

All field trips will take place within Manitoba, a province renowned for its friendly hospitality; nevertheless, participants should come prepared for the possibility of less-than-hospitable weather. The average daily temperature for May in Winnipeg is 12°C, with record extremes of 37°C and -11°C. North-central Manitoba (Thompson) has an average daily temperature of 6.5°C in May, with record extremes of 32.6°C and -18.3°C (*Source: Environment Canada*).

Prices shown below include transportation and double-occupancy accommodation for the duration of the field trip (as specified by the departure/arrival information), field trip guidebook, snacks and bottled water, meals and incidentals as indicated, and all applicable taxes.

### **Pre-meeting Field Trip**

#### **FT-A1**

#### **The Rice Lake Mine Trend, Manitoba: Regional Setting, Host Rock Stratigraphy and Structural Evolution of a Classical Archean Orogenic Lode-Gold System**

Saturday May 18 to Tuesday May 21, 2013

**Leaders:** Scott Anderson (Manitoba Geological Survey) and Doug Berthelsen (San Gold Corp.)

**Estimated cost per person:** \$620 (includes all meals)

**Maximum number of participants:** 12

**Summary:** This three-day field trip will provide an overview of the key geological attributes of a major orogenic gold system in the Archean Rice Lake greenstone belt of the Uchi Domain, western Superior Province. With a collective gold endowment of approximately 5 million ounces, the Rice Lake mine trend is the most significant lode-gold district in Manitoba. Clean bedrock exposures at Rice Lake provide an excellent opportunity to examine: 1) the character and stratigraphy of Neoarchean subaqueous volcanic and volcanoclastic rocks, associated subvolcanic intrusions, and an unconformably overlying succession of fluvial-alluvial ('Timiskaming-type') sedimentary rocks; 2) the geometry and overprinting relationships of mesoscopic deformation structures, demonstrating a protracted history of synvolcanic faulting, early regional tilting, local synorogenic extension, intense regional compression and late-orogenic dextral transcurrent shear; 3) complex arrays of auriferous quartz-carbonate veins hosted by shear and tensile fractures; 4) the effects of hydrothermal alteration under greenschist facies metamorphic conditions in a variety of rock types. Also included will be a visit to the Rice Lake mine complex and an underground tour of spectacular exposures of high-grade quartz-carbonate veins. The field trip stops have been selected to facilitate discussion on the nature, origin and significance of the deposits in the context of the tectonic and metallogenic evolution of the Rice Lake greenstone belt and western Superior Province.

**Departure/arrival information:** Departs Winnipeg International Airport on the afternoon of Saturday May 18<sup>th</sup>; exact departure time(s) will depend on delegate arrival times; arrives at the Winnipeg Convention Centre in the afternoon or early evening of Tuesday May 21<sup>st</sup>.

**Other information:** This trip commences in Bissett on the morning of Sunday May 19<sup>th</sup> and includes accommodation for the night of Saturday May 18<sup>th</sup> in Bissett. Transport by minivan to Bissett will be provided on the afternoon of Saturday May 18<sup>th</sup> from Winnipeg International Airport. Driving distance to Bissett is 250 km (approx. 3 hours). The field trip stops are easily

accessible along roads or bush trails, but may require walking on uneven or slippery surfaces; some stops will require hikes of up to 1.5 km on flat terrain, which may be wet in places. The final day will include an underground tour in an active mine. Personal protective equipment will be provided; however, participants with smallish feet are advised to bring their own steel-toed boots.