CASE STUDY: NORTH SEA OFFSHORE

TRU-ARMS advanced reservoir mapping service unlocked the potential of a major North Sea operator's field

CHALLENGES

- Optimize wellbore positioning of the drain hole for maximum productivity within challenging Clair Ridge reservoir
  - Variable distribution of reservoir facies.
  - Complex geological structure with faults and fracture networks.
  - Low resistivity contrast
- Mapping remote areas of the reservoir offers insights into potential reservoir facies for subsurface model updates and future development targets

SOLUTION

- TRU™–ARMS advanced reservoir mapping service employs full tensor multi-frequency and components, along with dual spacing options, to effectively support both geosteering and geomapping efforts
- GaffneyCline™ energy advisory comprehensive pre-well planning with multiple scenario modelling and detailed execution planning
- Industry-leading confidence analysis for enhanced understanding of the mapping results

RESULTS

- Record Production rate. The well achieved an "unusual level of success" in this mature oilfield
- Optimized well placement & mapped the reservoir to depths not previously achieved
- Inversions used to tie in with seismic data in Real-Time
- Identification of fault zone and throw by TRU-ARMS Potential remote reservoir facies identified
- Comprehensive while drilling formation evaluation for completion design optimization
  - Formation pressures, poro-perm from NMR, high resolution, acoustic Imaging for fracture determination

ADDITIONAL TECHNOLOGIES AVAILABLE

Formation evaluation
- LithoTrak™ advanced LWD porosity service
- TesTrak™ real-time formation pressure and mobility data
- SoundTrak™ acoustic formation measurement service
- MagTrak™ lithology independent nuclear magnetic resonance (NMR)

Directional services
- AutoTrak Exact™ rotary steerable system
- CoPilot™ real time drilling optimization.

TRU™-ARMS

advanced reservoir mapping services

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