

Saskatchewan Geological Society Talk

Monday, February 23rd

Ms. Deb Shewfelt, North Rim Exploration

**Saskatchewan Potash – Understanding an Ancient
Dead Sea to Sustain Modern Life**

**Ramada Hotel, 1818 Victoria Avenue, Regina
Pine Room, 3rd Floor**

**Lunch: 11:45 a.m.
Meeting talk: 12:15-1:00 p.m.**

**For lunch the cost is:
Members: \$15.00
Student Members: \$5.00
Non-Members: \$20.00**

For those not having lunch the talk is free

**Please contact Jason Cosford at cosford@jdmollard.com
or 306-352-8811 before noon, Friday, February 20th
if you are going to have lunch.**

If you want lunch please RSVP or you may go hungry.

Deb Shewfelt Biography

After attaining an Honours B.Sc. in Geology and a second degree in Anthropology at the University of Manitoba, Deb continued her education at the University of Saskatchewan, where she attained a M.Sc. in Geology. Deb's early geological experience was gained in academic, industry and government forums in gold, base metal and uranium exploration. Since joining the North Rim team as a part owner and manager, Deb has consulted as a Senior Advisor to potash projects and is a contributing author of technical potash reports. She is also involved in the development of North Rim's innovative data management and educational outreach products.

Deb is passionate about geoscience educational outreach across the province at all educational levels and for technical and non-technical audiences. In addition to her consultation with provincial academic institutions, she is also a member of the Canadian Geoscience Education Network (CGEN), represents North Rim as a member of the International Minerals Innovation Institute (iMii) Education and Training panel, and is a member of the Saskatchewan Polytechnic Centre for Minerals Innovation steering committee.



Saskatchewan Potash

Understanding An Ancient Dead Sea To Sustain Modern Life



The Middle Devonian (~390Ma) potash horizons of the Saskatchewan Prairie Evaporite Formation are world-class deposits. The regionally extensive, consistent and high grade nature of these paleo-sedimentary basin deposits make these sylvinite horizons *the* measuring stick against which other evaporite concentrations are considered. While these qualities perhaps evoke a predictive, simple, and unchallenging commodity from an exploration and mining perspective, numerous parameters influence the economics and practicalities of bringing these sensitive deposits to fruition and sustaining production to (literally) feed the world.

This talk will provide a brief overview of the depositional history, stratigraphy, mineralogy and texture of the Patience Lake, Belle Plaine and Esterhazy Members of the Prairie Evaporite Formation and will also touch on industry-norm potash exploration techniques and early-stage success indicators. Along with what it takes to make the “grade”, challenges facing the potash industry will also be examined as they relate to safety, ground control and processing. Comparisons between select public mineral resource estimations completed for Saskatchewan potash projects will be examined as will the various mining techniques currently used by industry.

