



## GWL Cluster Meeting Thursday 22<sup>nd</sup> September 2016

Magnetic Susceptibility – the next major step forward in core and wireline logging?  
Or: Can you really infer petrophysical parameters from magnetism?

### Abstract:

Magnetic measurements provide a rapid, cost effective and non-destructive means of characterising high-resolution mineralogical variations between core samples. Until now they have been a relatively unexploited tool in petrophysical core analysis.

A pioneering oil and gas reservoir imaging (RI) technology designed to cut the risk, time and cost for future oil and gas exploration/development has been launched by Advanced Downhole Petrophysics (ADP), an Aberdeen-based technology company. ADP's patented MagPi™ (Magnetic Permeability Indicator) technology uses a naturally occurring phenomenon - magnetic susceptibility - to predict certain parameters of hydrocarbon reservoir rocks.

Permeability is one of the important parameters that MagPi™ predicts. It measures the ease with which oil and gas can flow through a reservoir rock and directly effects production rate and recoverable reserves. MagPi™ also helps to quantify the mineralogy of the reservoir rock, knowledge of which supports the geological understanding of the reservoir and its behaviour during production.

### Speaker & Company Overview:

**Martin Cox - CEng FIMMM FEI SPE (1984) - Technical Business Development (Aberdeen Drilling Management)**

Martin began his Engineering career in 1979 as a National Coal Board Mining Student Apprentice in the South Nottinghamshire Area. After completing the Mining ET scheme, graduating in Mining Engineering (Nottingham Trent Polytechnic – now Trent University), he joined the offshore industry initially in subsea activities.

In 1986 he joined BPB Industries working in the evaluation of a variety of exploitation projects for coal, lignite, tar sands and mineral deposits in the UK, Canada, Europe and Africa, transferring into the newly forming oil & gas division for well evaluation and intervention activities in the North Sea, with a final UK field assignment on Wytch Farm before overseas assignments in Pakistan, New Zealand, Australia, and finally to the Netherlands (NAM).

A UK based period of technology development followed before joining Expro Group and then Aberdeen Drilling Management, since 2009

Stake-holder of Advanced Downhole Petrophysics (start up company for Magpi application).  
President elect for the Institute of Materials, Minerals & Mining (IOM3) 2017/18

This presentation will take place in the Royal Cambrian Academy, Crown Lane, Conwy,  
LL32 8AN (located behind Plas Mawr) at 18:30. Refreshments from 18:00.