## Solving the Shallow With Absorption Anomaly Modeling

DE-RISK YOUR
32<sup>ND</sup> ROUND
AWARDS **NOW** 

## **CHALLENGE**

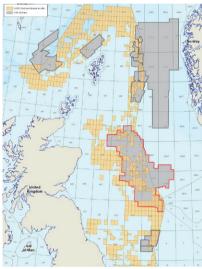
The complex overburden in the Central North Sea region includes features such as shallow gas accumulations, contourites and channels. These represent potential drilling hazards and result in velocity and absorption (Q) anomalies that degrade the deeper image.

## SOLUTION

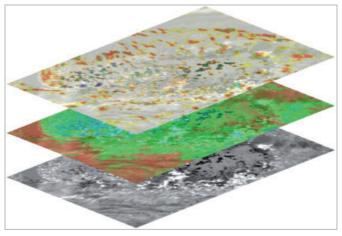
Cornerstone Evolution reprocessing utilizes the latest Q-compensating imaging workflow featuring full-waveform inversion (QFWI) and migration (QMIG) to account for these complex shallow anomalies.

## RESULTS

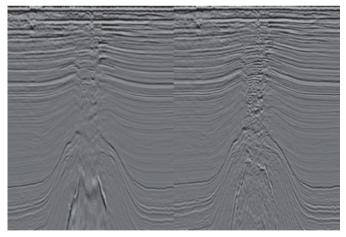
The detailed Q model, velocity model and QMIG images provide unprecedented shallow detail and identification of potential hazards, and improve the imaging of deeper targets, resulting in more accurate depth placement and seismic-to-well ties.



CGG 32<sup>nd</sup> round coverage.



Example Evolution Q-anomaly model (top) of Maureen formation showing shallow gas pockets, with corresponding velocity model [middle] and seismic image [bottom].



The Evolution Q-imaging workflow [right] compensates for image distortions caused by the gas chimney above the crest of the structure and shallow gas body, compared to standard imaging workflows [left].

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

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