## Memorial to Thomas Cleon Hiestand 1901–1979

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Thomas Cleon Hiestand passed away in his sleep on April 4, 1979, while attending the 64th Annual Convention of the American Association of Petroleum Geologists in Houston, Texas. He was seventy-seven years of age, having been born in Marengo, Indiana, just west of Louisville, Kentucky, on May 6, 1901. The night before his death, Tom had received the American Association of Petroleum Geologists' Distinguished Service Plaque at the annual award dinner, where he was cited "for reliability and faithfulness in long service to the AAPG and its regional affiliates, winning from his peers highest esteem, affection and designation as 'Senior Geological Statesman.'"

Tom was a man of many parts, both in the geographical sense of his residency and in the facets of his

professional career. His life over the sixty-year span of his geological practice serves as a great example of one's ability to grow and keep up with the times—an example many of us might heed.

In a sense, Tom's professional life was divided into two general eras separated by World War II. The early part (1919–1943) was concentrated on the Mid-Continent, with excursions into West Virginia, Illinois, and Michigan, while the latter era (1943–1979) was in the Rocky Mountain states. In all of these areas, he was an original thinker and pioneered much of the reasoning and practice which have now become commonplace in petroleum geology.

Tom Hiestand began his career as a file clerk in a lease broker's office in Tulsa in 1919. While there, he decided to major in geology at Indiana University, from which he graduated with a Bachelor of Arts degree in 1922. His first field experience was in mapping stratigraphic units of the Illinois-Indiana-Kentucky coal basin. Here, he learned to identify specific features of sedimentation, similarities to which he was to recognize in later years, while studying other subsurface depositional areas.

Tom's first employment was with Pure Oil Company in Columbus, Ohio, in charge of the Eastern Division (1922–1927). There he was a development field geologist for the Cabin Creek oil and gas field, West Virginia, where he learned the elements of reservoir analysis, which led to the early attempts at reserve estimates. He was an on-site geologist, coring wells, setting casings, and helping to engineer early-water floods in West Virginia, Kansas, and Oklahoma. He was as well known in engineering circles as among geologists. In Michigan he recognized from subsurface studies the anticlinal trend upon which the Porter, Mount Pleasant, Vernon, and other oil fields are located. In 1928 Pure Oil Company discovered the Mount Pleasant oil field on a test of Tom's mapping.

From 1927 to 1936, he was Exploration and Exploitation Geologist and Manager for W. C. McBride, Tulsa. During this period he worked with A. I. Levorsen in regional subsurface investigations of Oklahoma and Kansas. In 1928, he made studies of siliceous residues at Rolla School of Mines, Missouri. The results were applied to the subsurface of the

Cushing oil field, and regionally in Kansas. Tom learned about geophysics while with McBride, particularly while working with the interpretations of magnetometer anomalies. Some anomalies of the Mid-Continent region were discovered to be associated with subsurface anticlinal structure, while others were not. During this period (1929), Tom was granted leave to act as a consultant in mapping the surface anticlinal structure of Spring Creek, Big Horn Basin, Park County, Wyoming. This led to the location of a Tensleep sandstone discovery oil well. During the period from 1936 to 1941, Tom was consultant to management for the Indian Territory Illuminating Oil Company (ITIO) in Bartlesville. This was at the time of high activity in the Oklahoma City oil field, when economic contingencies to oil exploration and development first came forcefully to Tom's attention. State-wide proration had been instituted and, in Kansas, per-well allowables had been reduced to fifty barrels per day for new wells. Tom was ever cognizant of, and interested in, the external economic and political forces that directly affect the work of petroleum geologists.

When Cities Service Oil Company (Bartlesville) took over ITIO, Tom became Senior Staff Geologist for North America (1941–1952), establishing an office in Casper, Wyoming (1943). In the post-World War II years, a renaissance of oil exploration and development occurred in the Rocky Mountain states, and Tom was in the forefront of activity in all phases. His Mid-Continent experience had equipped him to see problems and possibilities, as witnessed by his recommendation, as a charter member of the Wyoming Geological Association (1943), that a study of oilfield waters and their effects on electric log interpretation be initiated. Tom was very active in all phases of industry affairs while resident in Casper, serving as Second Vice-President of the Wyoming Geological Association in 1947, and Secretary-Treasurer of the Rocky Mountain Section in 1953.

In 1952, the Hiestands moved to Denver, Colorado, where Tom lived until his death. He was Exploration Manager and Vice-President for Texota-Ambassador Companies, his charge including Alaska. Later (1956–1961), he served as consultant to a number of companies and, from 1961 on, he was Vice-President of Exploration for the Saratoga Production Company, in association with his son, Frank Irving Hiestand.

While based in Denver, Tom was very active in the affairs of the Rocky Mountain Association of Geologists; one of his prominent accomplishments was the formation of a Political Action breakfast committee. He was awarded an Honorary Life Membership in 1977. The Colorado Petroleum Association of the Rocky Mountain Oil and Gas Association named Tom "Pioneer Oil Man, 1978." He believed geologists should be alert to, and be active in, political matters of today which are affecting the employment of geologists and the practice of their profession. 1959 was a banner year for Tom, highlighted by his designation as an AAPG Distinguished Lecturer, speaking on "Oil and Gas Producing Property Depletion and Mineral Economics." His emphasis was the importance of the subject to practicing geologists and their need to be aware of the problem. In recent years, Tom carried his early concerns for economics into an AAPG ad hoc study committee for recommendations to the national body concerning the formation of an "other minerals" division. This resulted in the formation of the Energy Minerals Division of AAPG. In 1978, he was honored at Oklahoma City as a Founding Member of this group.

Over all, Tom Hiestand was a man of broad interests and had great capacity as a "joiner," as evidenced by his membership in seventeen church, civic, and professional organizations. These activities were accompanied by amazingly detailed notes and memories, which are matched only by recollections by his friends regarding his great ability for detail of expression.

Throughout Tom's varied experiences as a petroleum geologist runs a strong, steady thread of family life and affection. He married Agnes May Hosie in Hamilton, New York, September 5, 1926. She was a geologist for the Pure Oil Company at the time. Three sons were born, all in Tulsa: twins, Frank Irving and Thomas Cleon, on September 9, 1927; and Mahlon, on May 4, 1941. Tom is remembered as a dedicated father and family man who rode a bicycle about Casper with his youngest son, Mahlon. Members of the family recall his great love and warmth as a husband and father. After the death of his first wife, Tom married a long-time family friend, Rilla Hinchee Sartain, in Oklahoma City, on February 21, 1970; she survives him in Denver.

As a friend since the 1940s, I can say that we will all miss Tom Hiestand. His friendly presence was ever an expectation at geological conventions, which he rarely missed attending. His willingness to serve friends and professionals was always greatly appreciated—but his hallmark was dependability. One could count on Tom Hiestand—he would be there. He was active and alert to the last; and perhaps the best epitaph was given by a friend in Denver who said that Tom "died with his boots on"—he was still working on drilling deals in Utah and Wyoming.

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