



*Sub-Vertical Seismic Imaging  
for improving reliability and accuracy of  
3D seismic in complexly built fractured geologic environment*

## **Fracture Imaging Technology now available in Calgary**

- ✓ **What is DWM?** DWM is a new type of 3D pre-stack depth migration that images only the secondary reflections. DWM amplitude cubes image only vertical or near vertical boundaries and is a complement to conventional PSTM and PSDM imaging. DWM is designed to delineate lateral acoustic impedance heterogeneities within the reservoir that may be caused by increased intensity of water or hydrocarbon filled fracture systems. Impressive case histories have been published in the January issue of First Break magazine. Other case histories show DWM based AVA analysis on vertical geo-bodies. Also we have an example of a fractured shale oil case study.
- ✓ **Why is this technology interesting for the Western Canadian Basin?** DWM can identify lateral heterogeneities in deep reservoirs with a high degree of lateral resolution. Plays that rely on accurate delineation of intensity of fluid filled fracture systems, reef edges, and subtle zero throw near vertical faulting can benefit directly from DWM technology. We expect deeper conventional oil plays in the WCB may draw especially more of interest if we can find a new technology that significantly reduces drilling risk.
- ✓ **How does elastic anisotropic forward modeling fit in?** Forward modeling enables us to understand the complex reasons why high angle of incidence reflections from thin vertical boundaries can be detected on routine 3D seismic data.
- ? **How can you learn more about this technology?** Our specialists are available to provide a full range of power point presentations to oil company geophysicists, geologists, and reservoir engineers. We have executed more than thirty successful DWM service projects done since 2008. Please visit <http://www.tetraseis.com> /Contact Us to arrange a meeting.