

GROWTH PROJECTS

MASLOVSKOYE DEPOSIT

Location and profile

The Maslovskoye deposit is located in the Norilsk Industrial District, 12 km south of the Norilsk-1 deposit.

The Company received the licence to explore and mine the Maslovskoye deposit's platinum-copper-nickel sulphide ores in 2015.

Balance reserves

A feasibility study of permanent exploratory standards and a reserve statement for the Maslovskoye deposit were approved by the State Reserves Commission of the Russian Ministry of Natural Resources and included into the State Register of Mineral Reserves (Minutes No. 5561 dated 12 October 2018).

B + C₁ + C₂ mineral reserves

Item	Ore	Metal content in ore
Total ore	207 mln t	-
PGMs	49 Moz	7.4 g/t
Palladium	33 Moz	5.0 g/t
Platinum	13 Moz	2.0 g/t
Nickel	1 mln t	0.3%
Copper	1 mln t	0.5%
Cobalt	26 kt	0.01%
Gold	1 Moz	0.2 g/t

BUGDAINSKOYE DEPOSIT

Location and profile

The Bugdainskoye molybdenum deposit lies in the Alexandrovo-Zavodsky District of the Zabaykalsky Region, 30 km north-west of Alexandrovsky Zavod.

Its mineral reserves were included into the State Register of Mineral Reserves in 2007. In 2014, Nor Nickel halted the development of the Bugdainskoye deposit for three years in a low-price global molybdenum market, and in 2017 extended the suspension of operations for another five years, until 31 December 2022.

Balance reserves

Item	Reserves
Ore	812 mln t
Molybdenum	600 kt
Gold	360 koz
Silver	6,221 koz
Lead	41 kt

HONEYMOON WELL

The Group holds a mining licence to develop the Honeymoon Well project in Australia, which comprises deposits containing disseminated nickel sulphide ore (the Hannibals, Harrier, Corella and Harakka deposits), and massive and stockwork ores (the Wedgetail deposit). The total measured and indicated mineral resources of the Honeymoon Well project are estimated at 173 mln t of ore at an average grade of 0.68% nickel.

In 2017, Nornickel halted the development of the Wedgetail deposit for five years, until 7 October 2021.

BYSTRINSKO-SHIRINSKOYE DEPOSIT

The Bystrinsko-Shirinskoye gold ore deposit is located 24 km south-east of Gazimursky Zavod in the Zabaykalsky Region. The licence area shares a boundary with the Bystrinskoye deposit. In 2019, technical and economic viability of the potential development option was evaluated for the Bystrinsko-Shirinskoye gold ore deposit based on the results of a scoping study conducted to evaluate development options.

TALNAKH ORE CLUSTER DEPOSITS

To unlock the full potential of its deposits supporting existing operations and determine the best configuration for new operations, Nornickel explores the Talnakh ore cluster deposits, ensuring increases high-grade and cuprous ore reserves.

Eastern flank of the Oktyabrskoye deposit

In 2018, Nornickel conducted surface exploration within its licence boundaries as part of the Follow-Up Exploration of the Oktyabrskoye Deposit project. The results included multiple drill-hole intersections of rich ores outside the boundaries of the approved reserves, adding to the quantity of the high-grading ore reserves of the Severnaya 4 and Severnaya 3 Lens deposits. A quantitative estimate of the additions is planned following the project completion in 2020.

Western flank of the Oktyabrskoye deposit

In 2017, Nornickel obtained an exploration licence to prospect for and appraise mineral deposits within the western flank of the Oktyabrskoye deposit. The exploration licence area shares a boundary with the already licensed mining area. Prospecting on the property continued in 2019, with chemical analysis and laboratory tests completed for the 2018 prospecting results.

NON-METALLIC MINERAL DEPOSITS IN THE NORILSK REGION

Mokulaevskoye deposit

The Mokulaevskoye deposit lies 10 km north-west of the Oktyabrsky and Taimyrsky Mines. A mining licence for this limestone deposit was obtained upon its discovery in 2017. In 2018, the State Reserves Commission of the Russian Ministry of Natural Resources reviewed the feasibility study of permanent exploratory standards and the reserve statement for the deposit, including its limestone reserves into the State Register of Mineral Reserves for potential use in cement and lime production and in desulphurisation. The deposit can be developed through open-pit mining.

Its B + C₁ + C₂ balance reserves of limestone are 135,661 kt.

Gribanovsky licence area

In 2017, Nornickel obtained an exploration licence to prospect for and appraise silica sand deposits within the Gribanovsky licence area on the Yenisey River, 22.5 km south of Dudinka. A prospecting and appraisal programme for the property was completed in 2019. A feasibility study of permanent exploratory standards and a silica sand reserve statement for the deposit were completed based on its results and submitted to the State Reserves Commission of the Russian Ministry of Natural Resources for review.

The estimated C₁ + C₂ reserves of silica sand are 88,371 kt.

Ozero Lesnoye deposit

In 2017, Nornickel obtained a survey, exploration and mining licence for the basalt reserves of the Ozero Lesnoye deposit (licence area No. 2), located 22 km north of Norilsk.

Following a review of the 2019 feasibility study of permanent exploratory standards and the reserve statement, the deposit's basalt reserves were included into the State Register of Mineral Reserves for potential use as inert reinforcement for backfill concrete in underground mines.

The $C_1 + C_2$ balance reserves of basalt are 187,911,000 m³.

PROMISING AREAS AND PROSPECTS

Khalilskaya area

The Razvedochny, Mogensky, Khalilsky, Nizhne-Khalilsky, and Nirungdinsky copper-nickel sulphide ore prospects lie within the Khalilskaya area, located 150–160 km south-east of Norilsk.

In 2014, Nornickel obtained an exploration licence to prospect for and appraise deposits within the area. In 2019, the Company conducted surface prospecting and geochemistry, and identified promising areas for drilling to confirm the geology.

The Lebyazhninskaya area

The Lebyazhninskaya copper-nickel sulphide ore prospect is located 20 km north-west of Norilsk.

In 2014, Nornickel obtained an exploration licence to prospect for and appraise deposits within the area. In 2019, laboratory tests were conducted for previous prospecting results.

Yuzhno-Norilskaya area

The Morongovsky and Yuzhno-Yergalakhsky copper-nickel sulphide ore prospects lie within the Yuzhno-Norilskaya area, located 30 km south of Norilsk. In 2019, Nornickel obtained an exploration licence to prospect for and appraise deposits within the area.

Mikchangdinskaya area

The Yuzhno-Neralakhsky, Snezhny and Neralakhsky copper-nickel sulphide ore prospects lie within the Mikchangdinskaya area, located 70 km north-east of Norilsk. In 2019, Nornickel obtained an exploration licence to prospect for and appraise deposits within the area.