

### The Mackenzie Delta: an Overview of the Geoscience and Engineering Challenges of Working in the Canadian Arctic

<b>Date:</b>	Thursday, April 22, 2010
<b>Time:</b>	Registration: 11:15 a.m. Luncheon: 11:45 a.m. Speaker: 12:15 p.m.
<b>Location:</b>	The Fairmont Palliser 133 – 9 Ave SW
<b>Cost:</b>	\$45 Members and Guests \$22 Students \$15 APEGGA Student Advantage Program
<b>Guest Speaker:</b>	John Hogg, P.Geol. Gary L Bunio, P.Eng. MGM Energy Corp.

Oil was first noted in the Mackenzie Valley dating back to 1789 during the travels of Alexander Mackenzie along the banks of what was then called the Deh Cho, the Great River.

Oil and gas exploration in the northern Mackenzie began in earnest in the 1960's with large discoveries in excellent reservoirs on the Mackenzie Delta and then later offshore in the Beaufort Sea. The hydrocarbons are in Mid-Tertiary-aged sandstone reservoirs deposited by the paleo-Mackenzie River in a river to deltaic environment which flowed into an ice free Arctic Ocean.

Operating on the Mackenzie Delta is a challenge. From challenges in acquiring and interpreting seismic; to the construction of a one metre thick ice pad, insulated conductor pipe and mud chilling to abate permafrost melting while drilling; to the logistical challenges of working in one of the harshest environs on the planet during months of continuous darkness. MGM Energy's operations 160 km north of the last road in Canada all require integrated planning and execution of a multi-disciplinary team of Professionals and Technologists.

Increased importance of the protection of the natural environment in the Arctic has also changed the way MGM Energy manages both drilling mud and cuttings. Using a barge mounted base camp approach has decreased the size of exploration pads and the impact to the tundra. This presentation will cover MGM's last three years of learning and success in the Mackenzie Delta.

*To ensure adequate seating please preregister with the Calgary APEGGA Office at 262-7714 or register online at [www.apegga.org](http://www.apegga.org) under Fast Find; Branch Events Registration, noting any dietary restrictions prior to Thursday, April 15, 2010. Calgary Branch accepts Visa, MasterCard, or American Express.*