

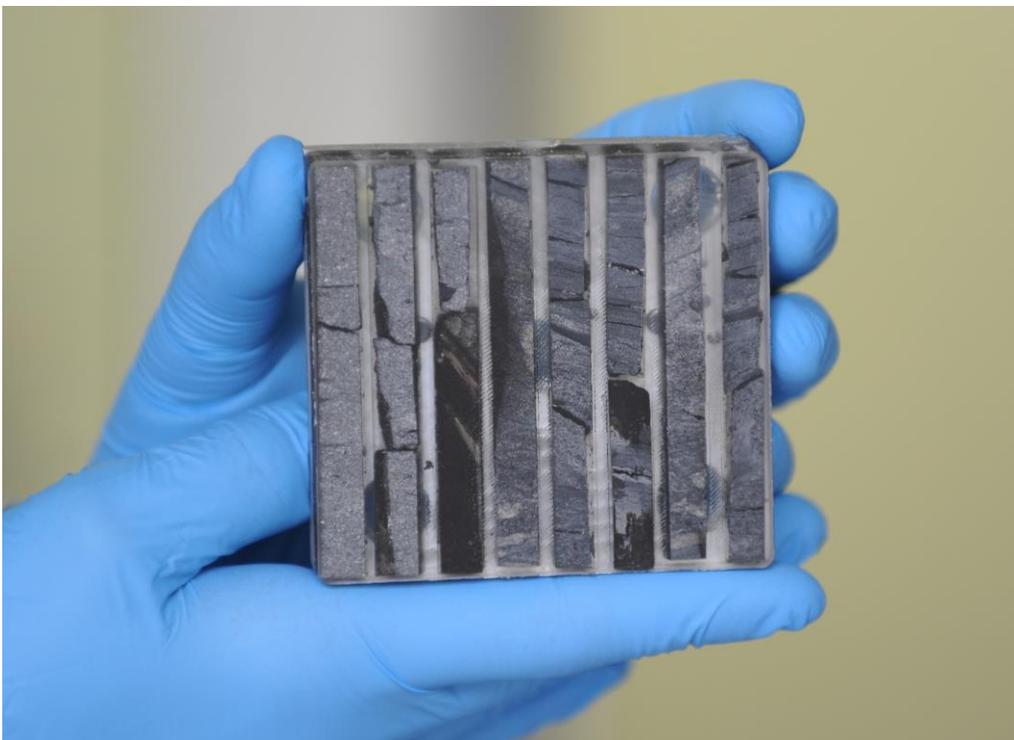
Coresticks

Continuous core scanning

Rocktype Coresticks is a unique system for scanning full lengths of core in a QEMSCAN by mounting strips of core in resin for precise and efficient scanning.

Traditional petrography is carried out on core plugs sampled at intervals, leading to an inevitable biasing of the dataset. Coresticks removes this bias and provides ground breaking data on heterogeneity and bedding characteristics by creating a continuous QEMSCAN dataset for the entire core length.

Coresticks provides continuous mineralogy, porosity, grain size and pore size maps at 50 μm resolution with 1.2 million mineral pixels per metre of core. The data can be rock typed and upscaled to log, reservoir model and seismic scale.



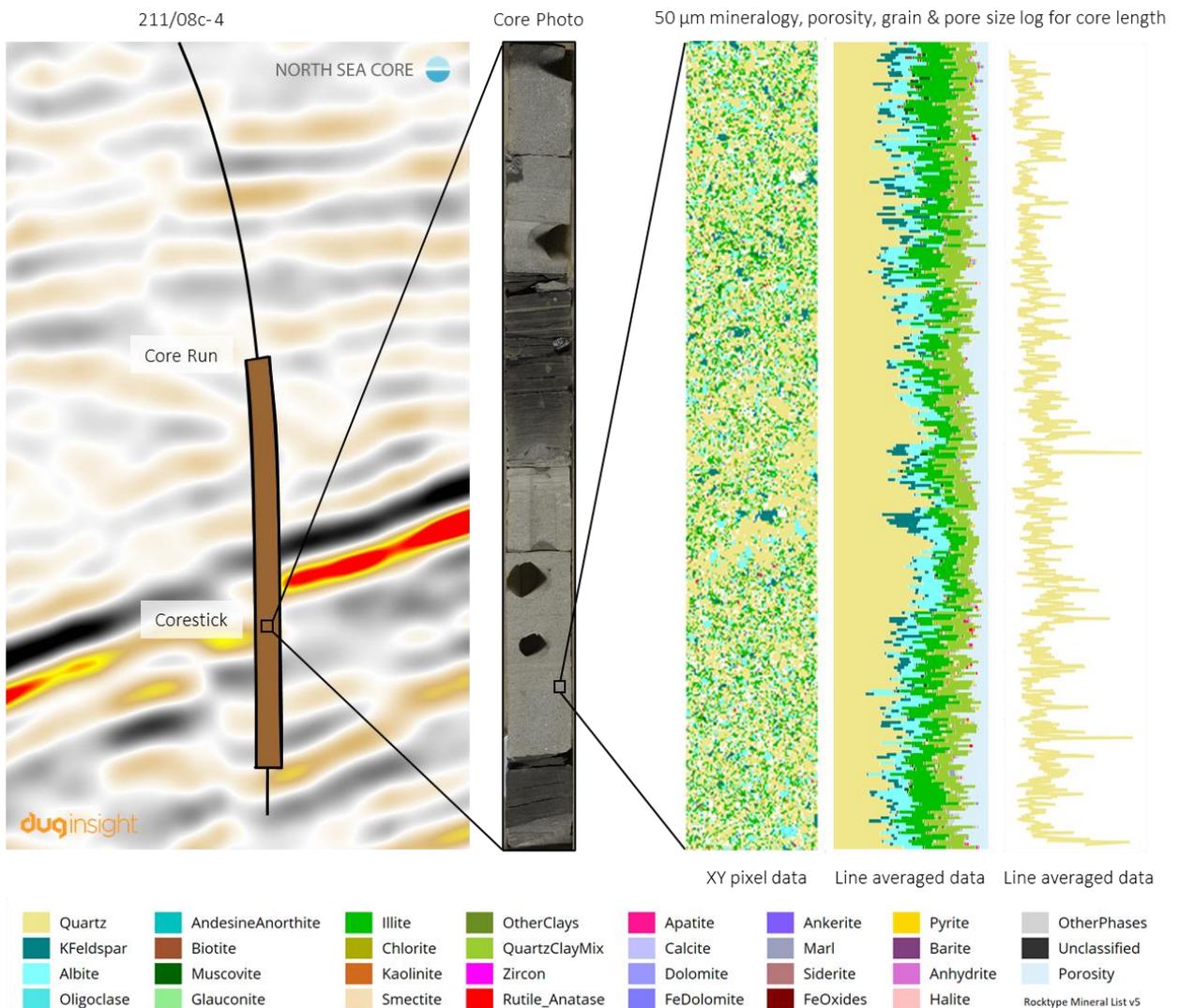
Half a metre of core set in resin, polished and ready for QEMSCAN analysis. Each 7 cm long stick is cut from a continuous section of core, with the resulting digital QEMSCAN data combined to form a continuous dataset. Core material courtesy North Sea Core CIC.

Pore-to-Seismic Scale Continuous Data

Rocktype Coresticks delivers a truly big mineralogy dataset, providing digital pore scale to seismic scale data. The improvement in computing technology means that this type of dataset can be created and analysed, supplying previously impossible volume of data at the reservoir level.

At a digitisation rate of half metre of core per hour, Rocktype can scan up to 50 metres of core per week. The data can be studied at pore to grain level, or averaged over a given length from 0.1 mm to 1 m for mineralogy, porosity, grain and pore size, with upscaling as required.

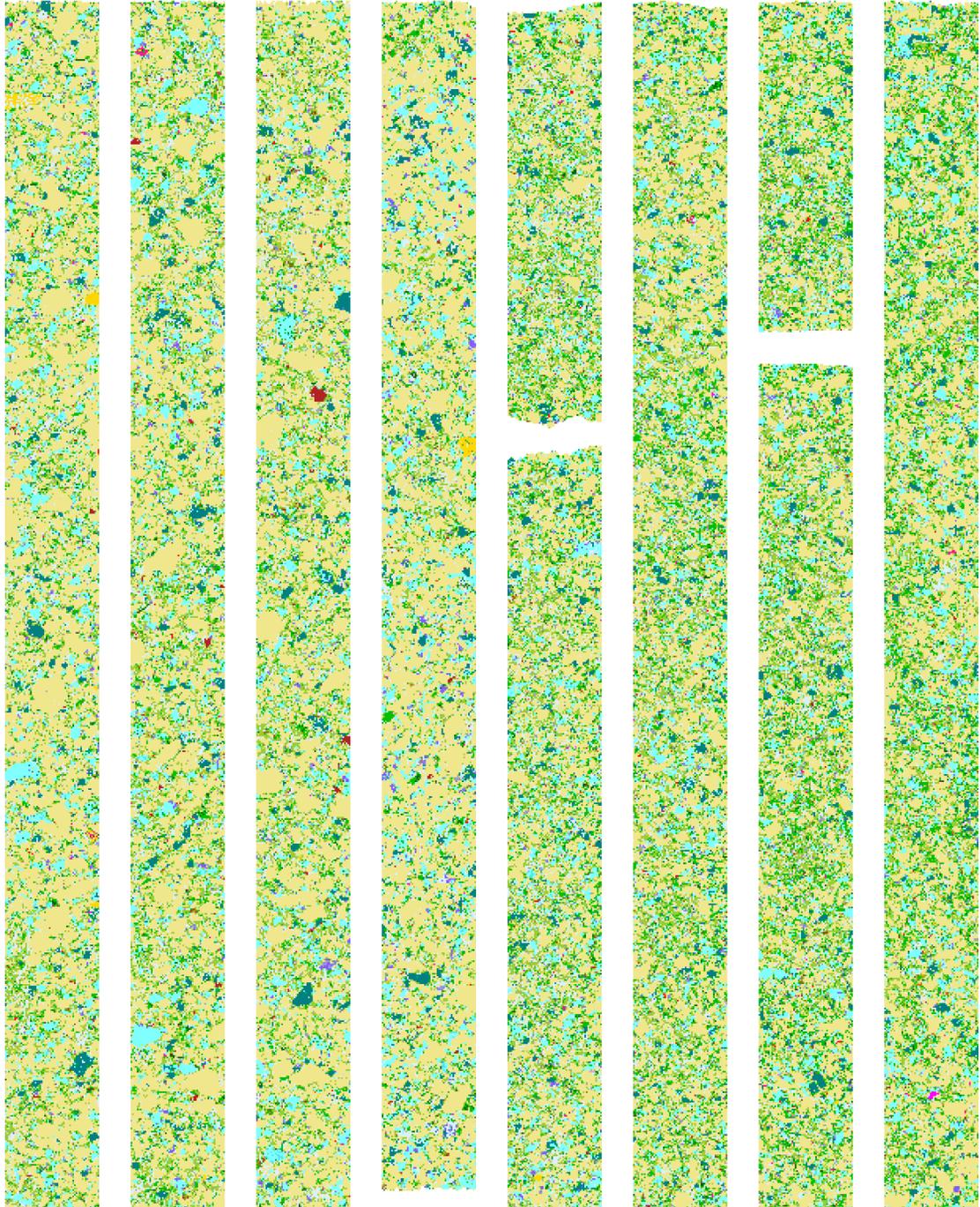
Our intense R&D process has provided a robust and repeatable QEMSCAN analysis process and we are confident that this rich digital dataset will become a future industry standard.



The dataset includes a fully digital 50 µm resolution XY pixel dataset for the entire core length. Core material courtesy North Sea Core CIC, seismic courtesy of North Sea Core CIC, OGA NDR and DUG insight.

Scanning Kilometres at 50 μm Resolution

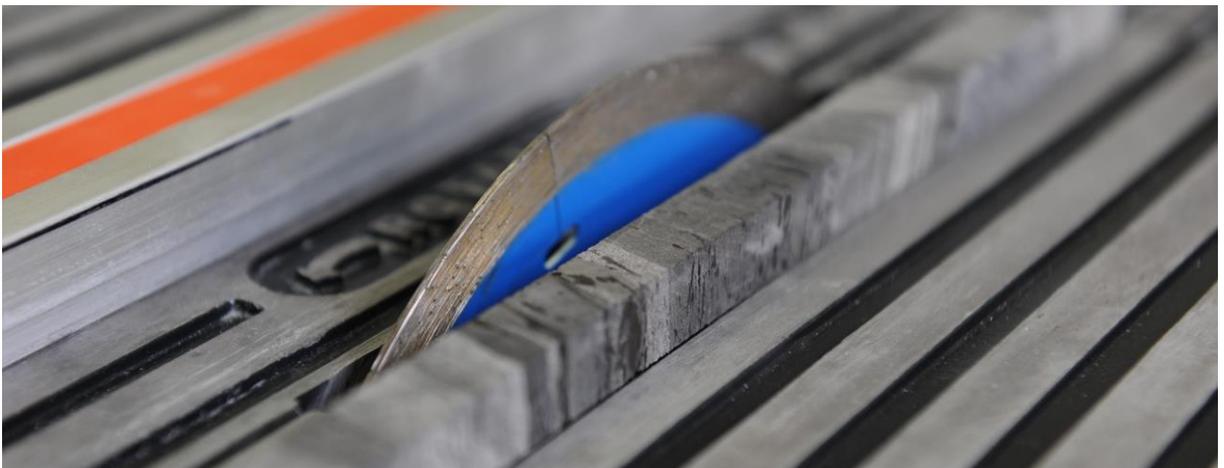
Our proprietary Corestick process starts by cutting the core into sections for embedding in resin. Once set they are ground, polished and carbon coated, ready to be loaded into our machines for QEMSCAN analysis at 50 μm resolution. This allows over half a metre of core to be scanned at once.



A scan of half a metre of core in 8 sticks. Each stick is cut from a continuous section of core, with the resulting digital QEMSCAN data combined to form a continuous dataset. Core material courtesy North Sea Core CIC.

Deliverables

Visual mineral map	50 µm resolution mineral map PNG showing the 30 phases of the Grouped Mineral List , with colour legend, scale bar and on-image metadata
Raw mineral map	50 µm resolution mineral map PNG showing the 133 phases of the Detailed Mineral List , with embedded metadata, ideal for AI applications
Modal mineralogy	Per section of core, line averaged
Porosity	Per section of core, line averaged
Average grain size	Per section of core, line averaged, per mineral phase
Lithotypes	Each section of a Corestick is assigned 1 of 5 lithotypes. The interval used for lithotyping can be changed in subsequent analysis.
Calculated log values	Includes gamma ray, Vclay, density and neutron, per centimetre
Optional extra	Raw pixel data available upon request



v 1.0

Rocktype

www.rocktype.com
+44 1865 522919

Rocktype Ltd, 1 Robert Robinson Ave
Oxford, OX4 4GA, United Kingdom



Global distribution partner