



Memoir 52 – UK Oil and Gas Fields 50th Anniversary Commemorative Volume – Launch Conference 30th November 2020

Published in November, the very substantial new volume, Memoir 52 (Goffey and Gluyas, 2020), continues the series of oil and gas field memoirs; Memoir 2 (Falcon and Kent, 1960), Memoir 14 (Abbots, 1991) and Memoir 20 (Gluyas and Hichens, 2003). These milestone volumes now take the reader from a period of desultory onshore exploration success, through the peak of UKCS discovery and development and into basin decline but with pointers towards a UKCS future both as a carbon store and as a contributor to meeting UK hydrocarbon demand under a net zero trajectory. These pointers include themes such as CO₂ storage, efficient field drainage and sustaining infrastructure through field tiebacks.

Originally scheduled for June 2020 this virtual launch conference was convened by the volume's editors and was well attended, with 150 participants including free student places. Fantastic support for the conference and Memoir by many industrial sponsors is much appreciated and the full day virtual conference worked surprisingly well, helped by the variety of talks and excellent time keeping by speakers.

A paper on Tolmount Field opened the conference, demonstrating continued material potential in the SNS, followed by Cygnus Field, still the only Rotliegend pool on the north side of the Silverpit lake. Two Carboniferous fields highlighted intra-Carboniferous seals and the utility of long reach drilling to increase reserves access (Wingate and Kilmer fields, respectively). The CNS HPHT play was illustrated by the recently developed Culzean Field and by Jasmine Field, addressing the impact of small-scale structures on deliverability. Several modest Fulmar fields were examined; Wood, Cayley, Godwin, Shaw, Bardolino and Howe, with reservoir development mostly in diapir-collapse basins ('intrapods') sealed stratigraphically or via downthrown fault seal against salt-withdrawal mini-basins ('pods').

Notable themes in Memoir 52 not seen in prior volumes include field redevelopment, which was touched upon in a talk on the NNS Penguins Field, and remobilised sandstone reservoirs as exemplified by a talk on the Catcher field complex. The remarkable sophistication now available in reservoir management was showcased in an eye-opening talk that discussed the value of smart completions and downhole fibre-optic monitoring technology in the Golden Eagle field. Similarly, the Atlantic Margin has come of age as a producing area since the 2003 Memoir and papers on the small Solan Field and the soon-to-be-developed Rosebank field gave a flavour of the wide coverage of Atlantic Margin fields in Memoir 52.

Looking to the future, two papers addressed candidate CO₂ storage sites that were under evaluation until termination in 2013/14 of the underlying government initiative. These were Goldeneye Field, at development a ground-breaking, long-distance, full well-stream tieback to shore, and Endurance which was never a field having been comprehensively tested by two old dry wells. Memoir 52 continues a long history of Geological Society publications that together underpin the extraordinary depth of understanding that this industry has developed of the pore space below UK waters. The editors' open access overview paper (<https://mem.lyellcollection.org/content/52/1/3>) gives a broader flavour of the entire contents of Memoir 52, and concludes; "...we must argue to the public and to politicians that greater action to encourage CCS is needed and our industry needs the opportunity to use all its skills, expertise and dynamism to play a positive role in the energy transition."