

DRILLING & GEOSTEERING



Innovative Drilling Techniques



 **LUCAS**



The Lucas Drilling Geosteering Service is powered by our in-house software, drilling and logging and data communication systems which are all part of an integrated approach to provide our clients with low-risk, improved coal seam modelling

IMPROVED
WELLBORE
PLACEMENT

HAZARD
IDENTIFICATION

OPTIMISED GAS
PRODUCTION

ACCURATE
RESOURCE
MODELLING

Step Change in Resource Modelling & Operational Performance

Lucas Illuminator Boundary Mapping - A New Integrated Logging While Drilling Service

Real-time Geosteering & Wellbore Geoplacement

- Grade control
- Improved degasification
- Target a seam ply within a seam with clarity, not just “we are in coal”
- Over 96% of geoplacement inside the same thin coal ply

Accurate Resource Modelling

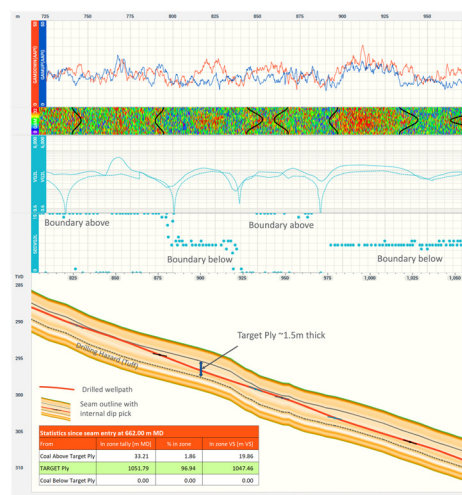
- Improved coal seam architecture model

Risk Mitigation

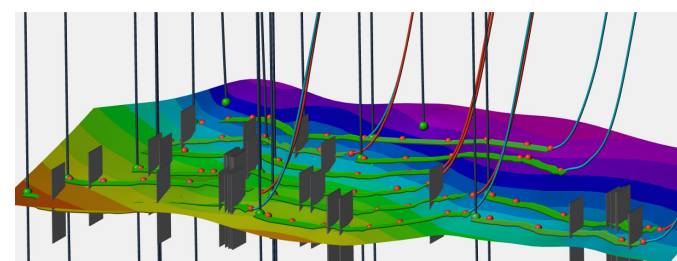
- Identify high potential risk areas
- Avoid drilling hazard
- Fault identification

Single Branch Inseam Section

- No roof touches
- No risk of running up a branch



Our drilling techniques are setting a **new standard** in operational performance, providing more **accurate resource modelling** and **improving overall drilling efficiency**.



Boundary mapping technology detects boundaries up to 6.1m away from the sensors.

Surface to Inseam (SIS) - Bowen Basin Geosteering & Interpretation

Lucas Illuminator - Azimuthal Resistivity & Boundary Mapping

Interpretation Service

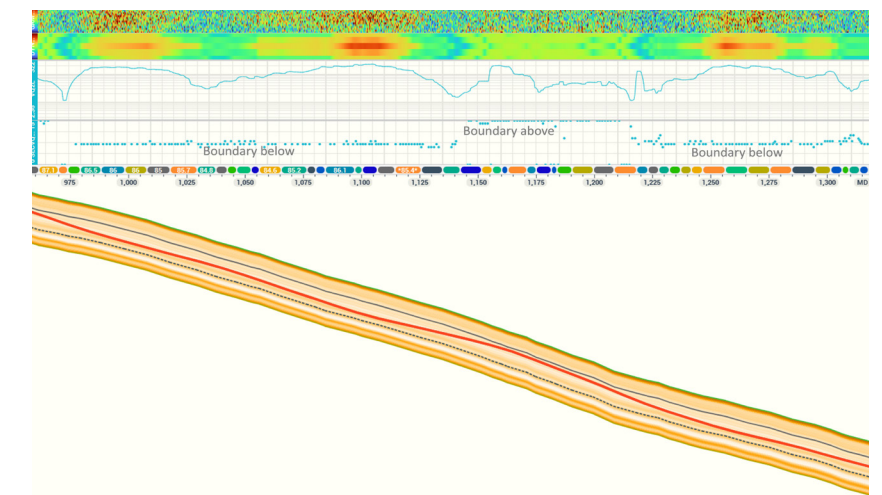
- Pro-active geosteering
- Avoid zone exits
- Accurate seam dip
- Wellbore trajectory optimised

Real-Time Geosteering

- Multi-frequency depth of investigation
- Maps bed boundaries up to 6.1m (20ft) away from the tool
- Triple frequency directional resistivity measurements

Faster SIS Wellbore Delivery

- 14% under planned delivery time
- 12% increase in tripping speed
- 4% increase in penetration rate





Contact Us

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