



Nornickel's Polar Division carried out successful pilot testing of the technology to extract valuable components from pyrrhotite with a low nickel content. The pyrrhotite is generated at Talnakh Concentrator after the main cycle completes and is in effect a dump product to be discharged to the tailing dam. The new technology provides a significant boost in metal recovery for the Company.

It took Polar Division three months to conduct the pilot tests to recover valuable components. In the first half of the year, as ore mining was limited due to the flooding at two mines caused by snow melt, the Company faced the need to find sufficient feedstock to ensure better use of output capacity of its concentration and metallurgical facilities. Nornickel's Polar Division and South Cluster (part of the Norilsk Division) teamed up to create a technical solution to recover additional products from some waste tailings generated at Talnakh Concentrator. Their research showed that pyrrhotite with a low nickel content can be most effectively processed at Norilsk Concentrator (an internal business unit of South Cluster).

In early August, the first phase of the pilot testing was over and proved to be successful. The technology helped recover the additional amount of around 200 t of nickel, 50 t of copper, over 80 kg of platinum group metals, around 2 kg of gold and 44 kg of silver. Further studies have been underway to determine the reagent scheme at the concentration facilities. The updated scheme is expected to allow the Company to substantially increase recovery of valuable components from low-grade products.

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