

10 September 2010

Companies Announcement Office *Via Electronic Lodgement*

PENINSULA SUCCESSFULLY COMPLETES AQUIFER PUMP TESTING PROGRAM AT ROSS PROJECT

Peninsula Minerals Limited **(Peninsula)** is pleased to announce the completion of the aquifer pumping test program at the Ross Project, the first planned production centre at the Lance Projects, Wyoming, USA **(Lance Projects)**. This well testing and the hydraulic values derived from it are key milestones in the regulatory permitting process and support the operational feasibility of the project.

On July 7, 2010, the first of six multi-well aquifer tests was initiated utilizing 24 regional baseline wells installed in 2009. Each of the wells was equipped with dedicated submersible pumps and data logging pressure transducers. State-of-the-art instrumentation and associated software provides the most accurate formation hydraulic characteristics possible.

The goals of the program were two-fold:-

- 1. To determine key hydrologic parameters of flow (permeability or hydraulic conductivity) and storativity, along with preferential directions of fluid movement within the ore zone.
- 2. To measure the relative confinement or isolation of the mineralized horizons from other water-bearing zones (also a critical factor in successful mining).

The aquifer testing program was conducted after significant coordination with the Wyoming Department of Environmental Quality/Land Quality Division staff, which approved the work plan in May 2010.

All six tests have been completed with very promising results from the mineralized sandstones.

Five of the six aquifer tests consisted of pumping from an ore zone well at a constant rate for 24 hours and recording the water levels within the ore zone well and three nearby monitoring wells, which are completed in the overlying and underlying aquifers at each location.

The final and most important test utilized an ore zone pumping well and six observation wells, which were all installed in the initial mining area. Prior to initiating the testing program at this site, Peninsula located and sealed some 56 exploration boreholes in the vicinity of the test site in order to simulate actual mining procedures. Three of the observation wells were completed in the overlying and underlying aquifers and three of the wells were completed as potential injection/recovery wells with limited open intervals targeting specific mineralized horizons. Results from a 72 hour pumping phase indicate permeability's from discrete portions of the uranium bearing host sandstones that range from 4.5 to 14.4 feet per day. Further, the results demonstrated no hydraulic communication between the ore zone and the overlying and underlying aquifers, confirming the mineability of host sandstone in the mining area.

These values compare favourably to operating In-Situ Recovery (ISR) facilities in the Powder River Basin, further confirming the commercial viability of the Lance Projects.

Executive Chairman Gus Simpson stated "These results further support the company's plans to be mining these deposits and mark the completion of a further significant step towards mining approval."

Yours Sincerely

John (Gus) Simpson Chairman

For further information, please contact our office on (08)9380 9920 during normal business hours.