

Church Uranium-Germanium-Molybdenum Deposit, North Dakota PacMag Metals Limited – ASX:PMH

LOCATION: The Church deposit part of the Sentinel uranium-germanium-molybdenum project covering in excess of 25,000 acres is located in western North Dakota USA.

STORY: The targets at Sentinel are multiple, near surface (less than 20 m depth), stacked, sub-horizontal, high-grade, uranium-germanium-molybdenum mineralisation zones that occur at the top of coal (lignite) horizons.

Resource drilling (419 holes) at the Church Deposit, the first of several prospects to be tested, was completed in late-2008, to assess the continuity and extent of mineralisation between and beyond the existing historic resources and with the aim of developing high-grade, near surface resources that can be developed by coal-style open pit mining. Continuous mineralisation has been identified in drilling in excess of 3 km of strike and resource modelling is in progress, with results anticipated to be released in early 2009.

In addition to the resource drilling, close spaced, post-hole drilling designed to test the local scale continuity and potential mine-ability of the mineralisation, shows excellent continuity and consistency of mineralisation. The weighted average grade for all 12 holes assayed returned values of 0.105% U_3O_8 , with mineralisation starting at, or very near surface.

Mining in the late 1960's, from a small open pit (now rehabilitated) that occurs within the Church lease, is reported to have produced approximately 40,000 tons of ore, grading 0.175% U_3O_8 from near surface. Mining in the district ceased in the late 1960's when U_3O_8 was at \$7 per pound.

Recent test work indicates uranium metallurgical leach recoveries of 92%, whilst metallurgical test work on germanium and molybdenum mineralisation is in progress. The company believes that the mineralization occurs at surface and because of the gently dipping strata, the project provides an excellent exploration and development opportunity over large areas.

GEOLOGY: The host lignite seams of the Sentinel Butte member of the Tertiary Fort Union Formation are flat lying to very gently dipping and are generally 0.5 m to 5 m thick, with the upper 0.5 – 1.5 m portion carrying the highest grades of uranium and molybdenum mineralisation. Germanium occurs in multiple stacked layers.

DISPLAY: Drill and trench samples of typical rock samples from the Church Deposit, along with photos, maps and cross sections to illustrate the deposit will be on display.