

Arden Thompson

Biography

Arden Thompson graduated in 1975 with a Bachelor of Science, Geology major, from Saint Francis Xavier University, Antigonish, Nova Scotia. He is a registered member of the Association of Professional Geoscientists of Nova Scotia (APGNS). Arden has had a career as both an employee and as a consulting and contracting Geologist on numerous projects in Nova Scotia and the Atlantic Provinces. His career has been mainly focused on coal and energy related projects, including Coal Bed Methane evaluation drilling, test production well operations, coal exploration drill programs, coal mine feasibility studies, mine development, surface coal mining and high wall mining operations. Arden is a member of the technical team working with East Coast Energy Inc. on the Stellarton Basin Coal Bed Methane Project in the Pictou Coalfield of Nova Scotia. He has been involved with previous CBM exploration and testing operations in the Pictou Coalfield commencing in the early 1980's and as recently as 2008. He has a lengthy history of working on and evaluating geological interpretations within the Stellarton Basin throughout his career.

Presentation Abstract: East Coast Energy's Work on Coal Bed Methane

The Pictou Coalfield is situated in the north-central part of Pictou County, Nova Scotia. The basin is 18 km wide (east to west) by 9 km long (north to south) and encompasses an area of approximately 165 square kms. East Coast Energy Inc. has a coal bed methane production licence for the area which encompasses approximately 22,000 acres.

The Pictou Coalfield lies within a graben. The coal basin was slowly filled with a succession of sediments which impeded drainage and shallow lakes developed which caused the fluvio-lacustrine deposits of the Stellarton Group coals to be laid down. The coals of the Pictou coalfield are of thermal quality and are mostly classed as high volatile A bituminous coals. There are approximately 22 major coal seams in the basin ranging in thickness from 1 to 14 meters. These coal seams are known for their gaseous nature which has been supported by recent desorption testing resulting in gas content readings of over 6 ml per gram. Approximately 55 million tonnes of coal have been mined in the past 185 years. Historically, these mining activities resulted in many tragic disasters, the majority caused by coal gas explosions.

There is nearly 400 feet of total coal thicknesses in the stacked coal seams of the basin. The impervious shale beds deposited between these known gaseous coal seams forms an excellent trap for the coal seam gas. Recent advancements in coal gas development and production technologies, combined with the nearness to local markets and the M&NP pipeline, make this an excellent on shore Nova Scotia natural gas development project.