

and testing place for our technology, and then we could take that technology to market in Canada, the U.S. and internationally.”

Back in the early 2000s, Themig and his partners, Peter Krabben and Ken Paltzat, developed the StackFRAC system, which facilitated multistage fracturing. Multistage fracs had been around since well before Packers Plus, but the Packers’ game-changing twist was the ability to frac multiple stages without having to remove the rig. The drill crew could come, drill their horizontal well, and hand the work over to the fracers. The days of “drill, pull drill, frac, re-insert drill and repeat” were numbered. The StackFRAC system radically changed the economics of many plays and helped open up the Bakken and Montney.

One of the keys to Packers Plus’ early success was the willingness of clients to test their equipment at the well head: “Our first big break came in 2001 when we installed our first StackFRAC system in an EOG well,” says Themig.

This collaborative attitude is widespread across the basin, and E&Ps understand that experimentation is crucial. As Petrobakken president and CEO Gregg Smith says, “It’s important to have a team that is flexible in their approach and is willing to try and fail, because that is when we find the breakthrough that takes us to the next level in growing and developing a play.”

As long as E&Ps can directly measure the results of their experimentation by extra barrels of oil produced, they seem keen to support new technology. However, when the benefit is less easy to assess and the technology is employed at the beginning of the exploration and development process, innovators may face an uphill struggle achieving market acceptance.

One such example is NXT Energy Solutions, which has developed the Stress Field Detector technology, or SFD, an airborne system that aids the identification of hydrocarbon reservoirs. The system is intended to be a precursor to seismic fieldwork, helping the user narrow down the zone of exploration, rather than replace it.

But NXT has faced difficulties finding acceptance of the SFD in the Western Canadian Sedimentary Basin, where E&Ps are focused on sweating the last hydrocarbon out of relatively small targets. According to CFO Ken Rogers, “In the earlier stages only a handful of companies had us in focus. It certainly wasn’t easy in the past when



Packers Plus has manufacturing operations in Edmonton, Alberta.

the technology wasn’t understood. We had some success and revenue in 2006-2008 and thought we were breaking through the resistance to new technologies in the WCSB. Then 2008 hit and we lost our core market.”

NXT realized that it might find a better acceptance of the technology among those searching for large areas in immature provinces where access and security issues made on-the-ground work difficult. “In 2008 we shifted our entire focus to developing a footprint in Colombia,” says Rogers, going on to explain that “an ideal survey for NXT would be a minimum of 5,000 square kilometers, where someone is looking for a target that might be 2 square kilometers. We focus people on a target.”

“Colombia is attractive, because there are concession blocks there that are in the 7,000- to 10,000-square-kilometer range and there’s a dearth of meaningful geophysical information. It can get complicated there because of community, environmental and land concerns that make ground-based surveys difficult, time consuming and expensive. Ideally, you want to obtain good data first before putting boots on the ground, and that’s when SFD has proven most effective.”



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