



GGA-Calderdale Geoscience Collaboration



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Primarily focussed on the UK, but with worldwide experience allowing collaboration in many other territories, GGA work closely with Calderdale Geoscience Ltd (CGL), a London UK-based petroleum exploration consultancy.

Together we offer a range of collaborative services bringing together GGA's geopressure expertise with the vast exploration experience of Dave Melnyk and Jo Prigmore at CGL, whose specialisations include:

- Licence round management and support
- Seismic interpretation, geological & petrophysical analysis, asset evaluation & resource calculation
- · Geological & geophysical data capture, formatting & loading and sales
- Thematic mapping, Play & Common Risk Segment (CRS) mapping & Block Ranking, GIS systems management

A particular current collaborative focus is to provide up to date overpressure mapping in the UK, combining overpressure, structure and sedimentology, with areas of the Central Graben and West of Shetland already covered, and more areas planned, in progress and available on request.

Contact us at sales@globalgeopressureadvice.com to find out more.

How we collaborate

Integration of structure and reservoir distributions with pressure data increases confidence in:

- · Overpressure mapping.
- · Identification of overpressure compartments.
- · Understanding of controls on overpressure distribution.

 $Integration \ of \ pressure \ into \ Common \ Risk \ Segment \ mapping \ and \ Block \ ranking \ to \ take \ into \ account:$

- · Overpressure magnitude.
- · Compartmentalisation.
- Seal capacity/breach risk.

Integration of pressure into detailed acreage analysis allows analysis of:

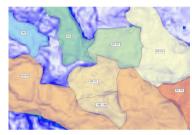
- · Overpressure vs porosity.
- $\hbox{\bf .} \ \, {\it Effect of compartmentalisation/reservoir connectivity/fluid contacts/overpressure variation} \\ \ \, on volumetrics.$
- · Prospect/Lead seal breach risk
- · Pressure effects on seismic response.
- · Drained reservoirs potentially creating enhanced column length.

Database sharing allows integration of geopressure and other studies including:

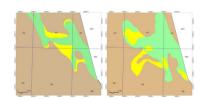
- $\boldsymbol{\cdot}$ 3D and 2D seismic, interpretation and structure over much of UK acreage.
- Regional GIS database of georeferenced structural and facies maps and layers from well reports, publications, relinquishment reports and purchased studies across UK acreage.
- ${\boldsymbol \cdot}$ UK CNS, NNS and SNS digital core log database of reservoir in 1000's of wells.
- Large well database of >3500 released wells, complementing GGA's existing database of >600 pressure evaluated wells, allowing quick access and fast work-up.

Combination of CGL petrophysical analysis and GGA pressure analysis aids identification of:

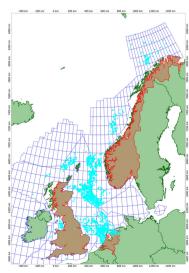
- Fluids present
- Fluid contacts.
- Paleo fluid contacts.
- · Reservoir connectivity.
- · Reliable pressure points.
- · Compaction trends in missing/uplifted section.



Overpressure compartments, UK Central Graben. Combines GGA analysis of pressure data, CGL structural interpretations, and references various published structural and facies interpretations.



CGL Common Risk Segment Mapping can be combined with overpressure and fracture strength data to identify key risks.



Large database of pressure data already identified, with fast access to many more.

