

Editor's Note – Cont. from page 7

Engineering and geology judgement still apply.”

Editor's Note: Six years ago, **Adam Farris**, in *Analytics* magazine, wrote that “the idea of a ‘data scientist’ was new, and should be considered alongside the petrophysical, geophysical and engineering scientists.”

He asked, “How does the industry bridge the vocabulary and cultural gap between data scientists and technical petroleum professionals? Ideas, applications and solutions generated outside the oil and gas industry rarely find their way inside.

Other industries seem to have bridged this gap, but in talking to experts in the broader technology industry, the oil industry is seen as a no man’s land...”

With no slight to the assertions of Farris, six years is a lifetime in the fast moving world of business and technical metrics. The upstream industry has been driven by data analysis and strong collaboration with geologists, petrophysicists, geophysicists, operations, etc., for decades. The sector is no stranger to predictive, interactive multivariate statistical models that predict geologic sweet spots and compare completion practices

Early leader at Ryder Scott, creator of “Fickert sheet” dies

— Katherine Wauters, contributing writer

William “Bill” Eugene Fickert, who began working at Ryder Scott in Wichita Falls in 1958, died Nov. 20. He was 94. One of his contributions to the firm was the “Fickert sheet,” created to establish and maintain historical records from previous studies.

Fred Ziehe, advising senior vice president who joined Ryder Scott in 1976, said, as a new employee, he began using the sheet.

“I reviewed work from other consulting firms,” Ziehe said, “And none of them had

modern technology.

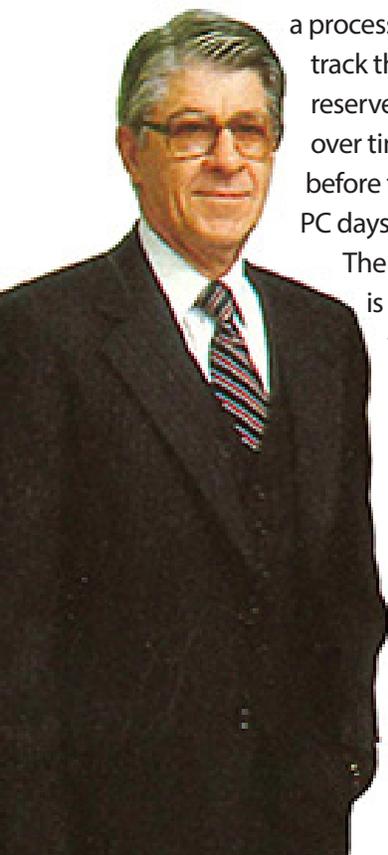
“Every day with Bill was a teaching moment,” said **Nina Roberts**, a technical analyst who joined Ryder Scott in 1981. “You had better ‘buckle up’ and be ready when you entered his office. He was an expert extraordinaire at organization and expected the same from me and everyone.”

Fickert’s management style was different from most. Roberts said, “He taught me the finesse of directing people without making them feel less than equal. He was the ultimate team player.”

In the mid-1970s, Ryder Scott wasn’t organized into groups, so younger engineers were exposed to and learned from senior engineers with varying backgrounds.

“Bill took me under his wing,” Ziehe said. “I sure learned the importance of having a process to generate repeatable results and to explain the reasoning I used to estimate reserves.”

Organized, methodical, detail-oriented, a fast eater and walker, friend and mentor
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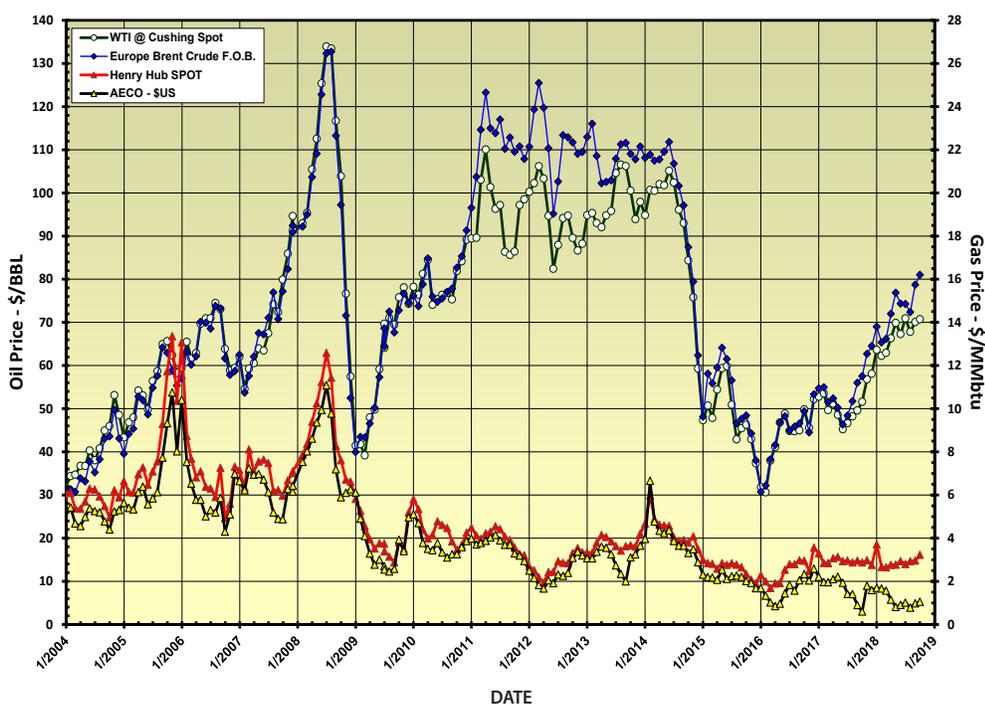


a process in place to track their historical reserves estimates over time. This was before the ‘modern PC days.’”

The Fickert sheet is still in use today in a modified PC format using

William “Bill” Eugene Fickert

Price history of benchmark oil and gas in U.S. dollars



Published, monthly-average, cash market prices for WTI crude at Cushing (NYMEX), Brent crude and Henry Hub and AECO gas.

Reservoir Simulation – Cont. from page 9

summarized the following “take-aways” from his reservoir simulation work.

“Operators turn to consultants such as Ryder Scott for history-matched reservoir models...”

– JPT Magazine

General observations

- Optimization of spacing has a strong relationship to fracture half-length.
- Half-length is usually varied in the history matching exercise, but . . .
- History matches are non-unique, and depend on other input parameters.
- Allow other sources of information to influence the history matching:
 - Micro-seismic
 - Presence or absence of frac hits
 - Fracture analysis
 - RTA
- Consider conducting sensitivity studies to cover uncertainty in other unmatched parameters, such as petrophysical values.
- Fracture half-length contributes to the optimal well spacing.
 - Other parameters, such as permeability and layering, can make a significant difference.
- Fracture half-length can be history matched, but is usually highly dependent on fracture height.
- In these cases, the challenge is in matching the pressure history along with each phase rate.
- Equivalent matches were achieved for varying fracture half-lengths, making the selection of the optimal well spacing subject to a residual uncertainty.
- Information from outside the simulation study must be considered in the decision-making.

“Operators turn to consultants such as Ryder Scott for history-matched reservoir models because they want results that line up with the output from actual wells,” the JPT article stated. “But that leaves a lot of room for judgment calls.”

Palke told the magazine, “Using the same wells for an equivalent history match, you can arrive at a range of options from 80 acres to 120 acres per well. If you have a big land position, that (difference) is a lot of wells. You would want to do a lot of work to decide which of those is the best decision.”

Early Leader – Cont. from page 8

are just a few of the words employees used to describe Fickert.

He was the embodiment of order in all aspects of his life.

Ziehe said, “I remember a time when Bill invited me to go deer hunting in Fredericksburg. He gave me a multi-page map, beginning with a Texas state map and star marking the town.”

In true engineering fashion, the maps became increasingly detailed, each page showing another level, from Fredericksburg to the highway exit, then turns off small roads to dirt roads.

“The last map showed the farm property and house location, and most importantly, the deer blinds,” said Ziehe.

Fickert served in the U.S. Air Force in the Pacific Theater during World War II. His next stop was the University of Texas. With petroleum engineering degree in hand, he began a nearly 30-year career at Ryder Scott, which owes its reputation, in part, to Fickert and others who shaped the firm’s early history.

He was made a partner in January 1962 and retired in 1986 as a senior vice president. Fickert taught short courses and seminars, including “Economics of Waterflooding the Garyburg Dolomite in South Cowden Field,” and “Waterflood Case History Caprock Queen Field.”

He was an elder and committee chairman at Christ Presbyterian Church in Midland, TX, and taught Sunday school to junior-high students. Since 1971, Fickert had been a member of Memorial Drive Presbyterian Church in Houston, where he was also an elder and volunteer.

He is survived by a sister, **Joan Finkboner** of Illinois; daughter, **Karen Ann** and son-in-law **Scott McCoy** of Austin; son, **Gary Lee Fickert** of Houston and three grandchildren: **Shawn Thomas McCoy**, **Kristin Nicole Fickert** and **John Austin Fickert**.

In addition to his family, Fickert leaves behind his “Ryder Scott family,” including those he helped mold several decades ago.