Experts: Shale Success Demands Local Focus, Predictability, Education

Matthew Veazey 12/10/2014

Pennsylvania-based geologist and attorney offer insights on what measures countries aspiring to develop shale plays should implement.

Betsy Suppes

Principal, Forgedale Geological Consulting

From her vantage point as the principal of Forgedale Geological Consulting in Johnstown, Pa., petroleum geologist Betsy Suppes has had a veritable front-row seat as exploration and production companies have transformed the Marcellus formation into a shale gas powerhouse.

Having spent the past decade performing due-diligence reviews for private investors, operating companies, law firms and financial institutions, Suppes has gained a strong grasp of what exploration and production companies incorporate into successful shale development plans.

Boosting The Odds

A company can boost its odds of winning at the shale development game by taking a localized perspective starting on the front end, Suppes said.

”Use landmen who are familiar with the locals,” she explained. “Do not apply ‘Texas techniques’ to Pennsylvania as Pennsylvania residents are not used to an active oil and gas community. The landmen are the first impression that the public will have with the operator.”

In addition, successful companies understand that investing in a shale play is not a short-term undertaking and prepare for potential local threats to their operations, she said.

“Recognize that establishing secure oil and gas reserves is a long-term strategy as the political risk in the United States is legislation, not armies,” Suppes noted.

Aside from not taking a “one-size-fits-all” approach or seeking to make a quick return on investment, operators that have thrived in the Marcellus and other shale plays have employed several other key strategies, said Suppes. These drivers for success include:

• Taking on a higher risk to secure a “first in the basin” land position. For example, Range Resources Corp.’s early entrance into the Marcellus has paid off because the company now operates in the play’s most liquids-rich – and thus most lucrative – section, Suppes explained.

• Positioning acreage as close to midstream infrastructure as possible to get your product to market. “You have a shorter lag between drilling and revenue,” Suppes explained. “The lag period is critical in cash flow.”

• Using technology to your advantage sooner rather than later. Although it is more expensive, leveraging more complex technology early on can provide a more complete picture of the play and thus mitigate costly setbacks later in the process. For instance, collecting a whole core rather than side wall samples while drilling the initial

wells in a campaign yields richer data that can help a company improve the cost-effectiveness of its drilling program, she said.You're "throwing all the science at the wildcat wells in order to understand why – or why not – they will work," she said.

• Ensuring that company public relations representatives understand the business and can proactively relay the facts to the news media."Having them actively working the press is big," Suppes said.

• Set a policy on disposing of and/or recycling water from hydraulic fracturing operations. "This is the one that the public is most interested in," pointed out Suppes.

Promoting Transparency, Cooperation

From a legal and regulatory standpoint, Brazil and other countries wishing to emulate the United States' enviable record of developing shale plays will need to assure a high degree of predictability, noted Dwight Howes, a partner in the Pittsburgh office of international law firm Reed Smith LLP.

Dwight Howes

Partner, Reed Smith LLP

"First and foremost, the legal and regulatory framework needs to be transparent and non-discriminatory,"Howes explained. "Shale plays exist all over the world. The capital necessary to develop them will go where the rules are predictable, the political situation is stable, the regulations are not overly burdensome and where governance is transparent and not corrupt."

Moreover, governments outside of the United States can help promote shale development by providing benefits to individual land owners, added Howes.

"For shale plays in the United States (and to some degree in Canada), land owners typically own the oil and gas rights beneath their property so there is a strong incentive for property owners to do deals with oil and gas companies," he explained. "The oil and gas company pays an upfront, per acre, bonus payment and then pays the land owner royalties of between 12.5 and 20 percent, without any deduction for the cost of drilling the well, on production from the well. So it's pretty much a risk-free proposition for the landowner."

Outside of North America, "land owners should have a stake in development – or at least the land owners whose land is going to be disrupted with drilling operations," Howes said.

Beyond legal considerations, expanding the shale revolution outside North America will require concerted public awareness and workforce development efforts, added Howes.

"The oil and gas industry needs to lay the groundwork for the public through education so that people understand that oil and gas resources can be developed an in an environmentally responsible way, and that development of oil and gas creates good-paying, sustainable jobs and benefits the economy in a variety of ways," he concluded.