

**Technical Luncheon – Drilling & Completions**  
**Tuesday February 9, 2010**  
**11:45 a.m. to 1:00 p.m. – Doors will open at 11:15 a.m.**

**ConocoPhillips Auditorium, Calgary**  
**401 – 9 Avenue SW, 3<sup>rd</sup> Floor (Gulf Canada Square)**

## **Getting the Most from Measurements While Drilling**

Presented by: Professor Angus Jamieson BSc FRICS  
University of Highlands and Islands, Scotland  
Consultant to Weatherford International  
Chief Directional Surveying Lecturer Shell and Conoco Phillips

This presentation will cover the techniques and methods used to maximize the accuracy of MWD surveying. It will include an introduction to high accuracy survey correction techniques such as Sag, Stretch, Temperature, Magnetic Interference, IFR, IIFR and slide/rotate optimization. Professor Jamieson was the original author of the COMPASS well planning software and a former chairman of the Wellbore Positioning Section of the SPE (ISCWSA).

**Angus Jamieson** is the professor of Offshore Engineering at the University of the Highlands and Islands in Inverness, Scotland. A regular consultant to Weatherford, Angus used to be the owner and director of Tech 21 the foremost survey consultancy for directional drilling operations. Angus was the original author of the COMPASS directional software and until recently was also chairman of the SPE technical section for surveying (the ISCWSA) and is a Fellow of the Royal Institute of Chartered Surveyors. He is a regular lecturer in directional drilling and surveying for the major oil companies.