

# Progress and Prowess: 100 Years of Pioneers

By EMILY SMITH LLINAS, EXPLORER Correspondent

Women have come a long way in the last 100 years, transforming the workplace and the oilfield as they've fought their way into roles previously considered off-limits to them. As much as attitudes and expectations have changed, however, challenges remain as women continue to blaze new trails in the industry.

These were the recurring themes at the Pioneering Women in Petroleum Geology Forum, which celebrated AAPG's first 100 women members and 100 years of women in petroleum geosciences. It was part of the Association's centennial celebration at the Annual Convention and Exhibition (ACE) in Houston last month.

The forum, organized by AAPG's Professional Women in Geosciences (PROWESS) committee, the Association of Women Geoscientists and the Society of Exploration Geophysicists Women's Network, highlighted women's impact on the oil and gas industry from the early 20th century to today.

The Forum was the brainchild of Robbie Gries, president at Priority Oil & Gas LLC, who served as AAPG's first woman president in 2000-01.

"Anticipating the 100th anniversary of AAPG, we wanted to find a way for AAPG women to contribute...and went with tracking down the first 100 female AAPG members," Gries said. "This led us to discover that the female presence in the geological side of the oil and gas business was also 100 years old, a fact unknown to any of us when we started this!"

Gries's research led her to write a



Robbie Gries and husband David E. Bailey dressed as 1915 geologists. Gries won second place in the costume contest organized with the AAPG Young Professionals, featuring business and work attire that was part of a woman geologist's "uniform" over the past century.

book, "Anomalies: Pioneering Women in Petroleum Geology," in which she profiles 100 influential women in the oil and gas industry from 1917-2017. She autographed books throughout the forum and the ACE event.

Barbara Tillotson, geoscience manager at RPM Energy Management and chair of the PROWESS special interest group, said Gries's and the PROWESS team's dedication to the topic motivated her to help organize the forum, which took years of planning.

"The research for this event has been in the works for roughly five years," she said.

"It was difficult to find information for most of these Pioneering Women and the first 100 women of AAPG."

The all-day event featured expert speakers, panel discussions, networking and the world premiere of a AAPG's new documentary: "Rock Stars: Pioneering Women in Petroleum Geology."

The documentary examines and celebrates the century-long history, achievements and advancements of women in petroleum geosciences and highlights the cultural, societal and professional characteristics marking the times in which they lived and worked.

## Evolving Challenges

Gries described how women's role in the workplace changed as society changed. During World War II, women were expected work while men fought overseas. When the men came home, women were expected to go home, too.

Carolyn Miracle Ross, retired international petroleum geologist, recalled preparing for a job interview in the early 1960s. Ross received the National Science Foundation Talent Search Award, attended university on a four-year scholarship in geology, and graduated with honors, on the Dean's list, with Phi Beta Kappa recognition.

"The man I interviewed with looked at my resume and said, 'Oh great - we need a really good geological secretary!' My academic achievements meant nothing, and all they saw was a woman, which of course, in their minds meant I *could* type and *should* be a secretary, even though I couldn't actually type," she said.

"The prevailing attitude for not hiring me as a geologist (and other women professionals) was, 'If you're married, you'll get pregnant and leave.' If a woman was not married, then the attitude was, 'If you're single, you'll get married and leave.' That attitude was not at all concerned that men often leave too, for a better job, or more money, or for family reasons."

Panelists and participants noted that discrimination still exists today in more subtle ways.

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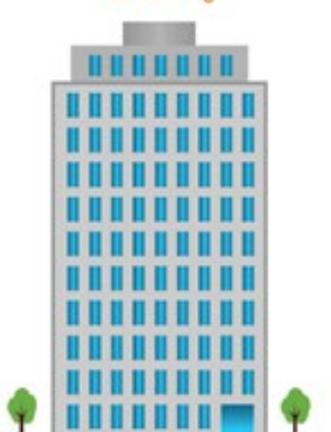
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The Pioneer Women in Petroleum Geology Forum included a costume contest organized by AAPG Young Professionals in which period costumes from various periods over the last century were worn.

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They discussed the “parental attitudes” of some company managers, who attempt to make decisions they believe are best for employees and their families.

Gries noted that in some cases, men are more likely to be offered promotions if their wife is a stay-at-home mom.

“If she is not working, he is free to accept a promotion and move,” she said. “If she has a successful career he may not be able to have as many options.”

Emily Glick, geologist at EQT Production Company, shared the challenges she faced when she returned from maternity leave and wanted to pump breast milk at work.

“The company had two ‘sick rooms’ for 800 employees, and that’s where we had to go to pump,” she said. “Often there were lines, and we had a hard time getting to meetings. Sometimes I would have to skip pumping to make it to a meeting.”

Glick got a group of mothers together, and they eventually convinced the company to set up two additional lactation rooms for employees. Now she is working with coworkers to establish standardized paid leave for fathers after the birth or adoption of a child, as well as official formal paid maternity/adoption leave, so employees don’t have to use short-term disability leave and unpaid Family Medical Leave Act (FMLA) time.

**International Perspectives**

Challenges for women in the energy industry are not unique to the United States.

Sylvia Anjos, applied technologies general manager deputy at Petrobras, shared the evolution of women’s involvement in Brazil’s petroleum industry.

“In 1961 Petrobras offered its first geology class and started training petroleum geologists,” she said. “It took 15

years for women to get into the company, and when they did, they started in paleontology.”

“Women couldn’t go to the rig because there were no women’s restrooms,” she said. “Nowadays it’s easier for women to enter the industry, but getting an executive position not so simple.”

Maria Antoneta Lorente, stratigraphic services manager at ALS Oil & Gas, shared her experiences working in Venezuela from the mid-1970s until the late 1990s, when the country’s oil became national property.

“At that time the country was more open to having women in professional careers. It was possible to keep your family and your job, but (women) had to work like two people,” she said.

Lorente said she and her husband were fortunate to work in a company that employed them both.

“Spouses could work at the same company, but they had to be in different departments,” she said. “My husband was in production; I was in exploration.”

**Finding the Right Partner**

Panelists also emphasized the impact spouses can have on women geoscientists and their careers.

“The decision of you who partner with in life is so critical,” said lone Taylor, executive director of the Earth and Energy Resources Leadership Program at Queens University. “Women have two jobs. You work at the office, and then you come home and work. If you have a true partner it helps.”

Taylor and her husband found a balance by pursuing individual interests.

“He had no interest in management. He wanted to stay on the technical side, so I went into management,” she said.

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## Pioneer from page 25

### What Makes a Pioneer

Claire Farley, vice chairman with KKR's Energy and Infrastructure Business, provided a luncheon keynote speech highlighting her experience in the oil and gas industry and characteristics of pioneers.

She opened by sharing her experience as a new-hire at Texaco in 1989.

"When I started I didn't know I was a woman. I was a geologist. I was invited to participate in this high-tech treasure hunt," she said, admitting being a bit naïve at the time.

"I thought 'Women aren't here. They must be running fashion companies or health care.' I didn't think it was that they didn't want women. I didn't worry about proving to my colleagues that I was up to the job."

Farley's perspective changed a bit as she spent more time in the industry. She recalled having a meeting with a new well site manager, who didn't expect the geologist to be a woman.

"He looked at me and said, 'They done sent me a lot of things before but they never sent me a little girl.' It's a good thing I laughed because he meant it as a joke," she said. "He taught me all kinds of things about that rig, and we remained friends for years."

Farley noted that while all work environments have challenges, there is always a way to move forward.

"Tune out the naysayers. Go through the gatekeepers. Find a way though," she said.

Farley also shared her definition of a pioneer: determined, passionate, curious and confident, with an appetite for risk. "Men don't have a monopoly on the traits, use them," she said, "But use your own voice. Don't hesitate. Be yourself."

### Useful Advice

Panelists provided plenty of wisdom for forum participants.

Panelist Susan Morrice, founder and president of Belize Natural Energy, emphasized the importance of creativity and motivation.

"Wallace Pratt gave us a key to unlocking our position. 'Oil is found in the mind....' It took me on a course to think about what is



Sherilyn Williams-Stroud, one of the narrators of the "Rock Stars" documentary.

in our mind. What holds us back? How do culture, parents, teachers and technology affect our mind? That's where our creativity comes from," she said.

Morrice said creativity and determination were essential to founding and running her company.

"That is how we discovered the first oil in Belize when everyone said I was stupid and there was no oil in Belize," she said. "Now in Belize we have new philosophy. We don't just take the money out. We are for nature and people."

Taylor highlighted the importance of developing personally and professionally while gaining technical knowledge.

"You have to be 100 percent technically competent, but seek education beyond the technical aspects," she said. "Understand the business. How does the company make money? Focus on relationships and understanding. You don't have control over the price of oil or the attitudes of your co-workers. You can control how you develop."

### A Successful Event

Tillotson described the forum as "extremely successful" and she said she received multiple positive comments on the documentary, the panel engagement and the networking ability.

"We sold out the event, which was listed for 200 attendees," she said.

"History is a great humbling exercise... putting our lives into the perspective of 100 years of progress is a powerful dose of medicine," she said Gries. 

on Sunday, July 4, 1982, I was quoted during an interview as saying "I predict that the Codell will be the largest continuing producing reservoir in the Rocky Mountains."

What I actually said was "contiguous," not "continuous," but the Codell play is now 35 years old and thousands of wells have been drilled and thousands more are scheduled to be drilled along with the emerging Niobrara play. The Codell was considered to be a non-typical reservoir from the beginning, and it has proved to be all that it was determined to be at the onset of the study more than 36 years ago.

Thus, what I began as a study of "Over Looked Oil and Gas in the Loveland Area" at the University of Northern Colorado under the guidance and supervision of William Nesse and Lee Schropshire became the Codell play that has endured until this very day. There have been many players and the industry has changed over time, but the initial geological interpretation was sound and over time has proved to be all that it that it was initially determined and suggested to be, even if at first it might have seemed to be "Raymond's Folly." 

## Contiguous from page 19

of every odd-numbered section in the Wattenberg Field on the UPRR right-of-way.

Then in early 1985, I contacted a company in Fort Collins, Colo., named Basin Exploration Incorporated and brought to them the basic farmout proposal. Basin met with Champlin and a farmout proposal was drafted on March 21, 1985. Basin agreed to drill 20 drill-to-earn wells and have a continual drill-to-earn right on the approximately 7,000 net mineral acres in the Wattenberg Field. I became the vice president of exploration and production for Basin Exploration.

### 'Contiguous' or 'Continuous'?

Since that time, thousands of Codell-Niobrara wells have been drilled in the Denver Basin and it is still being heavily developed to this very day. In an article that appeared in the business section of the Denver-based Rocky Mountain News

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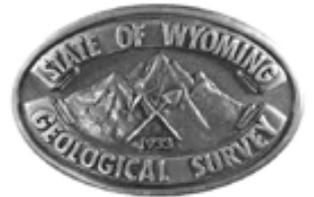
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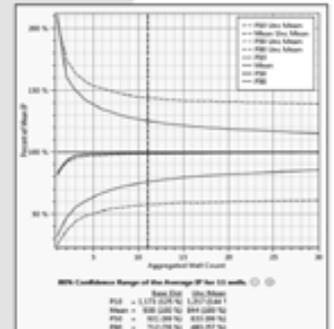
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