

Birger Friborg Hansen

Petroleum geologist and entrepreneur specialized in geomechanics and downhole structural geology, with research background in petrology.

1971-1977 Geology +math/phys/chem at Aarhus University. Including 3 field seasons in Greenland mapping for the Survey.

1977 Candidate of science with thesis on charnockite rocks in Nordre Strømfjord, Greenland

1978 Geologist for Cominco Ltd. at Black Angel mine in West Greenland (Pb Zn Au)

1978-1981 Research at Manchester and Bergen universities sponsored by Danish research council.

High pressure experiments and thermodynamic calculations simulating granulite facies reactions.

1981 PhD Aarhus University. Supervisor Kai Sørensen.

1981-1985 Reservoir geologist, Statoil (now Equinor), Stavanger (Norway). Geometrical models of oilfields, petrophysical databases, dipmeter processing and interpretation.

1985-1998 Co-founder and managing director of Z&S Geologi a/s providing services for oil companies internationally. Borehole image processing/ interpretation, geomechanics and software development. MEIR pilot.

1998-2001 Baker Hughes (Houston). Mainly geomechanics consulting, based in Stavanger or Houston.

2001-2018 Founder and owner of Eriksfiord group. Eriksfiord provides geoscience services for oil/gas exploration/production, geothermal and waste disposal.

2018 Retirement.

Publications

Henry L (BP), Wadsworth J (BP), Hansen B (Eriksfiord), Hartman K (BP) (2018): Erosion and ponding of Thunder Horse deepwater turbidites by mass transport complexes in Mississippi Canyon based on image log sedimentology. *Marine and Petroleum Geology*, 97, 639-658.

Zacharski J (Orlen Upstream) and Hansen B (Eriksfiord) 2017: Stress field and natural fracture system in Polish Shale Belt based on borehole images. *Conference Proceedings, Second EAGE Borehole Geology Workshop*, Oct 2017.

Joubert JB (Total) and Hansen B (Eriksfiord) 2017: Understanding wireline borehole image workflows from the wellsite to the end user. *Conference Proceedings, Second EAGE Borehole Geology Workshop*, Oct 2017.

Hansen B, Buczak J (2010). Making Interpretable Images from Image Logs, in M. Poeppelreiter, ed. *Dipmeter and Borehole Image Log Technology: AAPG Memoir 92*, 51-66.

Hansen B, Ruehlicke B & Vahle C (2009): New method for quick stress inversion and stability prediction. *SPE/AAPG/SEG workshop, Pore Pressure Prediction, Monitoring, and Wellbore Stability*, San Antonio, USA.

Galarraga M & Hansen B (2005): SPE 95060-PP. Detailed 3D Seismic Interpretation using HFI seismic Data, Fault Throw, and Stress Analysis for Fault reactivation in the Cogollo Group, Lower Cretaceous, Urdaneta West Field, Maracaibo Basin.

Galarraga M & Hansen B (2005). Detailed 3D seismic interpretation using HFI seismic data, fault throw, and stress analysis for fault reactivation in the Cogollo Group, Lower Cretaceous, Urdaneta West Field, Maracaibo Basin. IX Lacpec, SPE 95060.

Poppelreiter M, Balzarini MA, Hansen B, Nelson R (2005). Realizing complex carbonate facies, diagenetic and fracture properties with standard reservoir modelling software. In: The future of geological modeling in hydrocarbon development. Geol.Soc.Spec.Publ. 309.

Poppelreiter M, Balzarini M, de Sousa P, Engel S, Galarraga M, Hansen B, Marquez X, Morell J, Nelson R, Rodriguez F (2005). Structural control on sweet spot distribution in a carbonate reservoir: Concepts and 3D Models (Cogollo Group, Lower Cretaceous, Venezuela). AAPG Bulletin, v.89, no.12, 1651-1676.

Hansen B & Weihe T (2004). The Control of Geomechanics on Reservoir Properties of the Upper Sarir Sandstone Fm., Nakhla Oil Field, Hameimat Trough, East Sirt Basin, Libya. Symposium on the Geology of East Libya.

Hansen B alone or with collaborators in Z&S Geologi (1985-1998) About 200 industry reports and conference presentations.

Hansen B (1981) The transition from pyroxene granulite facies to garnet clinopyroxene facies in the system $\text{CaO}-\text{MgO}-\text{Al}_2\text{O}_3-\text{SiO}_2$. Contrib.Mineral Petrol 76 234-242.

Hansen B (1979) Some charnockitic rocks in the Nagssugtoqidian of West Greenland. Rapp.Groenlands geol.Unders. 89, 85-96.