Collaboration in the recovery will maximise asset value

By Jeff Miller

President, Halliburton



The depth and length of the oil industry downturn has impacted all market participants. It has reminded us that "old school" economics are still at work and the path to returns looks like execution and collaboration.

Oil prices began falling in 2014 and, without mercy, sent shock waves through the global economy. Undeniably, this oil industry downturn is one of the most significant macroeconomic events in decades. More than 350,000 energy jobs have been lost, mostly weighted toward oilfield service companies, with some reducing their workforce by as much as 80 per cent. Capital expenditure has been radically reduced, and bankruptcies and restructurings are quite commonplace as we sort through the wreckage of this downturn. While the last two years have been plagued with uncertainty, we believe that 2016 marked a bottom and we are in the early innings of a recovery.

Old school economics

While the pace and shape of recovery are never a precise science, the basics of supply and demand are always at work. If we consider a conservative 3 per cent annual decline in production, we should see a 14 million barrel per day gap grow over the next five years. This may be a conservative estimate, as capex starvation should only serve to exacerbate the gap. Additionally, global demand continues to grow at 1 - 1.5 per cent per year, adding another 6 million barrels of demand per day by 2020. In total, we are looking at a gap of about 20 million barrels per day, which, put into perspective, is the equivalent of adding two new Saudi Arabias worth of production. The advantage here is that economics always wins and the market will recover.

We collectively spend a lot of time talking about things that will change and speculating on what those changes will mean for our industry. I believe, however, we get the most value from spending time on what's not changing, and making sure our strategy – meaning our operating system – is uniquely built to meet these unchanging demands. Producing economic barrels of oil is the path to profitability. This may have gone out of style over the last decade, but lowest cost per barrel of oil equivalent (boe) is always important, now more than ever, and is achievable in any market.

Take for example a highly collaborative relationship between Halliburton and a small operator on a production project in west Texas. We listened to the customer drivers fastest returns and biggest estimated ultimate recovery from a field —and responded with transparent designs for well placement, spacing, lateral length and surfactants. In this case, our insight led to doing less rather than more to deliver the most barrels at the lowest cost per boe. For example, shorter rather than longer laterals, and customising a lowercost treatment, made for the best results. The success is clear—this operator now produces the most barrels per well on a cost per boe basis, nearly 10 per cent better than the next best and 45 per cent better than the third best. Despite being a much smaller operator lacking many of the same trappings of its larger competitors, this company achieved the lowest cost per boe through successful collaboration with Halliburton, working together to make the best use of the capabilities of both companies.

What recovers first and why?

The important question is not if the market recovers, because we know that it will, but where it happens first. In our view, the recovery starts with unconventionals, followed by mature fields, then deep water.

Unconventionals: The unconventional barrel is the fastest incremental barrel of oil to get to market, meaning it will be the first to fill demand. It is also the shortest-cycle return barrel, making it attractive not only for filling demand, but also from a return standpoint. The unconventional barrel has the best glide path. We continue to see efficiency gains in terms of lowering cost, as well as substantial room to improve recovery factors.

Mature Fields: The second group to recover will be mature fields, representing the largest market in the world. These are the lowest risk opportunities because the reservoirs are very well understood; however, they are harder to ramp up to scale.

Deep Water: The slowest to recover will be deep water. This market requires more money up front and a longer wait for returns. With 7 to 10 years from discovery to barrels in the tank, deepwater incremental barrels will be the last barrel of oil to market. Exploration continues to get tougher every year – reservoirs have been smaller and smaller, making it increasingly difficult to achieve lowest cost per boe, with a few notable exceptions. From an efficiency perspective, you also get fewer opportunities to test efficiency solutions in deep water than onshore. With fewer attempts to get it right, it is more challenging to drive efficiency quickly.

While driving to the lowest cost per boe remains critical, another thing that is not changing is customer demand for



Halliburton collaborates and engineers solutions to get the best value for its customers

reliable service delivery. The market demands effective technology that is clearly correlated to producing more barrels or reducing overall cost. Additionally, the market demands that the companies that develop the technology are clearly accountable for delivering the technology. Service companies have to 'execute in the last mile', meaning they must be present and ready to execute work on location. This requires them to have a substantial global footprint, sufficient infrastructure and reliable processes to ensure they are fully integrated in the important markets where operators are active.

Collaboration: How we work

The range of working arrangements is limited only by our imagination, but the one thing all these arrangements have in common is the requirement for collaboration. Our view is that the future requires collaboration and engineering solutions to maximise asset value for operators. This means we listen to operators' needs and respond with transparent solutions. By doing so, we are trusted to help maximise asset value, which means producing more barrels or lowering cost, both of which generate a lower cost per boe.

We collaborate not only with our customers, but also internally. At Halliburton, the focus of collaboration is not driven by a commercial model, but rather it is a means of delivering efficient, responsive solutions. This requires technology responsive to customer needs, developed at a low cost, and aligned with customers' processes and operational constraints. Returning to the earlier example of the small west Texas operator – we know collaboration works. We can achieve fantastic results under any conditions as long as we collaborate openly and effectively.

We are in the early innings of a recovery and collaboration affects everything we do to drive out cost in the industry. While we cannot control the price per barrel, we can control the cost per barrel. Service companies must remain deadfocused on delivering what's important to their customers. What was, is, and will remain most important over time is maximising asset value by helping to produce more barrels or to reduce cost – or in the best case, both.