REE values are in a dark grey to black, sub-metallic to glassy, mineral in veins which are variably non-magnetic to moderately magnetic. All of the REE-bearing samples are weakly to moderately radioactive with significant thorium content and minor uranium values generally <100 ppm. The presentation will describe the regional and local geological setting, the mineralization and the ongoing mineralogical studies and exploration, including diamond drilling.

Rare earths along the Trans Labrador Highway – a new REE camp in the making?

PETER DIMMELL
Silver Spruce Resources Inc., Suite 312, 197 Dufferin Street, Bridgewater, Nova Scotia B4V 2G9, Canada

Silver Spruce Resources Inc. (SSE – TSXV) has discovered significant REE mineralization in the Popes Hill Area, along the Trans Labrador Highway, approximately 100 km from Goose Bay. The mineralization, hosted in Paleoproterozoic pelitic and granitic gneisses affected by the Labradorian Orogeny (~ 1.6 Ga), which have been overprinted by the Grenville Orogeny (~ 1.0 Ga), occurs as veins, pods and disseminations in road cuts, a bedrock pit (the MP showing) dug for construction material for the highway, and as outcrops and float boulders in brooks and the Pinus River. The mineralization appears to be related to a structural zone defined by linear monzonite bodies of uncertain age, which parallel a thrust or reverse fault dipping at approximately 45 degrees to the south-southeast, also generally parallel to the banding in the gneisses. Thirty-one selected grab samples, over a 7 km strike length, all gave anomalous TREE + Y values averaging 5.73% with 16 samples >5%, and 5 samples >10%, with a high value of 24% TREE+Y. These include 7 "host rock" samples, with values <0.4%. The highest

Atlantic Geology, 2011, Volume 47, Number 1