

Tied to Geology With Rigorous Well Calibration

CHALLENGE

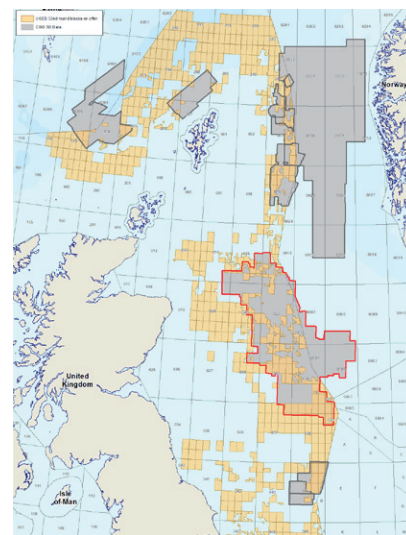
Regional-scale seismic data sets cover numerous geological environments and processing workflows may struggle to image all areas effectively due to these variations.

SOLUTION

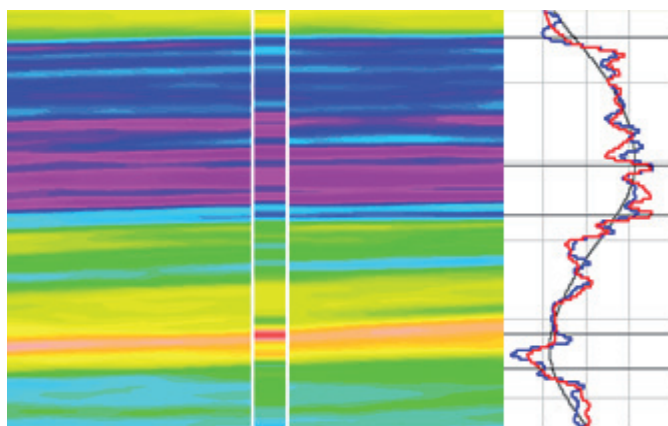
To overcome this, Cornerstone Evolution data has been calibrated with over 200 closely spaced wells. Well selection was designed to sample the different geological environments of the Central North Sea, whilst also providing rigorous regional sampling of all stratigraphic levels. A number of wells were specifically selected for shear log information to calibrate AVO and seismic inversion products.

RESULTS

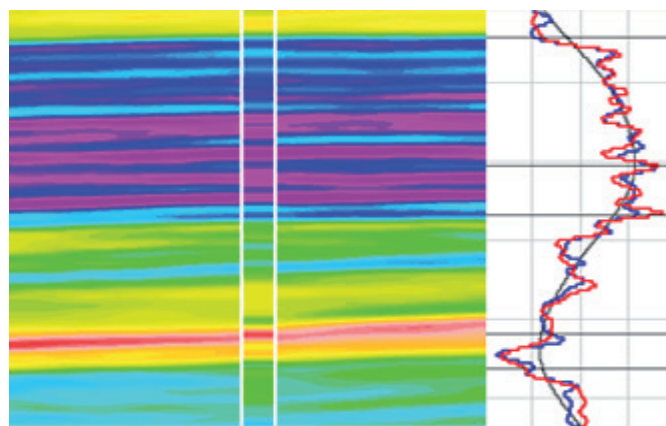
Utilizing the latest velocity model building tools, including TL-FWI, plus updated demultiple, deghosting and Q workflows, the new data achieves better seismic-to-well correlation, as demonstrated by seismic inversion well ties. As a result, Evolution is leading to a truly regional understanding of the subsurface and increased confidence away from the well locations.



CGG 32nd round coverage.



Legacy seismic inversion well-tie. P-impedance [Ip] with the well inserted into the seismic section (left). Ip curves at the well location: initial model (black), inversion result (red), well log (blue).



Evolution seismic inversion provides an improved well tie, reducing uncertainty for QI workflows.

Follow the link below to find out more, or contact us to arrange a data viewing:

Regional Contact:

Cameron Grant

Tel.: +44 1293 68 3340

✉ Cameron.grant@cgg.com

Thomas Obidairo

Tel.: +44 1293 68 3206

✉ Thomas.obidairo@cgg.com

cgg.com/cornerstone

