## Memorial to Olaf P. Jenkins 1889-1983

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Olaf Pitt Jenkins, for many years chief geologist and state mineralogist of California, died at his home in Pacific Grove on October 19, 1983, at age 94, of the complications of extreme old age.

Olaf was born on February 9, 1889, in Greencastle, Indiana. However, within two years the family moved to Stanford University in California. Professor Oliver Peebles Jenkins, Olaf's father, was one of David Starr Jordan's "old guard," joining him at Stanford University in 1891, the year of the founding of the university, as head of the Department of Physiology. Life there, at Cedro Cottage, the former summer home of Mrs. Leland Stanford, Jr., is charmingly recounted by Olaf in his *Memoirs* (1975). The family moved onto the Stanford Campus in 1904.

From childhood, the boy was interested in the outdoors; everything in nature was interesting and good. Fortunately, there was every opportunity to indulge this love, for he was close to the science of his father and to his father's colleagues in geology and the biological sciences at the university. In the summer of 1904 he joined a scientific expedition, from the university, to study the source and origin of the golden trout in the wild upper Kern River in the Sierra Nevada. The members of the expedition climbed Mt. Whitney, from the west; one man in their party was killed during a lightning storm on the summit.

In retrospect, Olaf's lifelong career as a geologist was set when he joined Robert Anderson and Robert Pack of the U.S. Geological Survey in their famous mapping job on the western rim of the San Joaquin Valley. Olaf was cook, horse-wrangler, and general handyman for \$40 per month, during a six-month season. The expedition took the train to San Miguel and crossed the Salinas River and Diablo Range to the west side of the San Joaquin Valley. Several years later, as a graduate student at Stanford, he wrote his doctor's thesis on the Kreyenhagen Shale on the west side. He told me about collecting the huge Ostrea titan in the late Miocene Santa Margarita sandstone, near Santa Margarita, a locality I visited over 40 years later to assess the possibilities of commercial use of this beautiful, coarse white sand.

In 1911, as a sophomore at the university, Jenkins, with young George Branner (J.C.'s son), joined the J. C. Branner scientific expedition to Brazil, resulting in Olaf's first published paper. With his Stanford professors' recommendation, young Jenkins, on graduation in 1913, went to Tennessee where he assisted the state geologist in compiling a geologic map of the state from known geology and Olaf's own field reconnaissance. He came back to Stanford for the master's degree in 1915.

During his Tennessee experience he reinforced his lifelong conviction that geology belonged in the field and that first and foremost we must know what's truly there before we begin to theorize on origins and geologic histories! After Tennessee, Jenkins spent a short time with Gypsy Oil Company, and then went to Washington State College to teach geology. In 1918 and 1919, he returned to state geologic mapping for a year in Arizona and a year in Alabama mapping coal fields. He then returned to Pullman, Washington, where he remained from 1920 to 1925.

One of the best things Olaf ever did was to marry Dorothy, his first wife, by whom he had three children. Dorothy was good in English and writing—becoming an English professor while they were at Washington State—and gave Olaf much-needed writing and editorial help. Dorothy died, tragically, from cancer of the spine, in her late middle age, after they had moved to Berkeley.

From 1925 to 1928 came more field experience, of a very different kind and a great adventure for the family; all five Jenkins went to the Dutch East Indies for Standard Oil Company of New Jersey. On his return, Olaf finished the Ph.D. at Stanford and then was chosen, on recommendation of his professors, to be chief geologist of the newly organized Geologic Branch of the State Division of Mines in San Francisco, where he served from 1929 to 1947. He then continued as chief of the division until he took retirement, by choice, in 1958.

So much for background and preparation for his real life work: the building of a California state geological survey. During its first half-century, until Dr. Jenkins came in to begin the emphasis on geology, the old State Bureau of Mines had centered its activities on (1) statistical reports on mineral production, (2) the annual reports on the mines and mineral resources by counties, and (3) maintaining a library, identification laboratory, and museum. In those days the Department of Petroleum and Gas was also a part of the bureau. During his tenure as chief geologist and then as chief of the division (state mineralogist), he turned this nearly decadent statistical bureau into one of the leading, modern, state geological surveys.

In 1929, Jenkins had enthusiastically started from scratch to compile a wholly new 1:500,000-scale full-color state geologic map (published in 1938) entirely with volunteer help, much of it provided by Stanford and the U.S. Work Projects Administration of the depression years. The state geologic map continued to be a major division project under the title of the "Olaf P. Jenkins" edition and now is a complete "Atlas" of 250,000-scale, 1° by 2° base topographic maps.

Dr. Jenkins's next project was preparation of the "Bible" for petroleum geologists in California, published as Division of Mines Bulletin 118 "Geologic Formations and Economic Development of the Oil and Gas Fields of California" (1943). This was an amazing cooperative effort, with 126 leading petroleum geologists as authors. It included a large amount of information which up to that point had been considered proprietary by most oil companies. Other notable Bulletins put out by the Geologic Branch during Jenkins's tenure as chief geologist were (1) Solon Shedd's "Bibliographies of California Geology"; (2) Murdoch and Webb's "Minerals of California"; (3) a series of Bulletins on 15-minute geologic quadrangles, with colored lithographed maps; (4) Bulletin 141 "Geologic Guidebook along Highway 49" (the division's all-time most popular bulletin); (5) Bulletin 154 "Geologic Guidebook of the San Francisco Bay Counties"; and (6) many commodity bulletins.

In 1947, Jenkins, with his new authority as chief of the division, began to push for more personnel and a larger budget, and the concept of the division as the state geological survey was fast getting under way. Olaf always believed that a geologist should do geologic work, and so we each, supervisors included, always had a geological assignment, including field and laboratory studies, designed to lead to a publication. How times have changed! Today, supervisors are so loaded with paper and committee work

that their geology is pushed into the background. Jenkins abhorred committees, meetings, and administrative details and took any excuse to get into the field. He worked as an individual, by personal contact with each geologist, igniting enthusiasm by inspiration. I joined him in the Ferry Building in San Francisco with two charges: (1) to get out in the field and become familiar with the geology of the state and (2) to relieve him of as many as possible of the state's increasing burdens of administrative detail. Olaf had terrific energy, imagination, and enthusiasm, and he believed that any geologist worth his salt could hardly be kept from vigorously pursuing his job; administrative restrictions were a waste of time!

Fed up with more and more budget and personnel restrictions by the state and threats to be moved to the State Capitol in Sacramento, Jenkins retired in 1958 at age 69—a year before mandatory retirement. He built a beautiful home on the dunes at Pacific Grove, from which he consulted on sand, gravel, and rip-rap, until he was 86 years old. Following his first wife's dying instructions, he had married again; Louise was a good-natured, friendly woman, just right for his volatile and explosive nature. For the next 25 years I visited him frequently. We took local field trips, argued the geology, and then as he approached 90, we sat at home, looked out at the sea, the dunes, and the wind-swept Monterey cypress, and discussed old times and old-time geologists. Olaf could never quite stomach the "new geology," but he quizzed me about it relentlessly!

Jenkins was a member of Phi Beta Kappa, Sigma Xi, an Honorary Member of Pacific Section, American Association of Petroleum Geologists, the American Institute of Mining, Metallurgical, and Petroleum Engineers, the Association of American State Geologists (past president), Fellow of the California Academy of Sciences, and Fellow of the Geological Society of America.

Geologic science moved beyond him, but Olaf P. Jenkins lived at the right time, in the right place, and was in the right position for the people of California!

His first wife, Dorothy; his second wife, Louise; and his son, William (a mining engineer) preceded him in death. He is survived by daughters, Barbara Jenkins and Nancy Jenkins Heizer Landwehr of Berkeley, 6 grandchildren, and 3 great-grandchildren.

In his honor, the Olaf P. Jenkins Field Research Fund has been established at the School of Earth Sciences, Stanford University, Stanford, California 94305.

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