

First Point Minerals' Decar Project Successfully Produces High-Grade Ferronickel Directly from Awaruite Concentrate

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VANCOUVER, BRITISH COLUMBIA--(Marketwired - Oct 10, 2013) - [First Point Minerals Corp. \(TSX:FPX\)](#) ("First Point" or the "Company") is pleased to announce the positive results of preliminary lab scale test work, in which high-grade ferronickel was produced using awaruite (nickel-iron alloy) concentrate from the Company's 40%-owned Decar project ("Decar", or "the Project"). Decar, a nickel-iron alloy project in central British Columbia, is 60%-owned and operated by Cliffs Natural Resources Exploration Canada Inc., an affiliate of [Cliffs Natural Resources Inc. \(NYSE:CLF\)\(Paris:CLF\)](#) ("Cliffs").

High-grade ferronickel was successfully produced from Decar awaruite concentrate samples by application of proven and widely-used processes, thereby demonstrating potential amenability of Decar products to processing in existing ferronickel plants. These results represent a key advancement in demonstrating the potential for market acceptance of the Project's concentrate. Test work completed to date demonstrates that smelting Decar concentrates on a stand-alone basis, with the addition of a reductant and fluxing agents, produces a high-grade product of 35% - 50% nickel, comparing favourably to typical ferronickel products containing 15% - 40% nickel. An alternative process route mixing Decar concentrates with saprolite ore at a pre-smelting, kiln reduction stage also gave positive results, but these are more preliminary in nature.

"These bench-scale results indicate the potential amenability of Decar's nickel-iron-chromite concentrate to downstream processing using conventional smelting technologies. This represents an important step towards introduction into the market of this new intermediate product derived from Decar or other awaruite deposits. We are encouraged that the very high nickel recoveries achieved, 94% to 99%-plus, for both a stand-alone awaruite concentrate and a mixed awaruite-saprolite calcine, along with strong iron recoveries, suggests the possibility of robust nickel and by-product payability as awaruite-based concentrates gain traction in the marketplace," said Jim Gilbert, President and CEO of First Point.

The Decar concentrate, as announced previously, is a nickel-iron-chromite concentrate produced by magnetic separation of awaruite-bearing material followed by gravity concentration. This represents a new product to be sold into the ferronickel-to-stainless steel production chain. As such, the testing program evaluating smelting performance of the concentrate targeted two possible treatment scenarios:

- Smelting of Decar awaruite concentrate into ferronickel on a stand-alone basis; and
- Blending Decar concentrate with saprolite ore in a kiln reduction/calcine smelting processing sequence.

The latter is a process configuration currently in use in a variety of ferronickel plants around the world.

Stand-Alone Smelting Tests

Five successful stand-alone smelting tests were undertaken, three on concentrates produced in 2013 specifically for this testing program, and two on concentrates originally prepared in 2011 to examine magnetic-plus-gravity recovery (as reported on by First Point in July 2011). The 2011 concentrates provided the basis for the Preliminary Economic Assessment ("PEA") of Decar completed in March 2013. (See First Point news release of March 22, 2013.) In these five tests, awaruite concentrate was premixed with varying combinations of a reductant (anthracite coal) together with silica and magnesia fluxes, placed in a crucible in a muffle furnace and smelted at conventional temperatures (1600°C) and for normal duration (1 hour). The target nickel content of 50% was met for the ferronickel produced in all tests on the 2013 concentrate, and in one of the two tests on 2011 concentrates. Target slag compositions were also achieved, with the exception of one test. Nickel recoveries, ranging from 94% to more than 99%, met or exceeded targets in all but one test, and iron recoveries at 31% to 46% exceeded the target in each case.

Smelting Tests Using Mixed Saprolite-Awaruite Calcines

In these tests, an initial key objective was to determine whether or not the awaruite concentrate would oxidize under kiln reduction conditions; such oxidation would render the material unsuitable for further processing in a conventional ferronickel furnace. The kiln reduction tests demonstrated that the awaruite survived un-oxidized through the process.

Three successful follow-on smelting tests were conducted on the mixed calcines, two in the same type of muffle furnace used in the stand-alone tests, and one in an induction-type furnace. The ferronickel buttons produced contained 17% to 19% nickel and 69% - 76% iron, versus targets of 20% nickel and 75% iron respectively, with recoveries for nickel ranging from 95% to 99%, and for iron from 86% to 95%. The metallic product contained 1.4% to 1.9% chromium and a relatively high carbon content of 1.8% to 2.6%, due to the elevated carbon content of the mixed calcine feed. These results are more preliminary than the stand-alone smelting tests, due to experimental difficulties in the laboratory, but are regarded as encouraging.

A further conclusion of this test work is that the Decar concentrate will require some form of agglomeration or sintering, as the material is too fine to be charged directly into conventional furnaces. This work has not yet been undertaken, except to demonstrate that pressure alone is insufficient to produce suitable briquettes.

The lab scale test work was carried out for Cliffs by Process Research ORTECH Inc., at its Sheridan Park, Ontario, facilities, on samples ranging in size from 200 grams to 300 grams of awaruite concentrate for the stand-alone smelting tests, and 2 kilograms of awaruite concentrate for each of the mixed saprolite-awaruite kiln reduction/calcine smelting tests.

The table below presents a comparison of the specifications for the ferronickel produced from Decar concentrates against the ISO standard specifications and some selected ferronickel products currently in the market. It should be noted that the phosphorous and sulphur contents achieved in the Decar smelting tests are not outside the norm of crude ferronickel. However, refining steps will be required to reduce the level of these elements in the final ferronickel product as typically practised in all ferronickel plants.

Selected Ferronickel Product Specifications

Element	Decar - Stand-Alone	Decar - Mixed	ISO 1	Sumitomo Metal Mining 2	Eramet SLN 25®2
Ni	35 - 52%	17 - 19%	15 - 80%	≥ 16%	21 - 28%
Fe	Balance	Balance	Balance	Balance	Balance
C	0.04 - 0.20%	1.8 - 2.6%	2.5% Max	≤ 3.0%	1.2 - 2.0%
P	0.06 - 0.08%	0.03 - 0.04%	0.03% Max	≤ 0.05%	0.014%
S	0.07 - 1.1%	0.4 - 0.8%	0.04% Max	≤ 0.03%	0.05%
Cr	0.03 - 0.07%	1.4 - 1.9%	2.0% Max	≤ 2.5%	0.55%

1. ISO Norm "FeNi specification and delivery requirement". Source: [Eramet](#) Ni Research.

2. Source: Company websites.

Dr. Raja Roy, P.Eng., a Senior Project Manager & Senior Process Engineer at Process Research ORTECH and an independent Qualified Person under NI 43-101, has reviewed and approved the metallurgical content, while Dr. Peter Bradshaw, P.Eng., First Point's Qualified Person under NI 43-101, has reviewed and approved the analytical content of this news release.

About First Point

[First Point Minerals Corp.](#) is a Canadian base metal exploration company operating worldwide. For more information, please view the Company's website at www.firstpointminerals.com.

On behalf of [First Point Minerals Corp.](#)

Jim Gilbert, President and CEO

Forward-Looking Statements

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