

PROTO



RESOURCES & INVESTMENTS LTD

STOCK EXCHANGE ANNOUNCEMENT

October 31, 2011

Technology Progress as Saprolite Samples Shipped

ASX Release Stock Code: PRW

Comprehensive piloting of the Barrier Bay process using third-party material is to recommence shortly, having been delayed while phase two membrane selection was undertaken. New membranes for the definitive pilot trials have been received and are undergoing quality control testing. Following installation into the pilot plant, the process will go through a set of rigorous and repetitive trials over a period of two to three months starting in mid-November.

The pilot programme will commence using available nickel laterite leach solution obtained from a project in Western Australia. At the end of the programme further test work will be performed on solution derived from leaching of the Barnes Hill ore, 10 tonnes of which is currently in transit to Evans Head in NSW for test work in conjunction with the project feasibility study being undertaken by Metals Finance Limited.

Executive Summary

- New membranes arrived and were visually inspected on Tuesday 18 October 2011. All membranes were accounted for and visually ascertained to be sound.
- Laboratory scale testwork is being undertaken in duplicate to ensure the quality of the membranes. This test will be completed this week.
- Collection of two 10-tonne saprolite samples from Barnes Hill has been completed. A total of 26 bulka bags weighing approximately 1 tonne each have been shipped from site.
- Reconstruction of the Barrier Bay pilot plant also commenced this week. Reconstruction will integrate the new membranes and allow the recommencement of the pilot work using the newly collected saprolite material.

Technology Status

A significant amount of laboratory and bench scale test work on the technology has been completed over the past two years, with the results now having been largely pulled together into a single interpretative study. This work has been taken to a level where larger scale continuous piloting is the next step. The work to date has concluded as follows:

Proto Resources & Investments Ltd

ACN: 108 507 517

Suite 1901, Level 19, 109 Pitt St,
Sydney 2000 NSW Australia

PO Box R1870
Royal Exchange NSW 1225

p: +61 2 9225 4000

f: +61 2 9235 3889

e: info@protoresources.com.au

w: www.protoresources.com.au



STOCK EXCHANGE ANNOUNCEMENT

- Laboratory testwork shows clear advantages for the technology as an enabling technology for Nickel laterite processing. While the primary function of the process is the regeneration and recovery of sulphuric acid, a range of significant benefits result from this. Through regeneration and recovery of the acid, and the recovery and recycling of water, the volume and level of contamination of process tailings is sufficiently reduced to allow viable development of laterite deposits that may otherwise be not environmentally feasible.
- The process also favours recovery of the contained metals as hydroxide products that adhere to a cathode and hence facilitate solid liquid separation at very high solid: liquid ratios, hence minimizing or removing conventional solid liquid separation processes. The incorporation of ion exchange into the circuit results in a high value nickel product and subsequently allows satisfactory recovery of a primarily iron component, and a second primarily magnesium component. These products (hydroxides of the mentioned metals) represent a significant process advantage when markets can be secured.
- The remaining risks the technology relate to satisfactory scale up and harvesting of the solid products, and the ability to optimize componentry to achieve both satisfactory operating and capital costs.
- The laboratory work has provided a valid basis for Barrier Bay to commission a preliminary Independent Technical Review (“ITR”) of the results to date, and the technology’s potential for commercial application. This has been carried out by a widely regarded metallurgical consultant based in Tasmania, who will continue to perform an overview role as the technology progresses to and through piloting.

Given the results achieved at lab and bench scale, the technology is ready for testing on a larger pilot scale over a series of runs and this view is supported by the ITR. An appropriate facility has been constructed at Evans Head in NSW to perform this work. However, in its initial operation the ion selective membranes (which are the core of the technology) proved to be unsuitable, resulting in a significant delay to the programme. A comprehensive review (and formal testing) of a number of potential membrane materials has now been completed – which has identified a robust membrane which is commercially supplied by one of the world’s top companies General Electric (NYSE: GE). A new set of membranes is now in hand and is undergoing installation into the plant.



STOCK EXCHANGE ANNOUNCEMENT

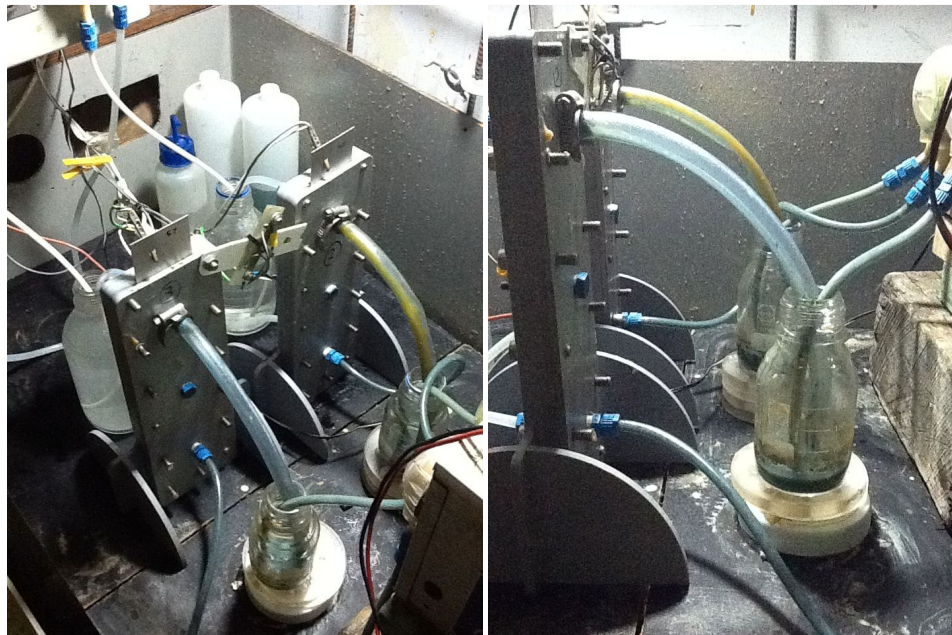


Figure 1 – Current QAQC Testing of Membranes

The reconstruction of the Barrier Bay pilot plant commenced this week. Reconstruction of the early stages of the pilot plant is intended to be completed in mid-November, and wet testing will be undertaken on each section as it is completed. Commissioning of the pilot will commence once Stages 1, 2 and the IX are rebuilt in either the second or third week of November with the first material cascading through the five stages. Full operation of the plant will occur for an intended period of seven weeks (solution allowing) beginning in January. This allows for planned completion of the pilot program at the end of February.

Bulk Sample Collection

Proto Resources & Investments Ltd (“Proto”, “the Company”) has completed taking two 10-tonne saprolite samples from Barnes Hill. This material is to be used for testing to inform the expanded definitive feasibility study currently underway by Metals Finance Limited (“Metals Finance”, ASX: MFC) as well as the integration of the Barrier Bay processing technology.

A local Beaconsfield contractor was engaged under the supervision of Proto’s geological and operation team to undertake trench excavation and sampling of nickeliferous ultramafic (serpentinite) saprolite, from selected sites at the north and south pit locations at Barnes Hill. The local contractor also assisted with loading and transport of the bulka bag samples away from site to a loading facility.

Saprolite samples were collected through excavation of trenches. After topsoil removal, sections of limonitic saprolite clay zone were exposed, and a section of saprock zone was exposed at a location further along the length of trench. Limonitic saprolite clay was then sequentially excavated and sampled, exposing more of the saprock section, eventually down to saprock limits. Locations of the saprolite collection are marked in Figure 2 below.

For personal use only



STOCK EXCHANGE ANNOUNCEMENT

In addition, ironstone material was also sampled for further beneficiation work. This caprock material is a lump mixture of haematite-goethite-limonite up to approximately 30cm in size. Outcropping boulders of iron oxide caprock were collected and reduced to size to enable loading by hand into bulka bags (see figure1 for site location). The location of these bulk samples was near the existing aircore drill holes BHA140, 552, 553 which collectively, contained assays of Fe₂O₃ up to 61.2% within the upper few metres of the holes. Additional material was sourced from past RC drilling. These locations are also shown in Figure 2.

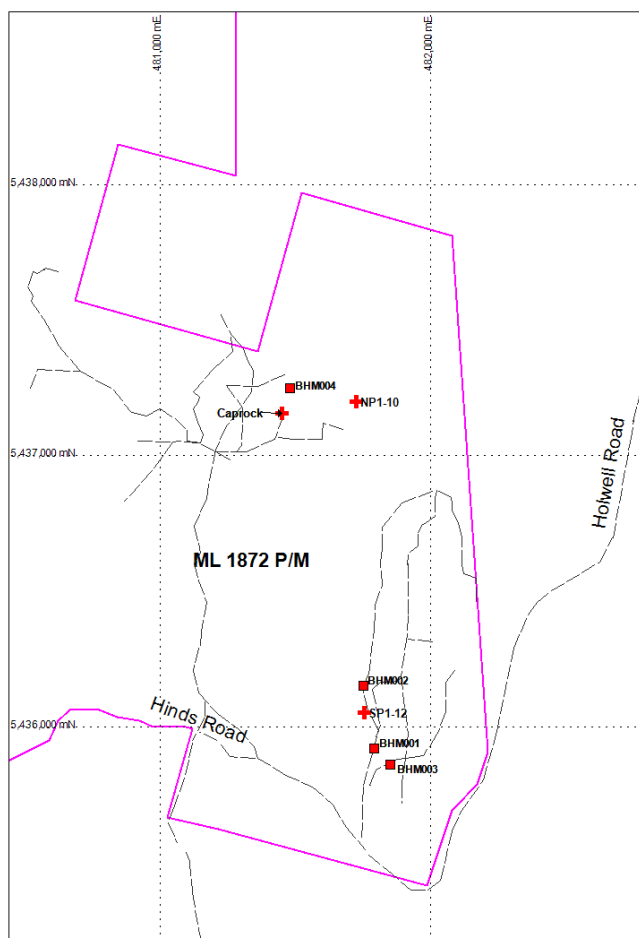


Figure 2 – Location of Bulk Sample Trench Sites (SP1-12 for south pit and NP1-10 for north pit) and Caprock Sites (by excavator at main caprock site and drilling at BHM001-BHM004).

By Thursday 20th October, a total of 26 bulka bag samples weighing approximately 1 tonne each had been shipped. This included 22 bags containing saprolitic nickel ore and four bags containing caprock iron ore. These were dispatched from Barnes Hill by truck to the TasFreight Depot in Launceston (see Figure 3) and are now in transit to Evans Head, NSW.

For personal use only

PROTO

RESOURCES & INVESTMENTS LTD



STOCK EXCHANGE ANNOUNCEMENT



Figure 3 – Loaded Bulka Bags of Saprolite Nickel Ore

Proto is pleased with the level of progress that is being made on Barrier Bay iron and magnesium sulphate technology and we are confident that following Metals Finance's recently announced technology collaboration with Dow Chemical, the Barnes Hill project (which was mentioned in the Metals Finance release) has the technical support to be put into production seamlessly.

Enquiries:

Mr Andrew Mortimer
Managing Director
Proto Resources & Investments Ltd
Office: +61 (2) 9225 4000
Mobile: +61 (0) 433 894 923

Competent Persons Statement

The information in this announcement that relates to Exploration Results, Mineral Resources or Ore Reserves, together with any related assessments and interpretations, is based on information reviewed by Mr Peter Peebles a full-time employee of Darlington Geological Services Pty Ltd. Mr Peebles is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Mineral Resources and Ore Reserves". Mr Peebles consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.