Canadian Ferrochrome from the "Ring of Fire"!

Karen Clancy (Metallurgical Technologist) – at XPS Furnaces

Canadian Ferrochrome and associated slag – from 'Ring of Fire' – (Cliffs & KWG) 'Big Daddy' chromite deposit

CONFIRMED: Successful processing of Ferrochrome from Ring of Fire

On Feb 2nd 2011, Karen Clancy, Metallurgical Technologist at Xstrata Process Support (XPS – www.myxps.ca) hit a major milestone in the development of the Ring of Fire in Northern Ontario--Karen's smelting tests yielded the first metallic product from Canadian chromite. "This is a positive development in the story of Chromite in Canada," says Arthur Barnes, Consulting Metallurgist on the chromite Smelting tests "and we are proud to be supporting this exciting work with our experienced team at XPS."

As part of an ongoing program evaluating the metallurgical characteristics of the *(Cliffs & KWG)* Big Daddy chromite deposit, one of a number discovered in the so-called "Ring of Fire" in Northern Ontario, the Extractive Metallurgy Group at XPS have successfully produced the first metallic product from Canadian chromite. The initial results are very encouraging given that ferrochrome production has not been part of Canadian mining and metallurgy prior to this, and the operating temperatures involved in ferrochrome smelting are much higher than those common to the copper and nickel extraction processes more familiar to Ontarians.

The initial small scale tests are aimed at establishing the grades and recoveries which could be achieved during smelting in submerged electrical arc furnaces, as well as the optimum recipes with respect to fluxes and reducing agents. The small scale batch tests will be followed by appropriate pilot testing in due course.

XPS are working closely with the owners of these deposits to ensure the maximum benefits are obtained from these deposits by treating them in a sustainable and environmentally responsible way using the best available process methods.

Although there are numerous logistical challenges to be faced before these discoveries can benefit stakeholders, XPS is excited to be part of the team guiding all those involved to a mutually beneficial outcome for Northern Ontario stakeholders for many decades to come.

Karen Clancy, a technologist who has been with XPS and its predecessor, Falconbridge Technology Centre (FTC) for almost 20 years, executed the smelting tests under the guidance of Arthur Barnes, a metallurgist with over 30 years experience in ferrochrome metallurgy. Both are proud to be part of the world-class team that XPS comprises.