

MEMORIAL TO THOMAS CARROLL WILSON

1906-1969

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Thomas Carrol Wilson, Fellow of The Geological Society of America since 1949, died on July 25, 1969, in Sydney, Australia, of coronary thrombosis. He is survived by his wife, Louita Dodson Wilson, and their three children: Thomas (Tex), Alison, and Louita (Topsy).

Tom Wilson was known to many geologists both in this country and abroad, and was almost instinctively respected and loved by all who knew him. He had been in Australia as Exploration Manager for Australian Gulf Oil Company from 1964 to the time of his death and I was most deeply impressed, during a visit to that country in late 1969, by the number of

Australians who expressed their sympathy and deep regret at his death. It is at the request of his wife, and with the hope of passing on to his children some indication of his achievements and the high estimation in which their father was held, that I have tried to put together here something of my knowledge of his life.

Tom was born on October 17, 1906, in Piedmont, West Virginia, the only child of Dr. and Mrs. Thomas L. Wilson. He entered Cornell University in 1924, and began the study of geology under such professors as Heinrich Ries, Charles Nevin, and O. D. von Engel. He left Cornell in June, 1928, without a degree due to a lack of one chemistry course, which, however, he completed seven years later in order to receive his B. S. degree.

During the next few months, after leaving Cornell, Tom worked as a control engineer for Nevada Consolidated Copper Company in Ray, Arizona, doing mine sampling, surveying, and examining mine prospects in the area. However, in January, 1929, he took the major step of abandoning mining for petroleum geology and accepted employment with Gulf Oil Corporation in Venezuela. He arrived in Venezuela on February 6, and his first assignment with Venezuela Gulf Oil Company was as a well geologist in the rapidly developing Bolivar Coastal Fields of Lake Maracaibo. Here I remember him as a young geologist with an exceptionally inquiring mind and a serious interest in the scientific aspects of petroleum geology, a quality not too common in the oil geologists of Venezuela in those days. His seriousness, however, was leavened by a sociable personality and a delightful sense of humor.

Our common Cornell background and the close working relationship between the field and the geological laboratory soon brought us together as friends. I well recall that Tom, intrigued by what he observed on visits to the laboratory, spent his own hard-earned money to buy himself a petrographic microscope. It was during this period that he introduced me to Gignoux's *Geologie Stratigraphique* (he had written for a copy), which we both greatly admired.

Following his first vacation to the States in the spring of 1931, Tom returned to Venezuela and continued his work for Venezuela Gulf, but this time as a ground magnetometer operator in the Venezuelan llanos from Barinas eastward. He was then transferred to geologic mapping in the State of Falcon. I visited him several times in the field, and early in 1932 he and I carried out a hand auger program in the waters of Salina Sauco on the eastern Falcon coast — one of the early offshore drilling projects; while here Tom composed his widely known parody on Venezuelan field life which began:

On the road to San José
Where the flying fishes play
And the dawn comes up like thunder
Over Sauco cross the Bay.

Mid-summer 1932 found Tom assigned to field work in the famous Barco Concession in Santander del Norte, Colombia. This work was interrupted in November by a special assignment on the surface geology of the Valenzuela Lease across the Perija Mountains in the Magdalena Valley. While there, he was dangerously injured by a fall from his mule, when he drove a trocha-stub through the roof of his mouth.

The years 1933 to 1934 were largely spent in geological field work in the Barco Concession where his closest geological associates were Walter Olson, Charles Flagler and Arne Birketvedt. This was a thrilling experience with the virgin geology of the area, the magnificent scenery, the Motilone Indians, and the successful discovery of petroleum. Camped on the upper Rio Catatumbo in the foothills of the Perija Mountains, Tom wrote in his diary on October 3, 1933: "This is the sort of thing that makes one forget the sweat and toil of the monte below, and stand in awe before such a glorious piece of the world's finest scenery. It is the exalting thrill of looking upon the unknown — the unexplored — and I fear that the craving for this thrill will yet carry me to many corners of the earth."

The Colombian Petroleum Company's Report No. 4 by T. C. Wilson on *The Rio de Oro anticline of Santander del Norte*, May, 1934, along with its geology, gives an interesting glimpse of the conditions under which this geology was done:

In the construction of camps a great deal of time and effort was spent to make them as safe as possible against Indians. The usual procedure was to completely fell and clear an area 50 meters square. In the center of this, tents were erected but at Camp Silencio a walled house was constructed. The clearings were protected by a barricade of palm fronds, brush, etc., allowing free movement within but preventing possible observation by Indians from the edge of the clearing. Outside these barricades guards were posted nightly in relays of two to each five-hour shift. Their vision was aided by kerosene lamps posted at strategic points.

Later Wilson worked in close proximity to the Colombian-Venezuelan boundary commission party, of whom he writes:

Their accumulated experience, not only with the Indians but with the trying problems of operating in such a territory, is of interest in connection with our own future work in the northwestern portion of the Barco Concession. Their base of operations . . . at Camp Confluencia has been established with a view to furnishing every comfort possible in that remote region. The clearing is some 200 meters square and at all times is maintained clear of weeds and kept well drained. A garden supplies a variety of fresh vegetables. Bounding the camp is a strong barbed wire fence the entire circumference of which is completely covered at night by electric spot lights using current supplied by a Delco plant A field hospital furnishes ample facilities for first aid minor surgery. In several cases Motilone arrows have been extracted successfully from wounded men. . . .

It is of interest to note that this region is visited by such severe electrical storms that the erection of several lightning rods around camp was necessary. Previous to this the lightning frequently damaged buildings and particularly the Delco plant. Health conditions are good but malarial fever is persistently present.

From La Confluencia work is carried ahead slowly and under heavy guard as there are several Indian villages in the immediate vicinity. Every effort possible has been made by putting out gifts to establish friendly relations with the savages. In spite of this, in two years work, eight men have been struck by arrows and two cases were fatal. . . . When gifts are put out and accepted, the commission in turn takes small quantities of sugar cane, platanos, etc. from the cultivations of the Indians. In this fashion it is hoped that they will come to grasp the idea of trading and eventually becoming more friendly. Articles which seem to be prized by them are machetes, axes, salt, small mirrors, and cloth of bright colors.

In the spring of 1933, he was assigned for three months to what was to be the discovery well of the Barco Concession — La Petrolea No. 1. The well blew out and caught fire, with the loss of several men. A letter from Tom dated May 13, 1933, says:

As you no doubt have heard, long ere this, the Colombian frontier, particularly that portion known as the La Petrolea Valley, has been the scene of some stirring events recently. First of all, we had the man killed by Indians at Puerto Reyes, causing a great sensation and a great wave of six-shooter carrying. I was fortunate enough to secure a trophy of that episode in the form of one of the arrows . . . The spring rainy season now being on, and the rivers in flood, I believe the Motilones have withdrawn to their mountain homes, where, I hope, they will find sufficient to entertain them in the future.

The well, blowing in so suddenly the following week, was quite a climax. From your knowledge of the Barco trail you can imagine quite well the task it was to carry the injured men over it on cots.

On December 28, 1934, Tom married Matilde Parra. In May of 1935, he and his wife went to the States on vacation. Tom was in such poor health that his father persuaded him not to return to South America. Instead he completed the requirements for his A.B. degree at Cornell and attended the Cornell geological field camp at Spruce Creek, Pennsylvania. He also parti-

cipated in the drilling of the discovery well of the Summit gas pool in West Virginia. Tom then entered the University of Pittsburgh where he received his M.S. in geology in June, 1936, with a thesis on *The Geology of Chestnut Ridge Anticline, Fayette County, Pennsylvania*.

For the next couple of years, 1936 to 1938, Tom worked as a geologist in Ohio, Pennsylvania, and West Virginia for Commonwealth Gas Company, West Virginia Gas Corporation, and for independents. In his own words, he "surveyed pipe lines, bought leases, prepared regional maps for the Oriskany gas play, did surface mapping, and reported on the deep prospects of the Burning Springs Anticline of West Virginia." In spring and summer of 1938, he did surface mapping on the Chestnut Ridge and Laurel Ridge anticlines of Pennsylvania and on Accident Dome in western Maryland.

In 1938, impelled by a recurrent nostalgia for foreign lands, Tom accepted employment with Atlantic Refining Company and worked for that company in Cuba through 1939 and 1940. He was particularly occupied with an extensive program of gravity surveys over the western two-thirds of the island. His final three months in Cuba were spent in areal mapping of the Tertiary and Cretaceous of Pinar del Rio Province and in setting up a stratigraphic column for Western Cuba.

In 1941 he was sent to Nicaragua, where Atlantic and Gulf were engaged in a joint exploration project. He turned out a series of excellent reports on the geology of various parts of the Pacific coast region of Nicaragua, hitherto geologically unmapped.

Early in 1942 Tom was sent back to Venezuela by Atlantic, just 13 years after his first arrival there. Atlantic kept him in Eastern Venezuela for the next several years where he was principally occupied with the supervision of gravimeter work. Later, as District Geologist for Eastern Venezuela, he supervised geological field work and wildcatting, and made reports on regional geology. In 1947 he was made Assistant Chief Geologist for Atlantic Refining Company, and moved to Caracas. In June, 1948, Tom resigned from Atlantic and left Venezuela.

On August 7, 1948, He married Louita Dodson in Del Rio, Texas. He and his wife (also a geologist) attended the 18th International Geological Congress in London in August, and made a geological excursion on their own to the Scottish Highlands. Gulf Oil, at this time, was becoming interested in Italy and Sicily, and Tom and his wife took on a consulting assignment with Gulf for geological reconnaissance along the Adriatic Coast of Italy and in the area of Sicily in which the Ragusa field was later developed.

On completion of his report on Italy and Sicily, Tom decided to go back to school for his Ph.D. He enrolled as a graduate student with Professor C. M. Nevin at Cornell University on February 3, 1949. Initially he was in-

clined to make his thesis study on Western Nicaragua, the geology of which had interested him since his work there in 1941. However, he finally selected as a thesis subject *The Burning Springs Anticline of West Virginia*. He received his Ph.D. degree from Cornell in June, 1951, and then accepted a job with Gulf Oil Corporation in the Rocky Mountain region.

With Gulf again, Tom was Area Geologist in Casper, Wyoming, for several years. In 1955 he was made Area Manager, then moved to Denver as Zone or Division Geologist, where he was concerned with geology and exploration in the Rocky Mountain states and Alaska.

In 1964 Tom was transferred to Australia as Exploration Manager for the newly formed Australian Gulf Oil Company, headquartered at Brisbane, a position which he held until the time of his death. This last transfer came largely at Tom's request; for some time he had been eager to get back into foreign work. He did a very successful job of representing his company in pioneer ventures in Australia where he supervised the drilling of two wells on the hitherto untouched Great Barrier Reef.

I would say that one of Tom Wilson's major contributions to geology was his infectious enthusiasm for exploration of new regions, application of new methods, and development of new concepts. This exploratory spirit was an influence which left its impression on innumerable geologists with whom he was associated during his career. Tom was always an explorer at heart and could be counted on for a fresh, imaginative, and stimulating approach, tempered always with good geological common sense. As with others of his nature, he had "itching feet" which were always carrying him into new ventures. He wrote very little for publication but the results of his many years of explorative geology are contained in numerous reports in the files of several petroleum companies. It is unfortunate that so much good pioneer geological work, because of its confidential exploratory nature, never found its way into the more permanent files of published geological literature.

Personally, Tom was always much of a romanticist — a Don Quixote who never hesitated to battle windmills for the sake of his ideals. Often, from a sense of chivalry or kindness of heart, he took on burdens which others would have shrugged off. His sensitive spirit, his keen sense of humor, his tolerant good nature, and his broad interests in so many aspects of science and of life in general, made him a favorite wherever he went. Perhaps I can pay him no greater tribute than to say that for all of us who knew him, he was an ideal companion and associate with whom it was always a pleasure and a privilege to work.