

# Nickel junior open to opportunities

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SYDNEY-based explorer Proto Resources has moved one step closer to production with the lodgement of the development application, development proposal and environmental management plan for the company's wholly-owned Barnes Hill nickel-cobalt deposit.

In a statement to shareholders on September 28, Proto said the application covered the approvals required for the construction processing facilities, the commencement of mining and ongoing environmental management.

Proto has already signed a binding option with the right to purchase 105 hectares of private land adjacent to the mine site, including 87 hectares of native habitat to offset environmental impacts.

## Barnes Hill

The lodgement followed the granting of a mining lease on June 29 for the company's flagship Barnes Hill project.

Just 4km west of Beaconsfield in northern Tasmania, the project is anticipated to yield Proto annual net profit of more than \$15 million and more than \$30 million following a potential ramp up in production.

Proto chairman and managing director Andrew Mortimer left the company in late August and was replaced by former federal Environment minister Ian Campbell. Prior to his resignation, Mr Mortimer said the company was steadily moving towards production.

"These are great steps forward for us as all parts of the Barnes Hill project are now coming together very well, and allowing us to now concentrate on the up-and-coming production phase.

"The mining licence has been in preparation for three years, and it was a great pleasure to sign it and arrange for its return to the Government's MRT [Mineral Resources Tasmania]."

In October 2010, the company announced a total resource for Barnes Hill of 6.6 million tonnes at 0.82 per cent nickel and 0.06 per cent cobalt. Of this resource, more than 5.6mt now falls within the indicated category of the JORC Code.

At a proposed mining rate of 250,000t per annum, the currently defined resource

represents a potential mine life of 26 years.

The company has a financing and technology agreement with its joint venture partner Metals Finance, whereby Metals Finance will fund the project into production and provide the technology necessary to beneficiate the ore for sale in return for 50 per cent of future profits.

Meanwhile, Proto will carry the responsibility of financing and completing the definition of the resource, and procuring the permitting required to develop the project.

As at August this year, Proto was the third-largest shareholder in Metals Finance, with 11 per cent of the latter's issued capital.

## Innovative technology

On August 16, Proto announced that it had agreed to a \$36 million financing arrangement with Caterpillar. The global mining equipment giant will become equipment supplier and a key financier of the Barnes Hill JV project.

It appears Caterpillar – whose investment represents a near doubling of Proto's market capitalisation – is attracted to Proto's unconventional use of acid recycling technology.

Proto is currently advancing its game-changing technology with a plan to turn its laterite nickel project into a prototype for a string of nickel projects.

The proprietary Barrier Bay technology will use water, power and reagents to drastically reduce acid consumption, and process waste products into reusable acid and saleable metal salts.

The technology will improve reagent recovery, lower the environmental footprint and significantly reduce processing costs.

Mining will involve ore extraction using vat leaching to produce a diluted 8 grams per litre sulphuric acid solution. The process flow sheet has been designed and tested, and the initial engineering design completed.

Mr Mortimer said in a statement in August that the company had been designed and constructed to become a leading nickel producer, processor and



explorer.

“Nickel’s strong economic future due to tightening supply for sulphide sources, and its unchallenged industrial applications in steel and rechargeable batteries, make it a very attractive global commodity,” Mr Mortimer said.

“Proto has capitalised on a market distracted by other commodities to build an asset register uniquely placed to pursue poly-metallic exploration across both nickel laterite ore bodies and nickel-copper-platinum group element mineralisations.

“Proto has been independently and internationally recognised for its projects, technology and vision, and we look forward to converting this into production cash flow.”

The company plans to ship the nickel through Bell Bay, which is about 15km from the mine.

The feasibility study and engineering design are under way, and are expected to be completed by the end of 2011. Subject to approvals anticipated in late 2011, construction will begin by 2012, with first production by early 2013.

### Exploration projects

In October 2010, Proto applied for four mining exploration licences covering a combined area of 357sqkm in the Doolgunna region northwest of Meekatharra.

In an announcement to shareholders on September 29, Proto confirmed that mining licences for the Casey and Great Doolgunna, which lie in the sought-after Yerrida Basin, had been approved.

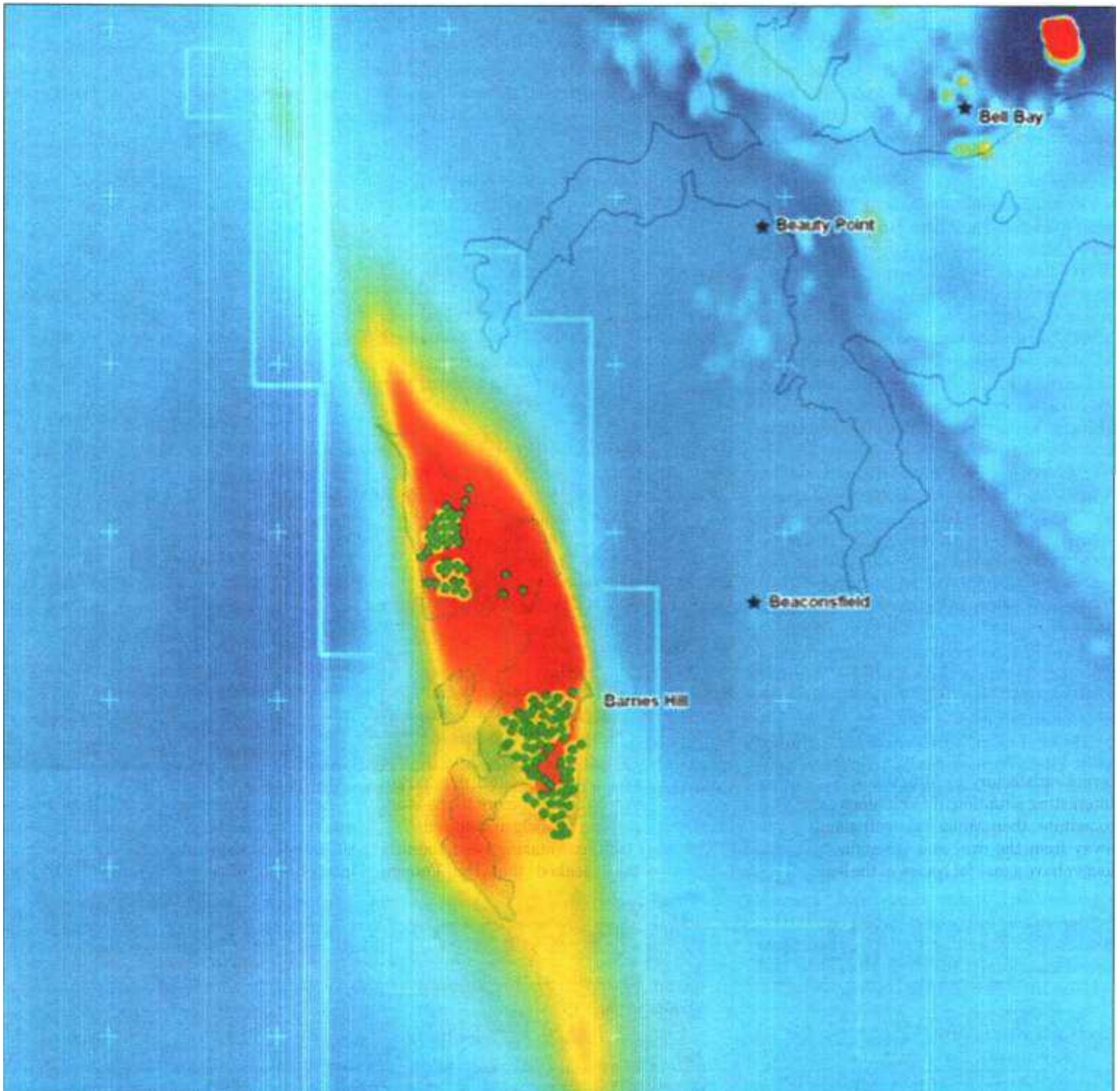
This area of WA is almost entirely covered by active mineral licences and applications. The region shows high prospectivity, especially for copper, and has been an exploration hotspot following groundbreaking

exploration success.

Field studies commenced recently, and will comprise mapping and geochemical surveys.

Proto will embark on its first Doolgunna exploration program as soon as practicable, and is already moving to organise logistics and assemble the ground team.

Meanwhile, on October 4, geologists from the Queensland University of Technology completed field mapping and sophisticated geochemical sampling of the company’s Waterloo landholding in the Northern Territory.



Magnetic image of the Andersons Creek Ultramafic Complex and EL17/2006, with historical drill holes and resource blocks from the JORC-compliant indicated resource shown