



PROTO

RESOURCES & INVESTMENTS LTD

**BARNES HILL PROJECT
TASMANIA
EL17/2006**

ANNUAL EXPLORATION REPORT
8TH AUGUST 2011 TO 7TH AUGUST 2012

Tenement Holder/Manager
Proto Resources & Investments Ltd

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SUMMARY

The Barnes Hill Project (EL17/2006) is located in northern Tasmania, 5km west of the township of Beaconsfield. The exploration licence covers an area of 79km².

The main focus of Proto Resources & Investments Ltd (“Proto” or “the Company”) at the Barnes Hill Project is laterite nickel-cobalt mineralisation. The project area contains a 12.5Mt Australasian Joint Ore Reserves Committee (JORC) compliant indicated resource at 0.83% Ni & 0.07% Co (Douglas McKenna and Partners Pty Ltd, A. Jannink 2006). This laterite resource is owned and managed by Proto and consists of three interconnected mineral deposits known as Barnes Hill, contained on licence 1872PM, and Mt Vulcan and Scott’s Hill, both contained by licence EL17/2006.

The Barnes Hill Project is the priority focus of Proto and joint venture partner Metals Finance Corporation. The partners aim to develop an open pit mining operation at Barnes Hill with processing and production of nickel, cobalt and iron metals on site.

Since purchase of the project, Proto has reclassified the previously defined mineral resource to JORC indicated status, secured historical databases including drilling and geochemistry, purchased detailed Satellite imagery including ASTER multi channel and Quick-bird visual band (60cm cell) datasets, undertaken an extensive aircore and diamond resource drilling program, commenced metallurgical testwork, completed a regional soil sampling program, undertaken flora & fauna studies, completed Aboriginal heritage and European heritage surveys, been granted an adjoining exploration licence (EL53/2008) to the west of the Barnes Hill exploration licence, lodged a mining lease application (1872P/M) over the Barnes Hill nickel deposit and surrounding area and completed studies for submission of a Development Proposal and Environmental Management Plan (DPEMP). In June 2011 the Tasmanian Government granted the mining lease application located within the boundaries of EL17/2006, for the Barnes Hill Deposit – Mining Lease 1872P/M.

Work planned for the coming year is to include follow up Air Core drilling to historic drilling programs at the Scotts Hill and Mt Vulcan prospects, associated bulk sample collection of lateritic iron, nickel, cobalt materials for metallurgical test work, follow up geochemistry work to the previous geochemical soil sampling programs conducted previously by Proto throughout EL17/2006.

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1 INTRODUCTION

The Barnes Hill Project is located in northern Tasmania and contains a 12.5 million tonne (Mt) Australasian Joint Ore Reserves Committee (“JORC”) compliant indicated resource at 0.83% Nickel (Ni) and 0.07% Cobalt (Co). The resource is made up of three interconnected resources known as the Barnes Hill, Mt Vulcan and Scott’s Hill deposits (see figure 1).

Recent advances in leaching techniques and the proximity of the project to grid power, roads, water, port facilities and a work force make the Barnes Hill Project a valuable addition to Proto’s asset register. The project comes with a clear development path focused on upgrading confidence in the current resource estimate and metallurgical testing of the ore to determine the most viable processing technique.

In response to the Notice of Intent lodged by Proto for the Barnes Hill project with the board of the Environmental Protection Authority (EPA), and in accordance to the February 2010 DPMP Guidelines received from the EPA Board, Proto submitted a DPMP in 2010 for the Barnes Hill project. Subsequently, in June 2011 the Tasmanian Government granted the mining lease application for the Barnes Hill Project – Mining Lease 1872P/M (see figure 3).

Exploration completed during the reporting period has included a geochemical soil sampling program in the northern and southern parts of the License, an RC drilling program for bulk sampling collection for further metallurgical test work, additional reserve estimation at the Barnes Hill deposit by external consultants Snowden Mining Services, and environmental assessment by North Barker Ecosystem Services of the presence and potential impact on flora and fauna within the proposed mining and processing sites, as part of the DPMP.

2 PROPERTY DESCRIPTION AND TENURE

The Barnes Hill tenement EL17/2006 covers an area of 79km² and was granted on 8th August 2006 for a period of five years. The tenement is entering its second extension of term application at the time of this report.

Tasmanian Government land status plans show that EL17/2006 is covered by both Crown and Private Land. The Crown Land is variously classified. The main areas of private land relevant to the known Ni-Co resource areas are in the east and the north. Exploration and mining are permitted on Private Land but must be preceded by negotiation of an access and compensation agreement with the landowner. This agreement must be concluded in writing and lodged with Mineral Resources Tasmania (MRT).

Most of the Crown Land is classified either as Multiple Use Forest (“MUF”) or Recommended Area for Protection (“RAP”), both administered by the Forestry Commission. Several reserves and mining tenements also exist within the area of EL17/2006.

Superimposed over much of the licence area is the Mt Vulcan - Simmonds Hill Australian Heritage Act (“AHA”) Registered Entry. This AHA area covers both Private and Crown Land. Whilst AHA areas do affect some conditions of exploration access, this classification does not represent significant impediment to access. The prime reason for the AHA and Dans Hill Recommended Area for Protection (“RAP”) areas is to protect two plant species: *Tetratheca gunni* and *Epacris virgata*.

Exploration on a RAP is possible, and has occurred during past exploration, but is subject to program approval and conditions. With good planning and supervision, a RAP should not be an impediment to exploration activities.

There are gravel reserves on EL 17/2006. Gravel Reserves may or may not be subject to the Mining Act. They are usually held by government authorities for road works and can generally be accessed for exploration by negotiation.

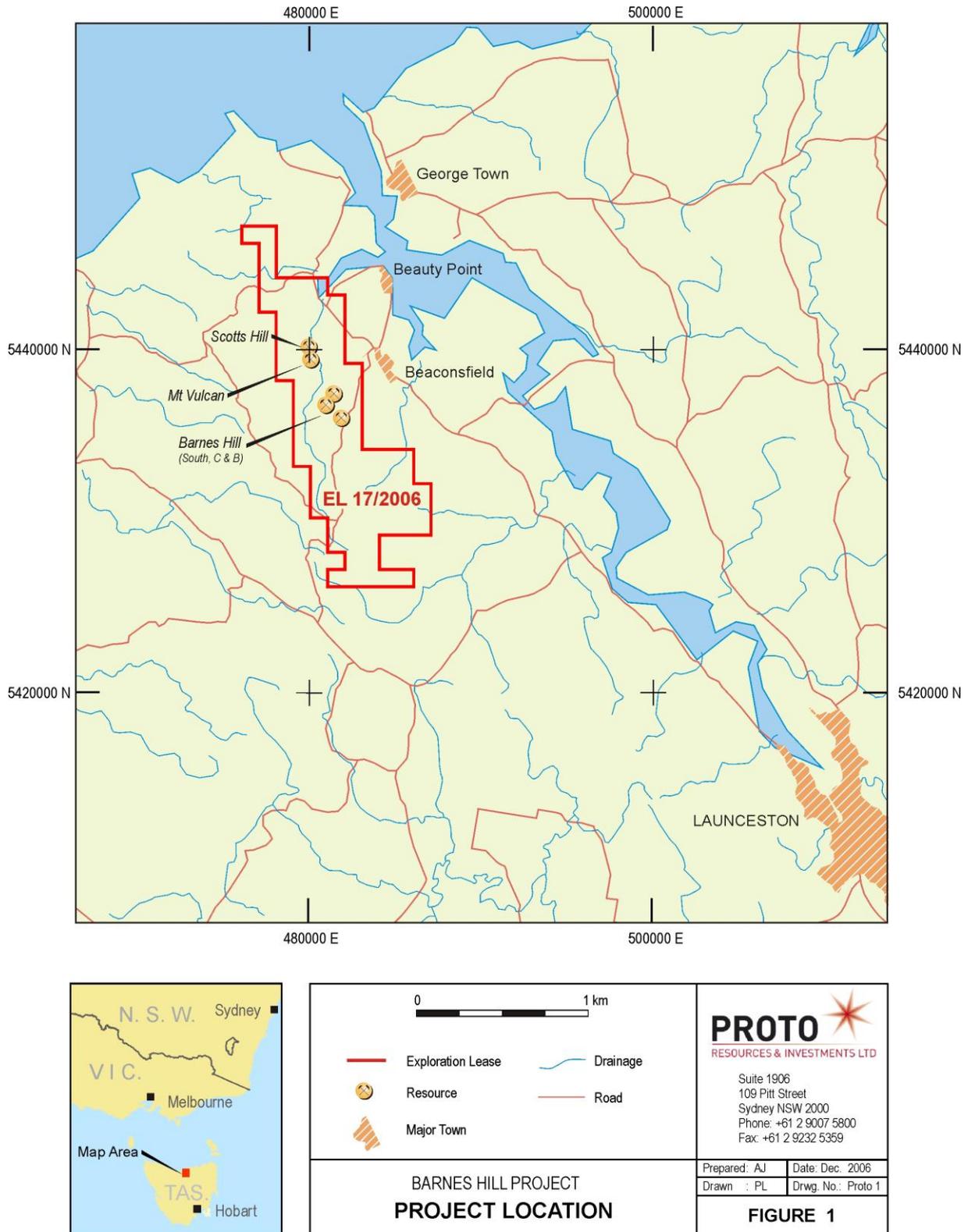


Figure 1 Barnes Hill Project & EL17/2006 location map

3 ACCESS AND INFRASTRUCTURE

The Barnes Hill EL17/2006 licence is located approximately 30km north of Launceston and 5km west of Beaconsfield near the Tamar River in northern Tasmania (see figure 1).

The Barnes Hill tenement can be accessed via a number of gazetted roads on the western side of the Tamar River. The Barnes Hill resource can be directly accessed using either Hinds or Tattersall's roads, just west of Beaconsfield.

A wide range of infrastructure and heavy industry occurs in the district including the nearby Beaconsfield Gold mining operation, the Bell Bay Power Station, the Temco Magnesium Refinery and the Bell Bay Alumina Refinery. The area also has deep water port facilities at Bell Bay and Beauty Point along with rail facilities. The regional City of Launceston has a population of over 90 thousand people and offers all the services of a major regional city including airport, university and advanced engineering facilities.

4 ENVIRONMENTAL CONSIDERATIONS

Allegiance Mining, Jervois Mining and Placeco Australia have all recognised and tabled the existence of endangered flora species in the Barnes Hill area, including *Tetratheca gunni* and *Epacris virgata*.

From existing work it seems *Tetratheca gunni* is present in only three known locations, none of these occurring over the Ni-Co resource areas. *Epacris virgata* is more widely distributed including parts of the Scott's Hill and Mt Vulcan Ni-Co resource areas.

Proto has engaged North Barker Ecosystem Services to assist with environmental assessment and requirements for exploration permitting. A "Botanical Survey and Fauna Habitat Assessment" report by North Barker on the three nickel-cobalt laterite deposit areas was included in a previous annual report for EL17/2006, and this annual report includes an additional report by North Barker which concludes that the mine plan and processing layout have successfully avoided the highest value plant populations and have minimized the environmental impact (see appendix 4).

5 GEOLOGICAL SETTING

The Barnes Hill tenement sits in the Badger Head region of northern Tasmania, an important structural location, considered to be the area in which the Tamar Fracture System separates the western and eastern Tasmanian terrains. The area has a complex nature, a result of thrusting during the Devonian and later normal faulting in the Jurassic and Tertiary. The Precambrian Badger Head Block possibly overlies younger units of the Cambrian Port Sorell Block. The Andersons Creek Ultramafic Complex is considered to be a thrust slice caught up in this deformation. The magnetic data over the area is dominated by the response of the Anderson Creek Ultramafic Complex with much of the surrounding geology having only subtle responses (see figure 2). Gravity is also dominated by the considerable differences in density between the Precambrian, Cambrian and later Devonian and Permian units. The Devonian geology also contains granites of that age with stark density contrasts to surrounding units especially the ultramafics.

Further to the east Ordovician Cabbage Tree Formation is thrust over the Anderson Creek Complex (ACC), and further east again the Beaconsfield Gold field sits on the western side of the Tamar River in possibly a zone of Devonian aged Mathinna beds. The Beaconsfield gold mineralisation has a similar nature to Victorian quartz reef gold systems.

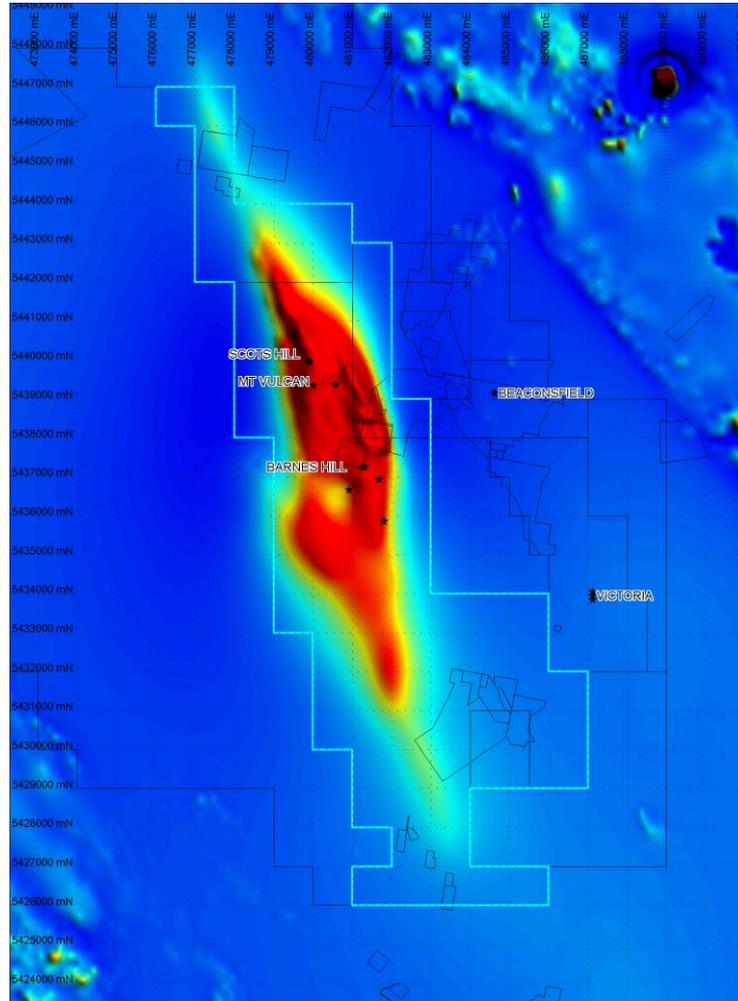


Figure 2 Barnes Hill EL17/2006 with total magnetic intensity as background clearly showing extent of the Andersons Creek Complex

5.1 Tenement Geology / Nickel Laterite Geology

Precambrian metamorphosed graywackes and sub-graywackes outcrop along the western extremities of EL 17/2006.

Cambrian aged schist's and micaceous sandstone are found faulted against the Precambrian Badger Head stratigraphy and Andersons Creek Ultramafic Complex to the east. These units are considered similar to the Sorell Block characterised by sandstones, graywackes, siltstones and slates (see figure 3 for regional geology groups).

The Andersons Creek Complex (ACC) is a layered wedge of Cambrian mafic and ultramafic stratigraphy consisting mainly of serpentinite, pyroxenite and gabbro (see figure 3 for Cambrian Ultramafics distribution on EL17/2006). It has been thrust into a sequence of Cambrian sediments lying on the eastern margin of the Badger Head Precambrian Block. The Andersons Creek Complex is probably Early Cambrian in age (neo-Cambrian) and one of 15 discrete ultramafic/mafic complexes found mainly on the north west and west coasts of Tasmania.

Aero-magnetics show the ACC as being a NNW trending lozenge shaped body approximately 20 km long and up to 3 km wide (Figure 2). It outcrops over a NNW length of 6.5 km, a width of 1.5 km, and plunges to the north and south beneath Permian sediments.

The ACC has been extensively and variably altered. Serpentinisation is pervasive, and probably reflects alteration of peridotites and gabbros. In the Scott's Hill area, a pyroxenite has been described as having been replaced by amphibole and then altered to talc, magnetite and calcite.

In the Barnes Hill South area, a rock called rodingite has been formed as the result of lime metasomatism of coarse hornblende gabbro prior to serpentinisation.

Various weathering profiles with differing mineral assemblages and metal concentrations are developed on the ultramafic complex. An appreciation of the ultramafic weathering profile is important because they contain most of the higher grade Ni-Co mineralisation. In the Barnes Hill-Mt Vulcan area, the weathering profile consists of an upper zone of secondary iron oxides (goethite, hematite, limonite) overlying a clay rich zone dominated by smectite, weathered serpentinite and chlorite, which in turn overlies fresh serpentinite (Table 1). Meteoric waters periodically leached soluble ions from the surface (lateritic) zone and enriched these ions (Ni) in the clay zone at the base of the weathering profile. A typical weathering profile is listed in Table 1.

Table 1 Idealised Barnes Hill Laterite Profile

| | | |
|---------------------|-----------------------|---|
| <u>Laterites</u> | Pisolitic Zone | Hard ironstone with red clay matrix |
| | Ferruginous Red Zone | Soft red clay, pisolitic grains and black ironstone |
| | Limonitic Yellow Zone | Soft yellow-orange clay with some red clay |
| | Mottled Zone | Soft bright red, brown, yellow, purple clay with black and white specks |
| <u>Clays</u> | Transition Zone | Soft decomposed green serpentinite with minor red clay |
| | Bleached Zone | Soft, pale yellow green serpentinite with some magnetite. |
| <u>Serpentinite</u> | Fresh Zone | Moderately hard dark green serpentinite |

Most of the Ni > 1% occurs in the Transition Zone and to a slightly lesser extent in the Mottled and Bleached Zones. The Ni is largely contained in clay (smectite), serpentinite and chlorite.

In the Scott's Hill area, the pyroxenite has been extensively replaced by amphibole, then altered to talc, magnesite and calcite which has then weathered to clay and chlorite. Ni is contained in talc, chlorite and serpentinite.

In the Barnes Hill South area, work completed in the late 1950s by Enterprise Exploration suggests the Ni (up to 3%) is concentrated in weathered serpentinite adjacent to rodingite dykes in this area. Rodingite formed as a result of lime metasomatism of coarse hornblende-gabbro dykes, prior to pervasive serpentinisation. Garnierite (hydrous nickel silicate) was developed as colloform growth layers often associated with opal. Secondary enrichment depth of Ni is highly variable with its deepest known to occur adjacent to rodingite dykes, because of the high relative permeability adjacent to these contact zones.

Ni in the Barnes Hill South area was therefore thought to occur as garnierite, in serpentinite, chlorite and hydrated iron oxides. Thus, in the three areas, Scott's Hill-Mt Vulcan, Barnes Hill and Barnes Hill South, Ni possibly occurs as different species, concentrated in different hosts in the weathering profiles of different ultramafic host rocks. However, whilst there is mineralogical and host variation, a common feature is that the greatest concentration of Ni occurs in thick clay within partly decomposed serpentinite zones towards the base of lateritic weathering profiles. Substantial tonnages of this favorable zone are only likely to exist beneath the protective cover of either ferruginous laterite caps, or transported Tertiary gravels, either of which may be concealed beneath Quaternary sediments.

Ordovician Junee Group consists of sandstone, siltstone, slate, limestone, quartzites and quartz conglomerates. Locally the tenement covers the Blyth's Creek Formation and Cabbage Tree Conglomerate, Caroline Creek Sandstone and Gordon Limestone all of the Junee Group.

Permian Sediments are reasonably abundant in the tenement area lying unconformably over older stratigraphy. Units include the Quamby, Golden Valley, Mersey, Woodbridge and Ferntree groups and Cygnet Coal measures.

Tertiary Sediments consist mainly of sandy clays and sandstones and north of Beaconsfield white quartz gravels. The laterite formed over the Andersons Creek Complex Ultramafics was formed in the Tertiary.

Igneous Rocks other than the Anderson Creek Complex, include minor Jurassic dolerite and Tertiary Basalt. Tertiary basalt overlies Tertiary sediments in most cases. Both dolerite and basalt form magnetic features in the regional magnetic data, however their responses are much less significant than the major ACC response.

6 EXPLORATION HISTORY

Substantial exploration has been carried out over the last 50 years. A summary table below has been compiled by assessing old reports and specifically compilations made by Lindsay Newham (1997). King Island Scheelite (KIS), Allegiance Mining, Jervois Mining and Proto Resources have completed most of the recent work on the Barnes Hill Ni-Co Laterite.

Table 2 Summary of historic exploration activities

| Company | Start | Finish | Focus | Work Completed | Results | Conclusion | Report/EL |
|-----------------------------------|-------|--------|------------------|--|---|--|-----------|
| Proto Resources & Investments Ltd | 2008 | 2011 | Lateritic Ni, Co | Resource drilling at Barnes Hill laterite deposit | 12.5 million tonne JORC compliant indicated resource at 0.83% Nickel and 0.07% Cobalt (no cut-offs applied) | Ongoing metallurgical recovery testwork, DPEMP & mining lease application | EL17/2006 |
| Jervois Mining | 2001 | 2004 | Ni, Co | Re-assaying, campsite sampling for met work | 12.5 Mt at 1.07%Ni combined (Ni Co) | spending and budget pressure meant area dropped to focus on other projects | ETA 504 |
| Allegiance | 1996 | 2000 | Ni, Co | Historical data compilation, Shallow drilling, Resource calculation environmental studies, metallurgical studies, 116 air core and 8 diamond holes | | Low Ni prices and restricted tenement meant re focus on other projects | 97_4013 |

| | | | | | | | |
|-----------------------|------|------|-----------------------------------|---|---|---|----------|
| CRA Exploration | 1994 | 1995 | NiS | Rock Chip surveys and IP survey | Rock chip sample 1.7% Ni in Serpentinite | not considered economic. | EL35/92 |
| Placeco Australia | 1988 | 1988 | PGM, Au | Rock Chips composite sand samples | Failed to detect economic quantities of target minerals | No sampling of Laterite | EL 18/87 |
| Northern Chromite | 1969 | 1981 | Cr | Cr production on western flank of Barnes hill, drilling at Rifle Range south | 660,000t at 12% Cr defined at Rifle Range and Barnes Hill | Mined Cr no Ni production | |
| Department of Mines | 1979 | 1980 | Cr | 16 percussion holes, serpentinite clays intersected but not tested | | Reconnaissance Cr drilling | |
| Allstate Exploration | 1971 | 1972 | Ashb | 15 Core holes and trenching | tope weathered section (Laterite not sampled) | No Ni Focus | |
| King Island Scheelite | 1968 | 1969 | Ni, Co, Cr | 37 Holes , metallurgy test work resource calculation, environmental studies | 6.014 long tonnes @1.04%ni and 0.06% Co | sub economic in terms of size | 69_544 |
| BHP Minerals | 1965 | 1967 | Fe, Ni, Cu, Zn, Mb, Cr, limestone | Stream sediment sampling, aero magnetic survey, Drilling, trenching, 99 - 3m deep pits | Drilling intersected magnetite bearing serpentinite. (CRA re-sampling in 1994 assayed 3m at 1g/t Au) | Sub economic mineral grades in all elements tested. | 67_465 |
| Consolidated Zinc | 1957 | 1958 | Ni | Series of auger samples at 100ft and 200ft intervals focused on previous work by Ben Lomond mining intervals resulting in | Intersected Ni grades between 1.2 to 1.8% | Didn't meet expected grade of 2.5%Ni considered economic at time. | 58_0195 |
| Ben Lomond Mining | 1955 | 1956 | Ni | Reconnaissance Sampling | Results showed Ni rich clays developed on Mafics/serpentinites were more wide spread than previously known. | JV sort with Consolidated Zinc. | |
| Department of Mines | 1929 | 1929 | Ni | 13 holes - location information sketchy | Difficulty in locating holes | Reconnaissance Ni laterite drilling | |

6.1 Barnes Hill Nickel Laterite Resource

Previous explorers of the Barnes Hill laterite have drilled 161 holes including 37 diamond drill holes for approximately 580 meters in the late 1960's. More recently, Allegiance Mining drilled 1178.4 meters in 116 aircore holes along with eight diamond drill holes in 1997. The laterites have been drilled at a density of 100 to 150 meter centres.

The nickel laterite is developed above serpentinites of the Andersons Creek Ultramafic Complex. Three separate deposits are known in the area, Barnes Hill, Mt Vulcan and Scott's Hill.

Resources have been calculated using both King Island Scheelite and Allegiance Mining assay data. The lithologies are based on re-logging of the Allegiance Mining chip trays. A summary of the resources is given below:

Table 3 Combined Resources for the Barnes Hill, Mt Vulcan and Scott's Hill Deposits

| Lithology | Ni | Co | Tonnes | %Ni | Percentage | | |
|------------------------|-------------|-------------|-------------------|---------------|------------|-------|-------|
| | % | % | | Equivalent | Tonnes | Ni | Co |
| Hematite | 0.63 | 0.12 | 167,657 | 1.05 | 1.3% | 1.0% | 2.3% |
| Limonite | 0.39 | 0.12 | 794,699 | 0.81 | 6.4% | 3.0% | 11.3% |
| Saprolite | 0.88 | 0.07 | 9,213,728 | 1.13 | 73.8% | 77.7% | 75.9% |
| Weathered Serpentinite | | 0.82 | | 0.042,301,870 | 0.96 | 18.5% | 18.3% |
| | 10.5% | | | | | | |
| Totals | 0.83 | 0.07 | 12,477,955 | 1.07 | | | |

The parameters used in the calculations were:

| | |
|--------------------|--|
| Area | Plan Polygonal Blocks |
| Volume | Area x drill thickness |
| Density | 1.8 |
| Minimum Thickness | 2m |
| Cut-off Grade | 0.6% Ni Equivalent ($=\%Ni + 3.5 \times \%Co$) |
| Assay Grade | Averaged per drill hole |
| Minimum Overburden | 1m |
| Overburden Ratio | 0.9:1 |

From the calculations above it can be extrapolated that 96% of the nickel and 86.4% of the cobalt occur in the saprolite and weathered serpentinite lithologies. Furthermore, the Barnes Hill saprolite and weathered serpentinite holds 8.3 million tonnes (66.8% of total tonnage) containing 72.5% of the nickel and 57.4% of the cobalt. (Douglas McKenna & Partners Pty Ltd)

6.2 Barnes Hill Metallurgy

Allegiance Mining submitted nine composite samples to Amdel Laboratories for high pressure acid leach metallurgical testing (two from Scott's Hill, three from Mt Vulcan and four from Barnes Hill). The samples averaged 1.16% nickel oxide (0.91% nickel) and 920ppm cobalt. Lithologically this composition is fairly close to the resources calculated above, although the nickel and cobalt grades are slightly higher.

The results of the High Pressure Acid Leach ("HPAL") testing were good (especially when considered as preliminary testwork) with high recoveries and low acid consumption. Tests were done at 2400°C and 2600°C producing the following average recoveries after two hours of leaching:

Table 4 HPAL Testwork Results for the Barnes Hill, Mt Vulcan and Scott's Hill Deposits

| Temperature | Recovered Ni | Recovered Co | Acid Consumption (kg/t) |
|-------------|--------------|--------------|-------------------------|
| 2400°C | 89% | 83% | 397 |
| 2600°C | 92% | 93% | 326 |

6.3 Previous Exploration by Proto Resources & Investments Ltd

Exploration completed by Proto since grant of EL17/2006 has included:

- completion of a high level review of the Barnes Hill Project and drillhole database by Snowden Mining Industry Consultants,
- an aircore drilling program (17 holes for 202m) completed to validate historic drilling results and to provide samples for metallurgical testwork,
- planning of a resource drilling program at Barnes Hill,
- detailed flora and fauna assessment of the resource areas by North Barker Ecosystem Services,
- cutting and assaying of some historic diamond core holes held at the MRT Rockstore in Mornington,
- ongoing metallurgical testwork at HRL Testing in Brisbane,
- a regional soil sampling program consisting of 429 samples taken along 400m spaced east-west lines,
- the first phase of a resource drilling program which consisted of 75 aircore drill holes (BHA076 – 075) for 1,080m,
- a second phase of the resource air core drilling program consisting of 549 drill holes for a total of 4,839m. The hole numbers completed were BHA076 through to BHA625. Hole number BHA288 was not drilled. A closed spaced (10m spaced) program of grade control drilling along an east-west and north-south line was also completed to verify grade and thickness variations at the deposit (holes BHA478 – BHA582).
- Aboriginal heritage and European heritage surveys of the proposed mining area and
- Column leach testwork on further aircore drilling samples from the Barnes Hill deposit.

For a more detailed description of Proto's previous exploration activities at the Barnes Hill EL17/2006 project the reader is referred to previous annual reports by the company.

7 EXPLORATION COMPLETED DURING THE PERIOD

Exploration completed during the reporting period has included planning of infill Air Core drilling programs at the Mt Vulcan and Scotts Hill laterite resources, a detailed European and Aboriginal heritage survey and assessment, and a detailed environmental survey and assessment of the potential impact of the proposed infill drilling program.

7.1 Planning of Infill Air Core Drilling Programs

A work program of 247 proposed infill air core drill holes to existing historic drilling at Scotts Hill and Mt Vulcan was lodged to Mineral Resources Tasmania in August 2011 (see attached appendix 1 for details). The approval for this program is based on the combined outcome of a European and Aboriginal heritage survey, as well as a detailed flora and flora assessment survey. The approval for the program remains outstanding at the date of this report.

7.2 European and Aboriginal Heritage Survey

The European and Aboriginal heritage surveys were conducted by Cultural Heritage Management Australia, throughout the proposed air core drilling areas during November 2011, with the final assessment reports completed in December 2011 (see appendix 2 & 3 for their detailed assessments).

7.3 Flora & Fauna Survey

The detailed flora and fauna survey over the proposed drilling areas was conducted by North Barker Ecosystem Services in October 2011, with the final assessment report completed in November 2011 (see appendix 4 for this report).

8 EXPENDITURE

Expenditure from 8th August 2011 to 7th August 2012 is summarised below for the Barnes Hill EL17/2006 licence.

Table 7 Expenditure 8th August 2011 to 7th August 2012.

| | |
|---|------------------|
| Administration & Management | \$37,372 |
| Geological, Drilling Planning, Feasibility | \$30,103 |
| Detailed European and Aboriginal Heritage Survey and Report | \$44,713 |
| Detailed Flora and Fauna Survey and Report | \$13,200 |
| Other (travel, vehicle hire, accommodation, rehabilitation) | \$55,631 |
| TOTAL | \$181,019 |

9 PROPOSED EXPLORATION

The activities proposed to be undertaken at the Barnes Hill Project on EL17/2006 in the coming term include:

- Follow up Air Core drilling at the Scotts Hill and Mt Vulcan prospects (see Appendix 1 – Proposed exploration Air Core drilling at Scotts Hill & Mt Vulcan). A phase 1 program is planned utilizing a 100m x 100m drill hole spacing, followed by a phase 2 program of 50m x 50m drill hole spacing, in areas of significant mineralization potential delineated by the phase 1 program.
- Metallurgical test work on bulk samples of lateritic iron, nickel and cobalt mineralization to be collected at the Scotts Hill and Mt Vulcan prospects, at locations delineated by the proposed Air Core drilling program.
- Follow up work on the previous geochemical soil sampling programs conducted in 2010 to 2011 throughout the license in particular, an extension of further soil sampling is recommended along the interpreted south-easterly structural trend extending from within contiguous EL58/2008, onto EL17/2006, as a further test for potential Cu-Pb-Zn anomalism.
- Follow up reverse circulation drilling to test the anomalous diamond core drill hole intercept (3m at 1.04g/t Au) east of Scotts Hill, encountered by CRA Exploration Pty Ltd (1994) along the eastern faulted contact zone between the Anderson Creek Ultramafic Complex and the Cambrian quartzite-slate-chert formation.

10 KEY REFERENCES

Maher, S, 1994 to 1996 CRA Exploration Pty Ltd, Exploration Reports on tenement EL35/92 Anderson's Creek Project.

Douglas McKenna and Partners Pty Ltd, 2006, JORC Indicated category confirmation letter for Barnes Hill, Scotts and Mt Vulcan Resources, EL 18/2006 Beaconsfield, Tasmania. (Author A Jannink), (12 December 2006).

Douglas McKenna and Partners Pty Ltd, 2005, Final Report EL 1/2001 Beaconsfield, Tasmania. **Jervois Mining Limited** (13 March 2005).

Douglas McKenna and Partners Pty Ltd, 2005, Annual Report EL 1/2001 Beaconsfield, Tasmania. **Jervois Mining Limited** (March 2005).

Douglas McKenna and Partners Pty Ltd, 2004, Annual Report EL 1/2001 Beaconsfield, Tasmania. **Jervois Mining Limited** (March 2004).

Douglas McKenna and Partners Pty Ltd, 2003, Annual Report EL 1/2001 Beaconsfield, Tasmania. **Jervois Mining Limited** (March 2003).

Douglas McKenna and Partners Pty Ltd, 2002, Annual Report EL 1/2001 Beaconsfield, Tasmania. **Jervois Mining Limited** (March 2002).

Douglas McKenna and Partners Pty Ltd, 2002, Budget and Program for Bulk Sample Collection of Nickel-Cobalt Laterite on EL 1/2001, Beaconsfield, Tasmania. **Jervois Mining Limited** (January 2002).

Morrison, K C, Hofto V, Davidson J K, 1988, Annual Report Year 1 Exploration Licence 18/87 – Andersons Creek, **Placeco Australia Pty Ltd** (June 1988).

Newnham, L A, 1997 Annual Report EL 10/96 Andersons Creek Area, Northern Tasmania. **Allegiance Mining NL** (20 May 1997).

Newnham, L A, 2000 Final Report EL 10/96 Andersons Creek Area, Northern Tasmania. **Allegiance Mining NL** (20 April 2000).

Proto Resources and Investments Limited, 2006, ASX Release: Barnes Hill Resource Announcement (18 December 2006).

Proto Resources and Investments Limited, 2006, ASX Release: Barnes Hill Resource Announcement (19 December 2006).

Proto Resources and Investments Limited, 2007, ASX Release: Short Form Prospectus Barnes Hill Resource Announcement (15 March 2007).

Proto Resources and Investments Limited, 2007 to 2010, Annual Exploration Reports for EL17/2006, by Andrew Johnstone – Exploration Manager.

Proto Resources and Investments Limited, 2011, ASX Release: Company update as Pilot Plant commences (1 March 2011).

Proto Resources and Investments Limited, 2011, ASX Release: Government grants Mining Lease for new Tasmanian project - Barnes Hill (29 June 2011).

Proto Resources and Investments Limited, 2011, Annual Exploration Report for EL17/2006, by Dan Hampton – Senior Geologist.

Proto Resources and Investments Limited, 2012, Annual Exploration Report for Mining Lease 1872PM Barnes Hill Deposit, by Dan Hampton – Senior Geologist.