Integrated Geochemical Interpretation (IGI) Ltd.
Experts in geochemistry, basin modelling and software for over 35 years

The Granary, Hallsannery, Bideford, Devon, United Kingdom, EX39 5HE

United Kingdom Continental Shelf

IGI's expertise, services & products overview

90,000 geochemical data across UCKS

In 2018 IGI was commissioned by the OGA to construct the first comprehensive geochemical database across the UKCS. Working with Lloyd's Register, the result was a quality-assured database containing **over 90,000 samples**, from screening to high-resolution data (see overleaf). The data is immediately available to use in IGI's bespoke p:IGI software, an industry-leading software package for geochemical interpretation.

Cost-effective & time-efficient decision making

Petroleum Systems Analysis (PSA) is a useful integration tool combining geological, geophysical and geochemical information to ascertain charge volumes, timing and migration vectors. PSA can provide a cost-effective solution to help constrain a prospect's Probability of Success (PoS) using **IGI's 35 years of expertise in the UKCS**, including recent research published in *Geology* (Gardiner *et al.* 2019).

Revealing untapped potential

Even after 60 years of discoveries within the offshore UKCS, forward-thinking companies are making new discoveries through innovative G&G studies with PSA at its heart. From colossal discoveries in fractured basement in the West of Shetlands to Paleozoic source rocks on the Mid North Sea High, IGI have helped quantify and better understand the UKCS's untapped potential.

Not just source rocks

In frontier areas, misunderstanding of PSA (e.g. source quality) accounts for ~45% of wildcat failures, whilst in mature basins which are relatively well understood, ~60% of wildcat failures are associated with the trap/seal (Rudolph & Goulding, 2017). PSA can help quantify uplift/erosion of traps, helping to better understand tilting (e.g. re-migration), seal integrity, PVT history (e.g. gas expansion) and reservoir temperature history (e.g. biodegradation rates).

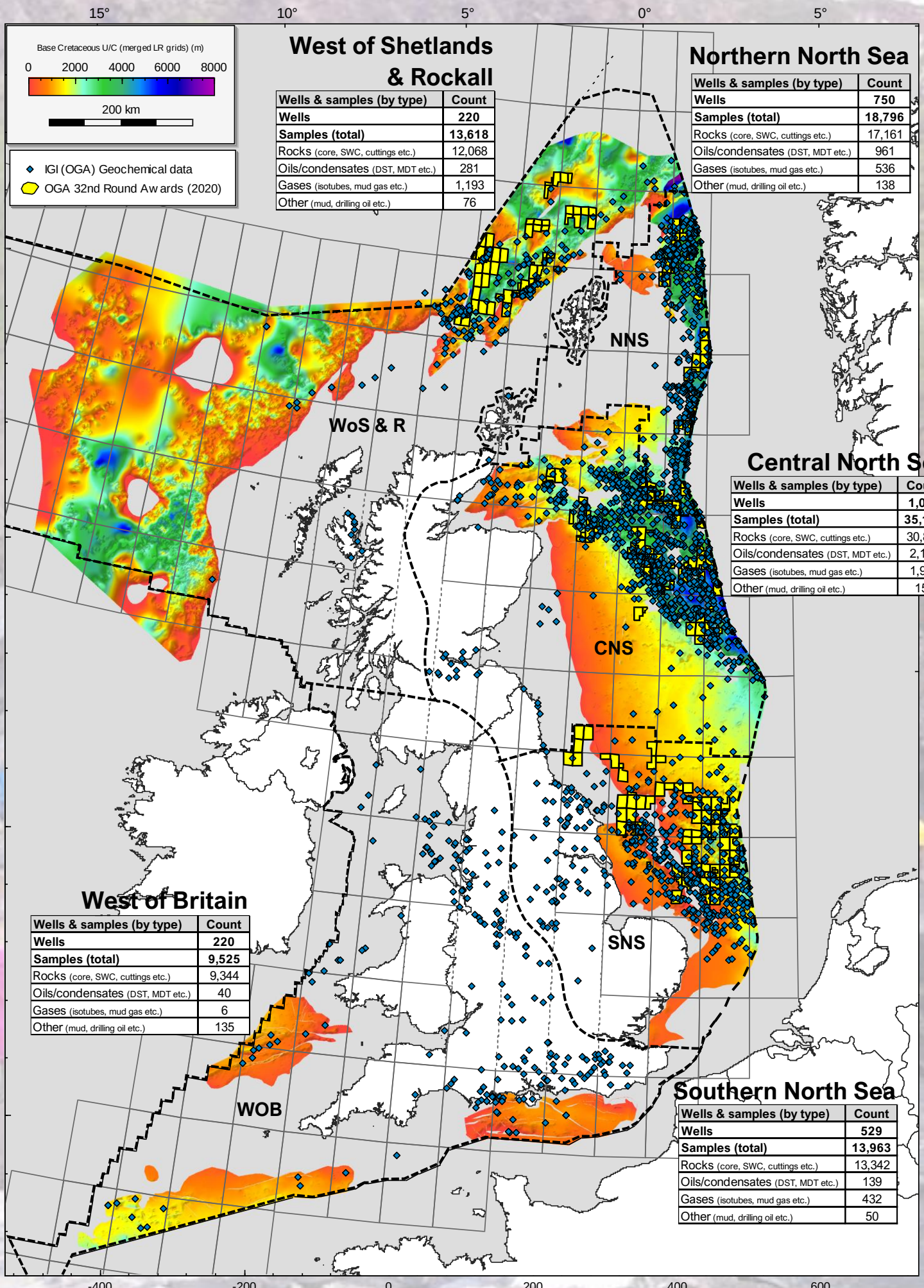
Fully flexible, interactive & integrated

The workflow for each IGI project is unique, created based on the client's objectives, data availability and budget. We strongly believe that interaction results in the best product, so we strongly encourage regular dialogue with the client and workshops. With travel so restricted in 2020 (and the foreseeable future), online interactive workshops are a fantastic tool for our clients to discuss inputs and understand outputs.

To discuss how IGI can work with you to evaluate your new acreage, please contact:

Info@igiltd.com

References:
GARDINER, D., SCHOFIELD, N., FINLAY, A., MARK, N., HOLT, L., GROVE, C., FORSTER, C., & MOORE, J. (2019). Modelling petroleum expulsion in sedimentary basins: The importance of igneous intrusion timing and basement composition. *Geology,* 47(10), 904-908.
RUDOLPH, K.W., & GOULDING, F.J. (2017), Benchmarking exploration predictions and performance using 20+ years of drilling results: One company's experience: *AAPG Bulletin*, v. 101/2, p. 161-176.



United Kingdom Continental Shelf (UKCS) highlighting the positions of the newly announced 32nd Round license areas (yellow polygons) and the OGA geochemical database compiled by IGI Ltd. (UTM 31N, ED50), containing over 90,000 geochemical samples from 2,751 wells in IGI's p:IGI software – ready for IGI to use to support a petroleum systems project in your license area. The base map is the regional Base Cretaceous Unconformity (BCU) depth by Lloyd's Register.