## Short introduction to the film: Field Geology of the Yorkshire Coast

## - The North Sea Basin exposed on land

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The coast of North east England represents geologically a continuation of the North Sea Sedimentary Basin during the Mesozoic. This area was uplifted and eroded during the Tertiary. The Mesozoic and Upper Paleozoic sediments then became well exposed along the coast.

The Yorkshire coastline is constantly being eroded and for this reasons there are good exposures in these sediments. The modern coastline reflects the distribution of hard rocks, mostly limestones and well cemented sandstones, protruding out in the sea (nab), and softer shales forming the embayment's (Wyke). There we can study in the field source rocks and reservoir rocks that are known from well logs and seismic sections in the North Sea. The exposures contain ,however, much information that can not be obtained from cuttings, cores or well logs.

Near Newcastle we have good exposures of Carboniferous and Permian sediments with coal beds and eolian sands. Further south along the Yorkshire coast from Staithes to Flamborough Head we have very good coastal section of the Jurassic and Cretaceous sequences. There are good pathways for walking along this coastline (Cleaveland Way).

Since the late 1970's I have led nearly 30 field courses to Yorshire. First with students from the University of Bergen and later students from the University of Oslo.

I hope that students and others will learn something also from this virtual field trip and that they would like to visit this area themselves.

This CD was recorded in the field in 2003 by a professional photographer (Arve Helling) and edited by Fred Sollie. I was accompanied in the field by my colleague Johan Petter Nystuen.

Film available at webpage URL: www.mn.uio.no/geo/tjenester/kunnskap/

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K.B.

Further reading about petroleum geosciences:

Bjørlykke. K. (2010). Petroleum Geoscience: From Sedimentary Environments to Rock Physics. Springer. Edition: 1st Edition. 2nd Printing. ISBN-13: 978-3642023316