

AAPG Super Basins 2021

The Permian Basin, Goldilocks and Alice in Wonderland – The search for the optimum, a chaotic present day and what it means for the future

Over the past 6 years, the Permian Basin has become synonymous with the shale business. Although shale development as we know it today may not have been invented in the Permian, it most certainly has been perfected in the vast acreage of west Texas and eastern New Mexico. Widespread application of the latest digital technology, rapid progress in understanding of unconventional reservoir characterization and - similar to Goldilocks' quest for the best - an unrelenting focus on making the next well better than the last has driven a degree of progress and development optimization that has shaped the Permian into a global disrupter of energy markets. With the Permian providing global scale, technology developed across North America's shale plays have gained traction and become foundational around the world as others look to replicate the success. Technologies once considered novel have found a home in a data-rich and manufacturing-oriented setting positioned to impact global plays in a similar fashion. Superimposed on this progress has been a disruptive 2020. Like Alice in Wonderland, we have experienced a world turned upside down. Collapse in short-term demand creates an immediate need while longer-term factors around the climate and energy transition remind us that significant challenges remain on the horizon. As an industry, we have the technical skills and the wherewithal to bring scale, but we will need to continue to attract talent, develop the right technology and articulate the path toward a better future.