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## The Evolution of the Angelin Field Fault Framework, northern Columbus Basin, Trinidad

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The Angelin field was discovered in 1995 and is located on the shelf, offshore East Coast, Trinidad. The first phase of development in 2018 benefitted from a conventionally processed OBC survey, which was acquired in 2012. Shallow gas to the eastern part of the field, as well as complex faulting to the north, negatively impacted seismic image quality and led to two rounds of reprocessing which hoped to illuminate further infill opportunities. Updates to the structural framework are key to defining remaining prospects and the methodology has evolved along with the seismic data quality to provide an integrated product which incorporates best practice approaches and uses interactive machine learning to enable a faster output and more detailed results which adequately characterize subsurface uncertainty.

The improvement in our understanding was critical to delivering more robust structural interpretations, reservoir definitions and volumetric estimates to enable the progression of a possible drilling target in a previously poorly defined and unpenetrated fault block to the eastern part of the field. The new products are also immediately applicable for target and trajectory optimization work during well planning. Thus, the step change in our fault interpretation methods, which was driven by improvements in seismic data quality creates value through the life of the field and aims to maximize ultimate recovery.