detailed cross sections throughout the area, structure maps and isopach maps, along with a variety of other maps. A study of the capping sands and the underlying Doig shales would improve the technical understanding of the area surrounding the Doig reservoir by means of core analysis and detailed photographs of contacts and both depositional and biological sedimentary features. Ichnology may play a role in helping to create a depositional model for the capping sands of the Doig shales and the related Doig thick sand bodies. This would benefit future models proposed for the ATSBs.

The Doig lithologies show considerable variation throughout the body, both interior and exterior. There is a need to understand the mechanics of the Doig bodies and surrounding areas before conclusions of depositional environments and interpretation of stratigraphic sequences can occur. The story of the Doig Formation is aided by the understanding of the depositional conditions of its shales and capping sand packages and their relationship to the ATSBs.

## Study of the capping shale of the Triassic Doig anomalously thick sand bodies in the area of the Wembley Field, Alberta

Jessica Beal
*Department of Earth Sciences, St. Francis Xavier University, Antigonish, NS B2G 2W5*

The Triassic Doig Formation contains Anomalously Thick Sand Bodies (ATSBs), which are thick bodies of sand located as numerous fields surrounded by shale and capped by a distinct transgressive sand layer. The Doig shale and their sand cap on the east and west sides of the Wembley field are poorly understood in their relationships to the Doig Formation sand bodies and to the overlying Halfway Formation. The ATSBs have considerable thicknesses of fifty meters or more, while the capping sands outside of these bodies are of lesser thickness, closer to 10 m thick, with the overall Doig thickness being similar throughout the whole area. The facies relationship and depositional environment of the shales laterally equivalent to the ATSB are important to the overall understanding of the area.

A focused study on the Wembley ATSB used detailed photographs of the available core and matched them with the logs. The information obtained from these was used to create