



ANNUAL REPORT
EL17/2006, BARNES HILL
NORTHERN TASMANIA

FOR THE YEAR ENDED
28th August 2007

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DISTRIBUTION:

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Proto Resources and
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SUMMARY

The Barnes Hill Nickel Laterite ("Barnes Hill") in northern Tasmania is 100% owned by Proto Resources and Investments Limited ("Proto") Located on Exploration License 17/2006. EL was purchased from Discovery Nickel Limited in late 2006.

The Barnes Hill project contains a 12.1 million tonne (Mt) Australasian Joint Ore Reserves Committee ("JORC") compliant indicated resource at 0.83% Nickel (Ni) and 0.07% Cobalt (Co) (Douglas McKenna and Partners Pty Ltd, A. Jannink 2006).

The resource is made up of three interconnected mineralised bodies known as the Barnes Hill, Vulcan and Scotts resources. The Barnes Hill laterite resource is wholly covered by Tenement EL 17/2006, owned and operated by Proto Resources and Investments Limited (hereinafter Proto).

Recent advances in pressure leaching techniques along with the current relatively high nickel price make the Barnes Hill project a valuable addition to Proto's asset register.

Since purchase Proto has reclassified the previously defined resource to JORC Indicated status and secured historical databases including drilling and geochemistry along with standard GIS layers. Proto has also purchased detailed Satellite imagery including: ASTER multi channel and Quick-bird visual band (60cm cell) datasets. And integrated with publicly available GIS layers from MRT. Submitted first work program to MRT for collection of large samples for met testing along with additional sampling for QA/QC work to validate historical drill results. Proto plans to quickly asses the viability of a heap leach operation in the area.

Work over the coming year will include large sample size metallurgical testing, conversion of the indicated resource into the measured category, and a two pronged exploration program aimed at extending the existing resource and also discovering new laterite bodies in the region. Thorough environmental work is planned/underway to help gain permits for upcoming programs.

The Barnes Hill Nickel Laterite is the priority focus of Proto Resources and Investments, as it has an indicated JORC resource, is close to infrastructure including port and power facilities and has a clear path for development.

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1: INTRODUCTION

The Barnes Hill project is located in northern Tasmania ("Barnes Hill") and contains a 12.1 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, Vulcan and Scotts resources.

Recent advances in pressure leaching techniques along with the current high nickel price make the Barnes Hill project, a valuable addition to Proto's asset register. The project comes with a clear development path focused on metallurgical testing of the ore to determine the most viable processing technique and a already defined area to begin detailed drilling to build a measured resource. The project also has significant exploration upside both around the existing resource and in the region.

2: PROPERTY DISCRPTION AND TENURE

The Barnes Hill Tenement EL 17/2006 covers 76 km² and has a minimum exploration commitment of \$57,000 over the first two years. The licence was granted on 8th August 2006 for a period of five years.

The land status plan shows EL 17/2006 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 Forestry Commission. Several reserves and mining tenements also exist.

Superimposed over much of the license 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 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.

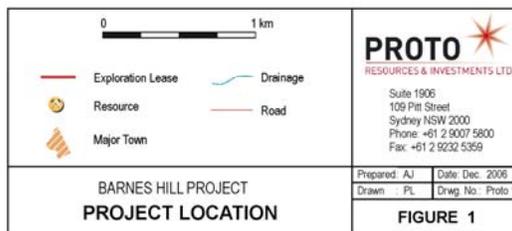
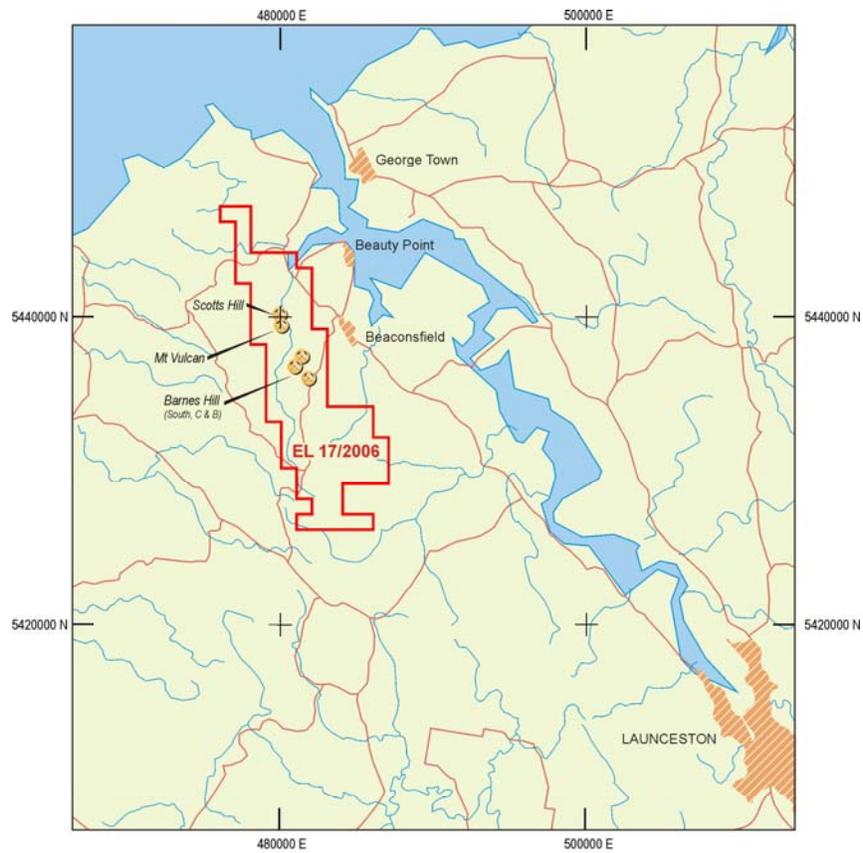
There are gravel reserves on EL 17/2006. Gravel Reserves may or may not be subject to the Mining Act. They are usually held by government authorities for road works and can generally be accessed for exploration by negotiation.

3: ACCESS AND INFRASTRUCTURE

The Barnes Hill tenement EL 17/2006 is located approximately 30km north of Launceston and 5km west of Beaconsfield near the Tamar River in northern Tasmania.

The Barnes Hill tenement EL 17/2006 can be assessed 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.

There is a plethora of infrastructure and heavy industry in the district including the nearby Beaconsfield Gold operation operated by Allstate, the Bell bay Power Station (Alinta) the Temco magnesium refinery (BHP Billiton) and the Bell bay Alumina Refinery (Camalco/RioTinto) The area also has deep water port facilities at Bell bay and Beauty point along and 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 recognized 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* is present in only three known locations, none of these occurring over the Ni-Co areas. *Epacris* is more widely distributed including parts of the Scotts Hill and Mt Vulcan Ni-Co resource areas. If the Barnes Hill deposit extended further north than shown, then any such extension would also be in at *Epacris* area. However Proto is very aware of the need for further environmental work in the Barnes Hill area, prior to any new exploration or development work proceeding.

All previous explorers worked with various agencies, including the Tasmanian wilderness society, native seed society, Forestry Tasmania, Department of lands planning and environment and Mineral resources Tasmania, to enable exploration to take place.

Proto has engaged North Barker Ecosystem Services to assist with environmental assessment and requirements for permitting. In August a two day program was completed to assess proposed sample sites tabled in Appendix A. The sample sites chosen for met testing were carefully screened for any endangered plants or animals and the report was submitted to MRT (appendix B) along with the work program to conduct program.



Figure 2: Screening of proposed sample sites by North Barker

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 Complex with much of the surrounding geology having only subtle responses. 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 Beaconsfield Gold field sits on the western side of the Tamar River in possibly a zone of Devonian aged Mathinna beds. The Beaconsfield gold mineralization has a similar nature to Victorian quartz reef gold systems.

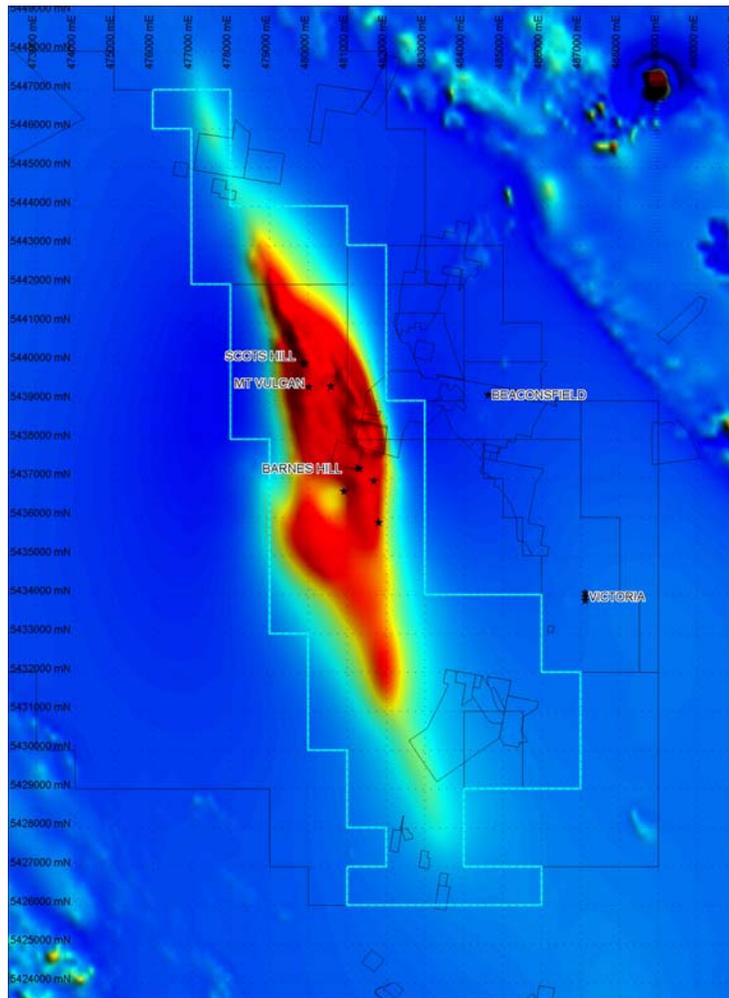


Figure 3: Barnes Hill EL17/2006, over TMI magnetics clearly showing extent of Andersons Creek Complex.

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 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 characterized by sandstones, graywackes, siltstones and slates.

The Andersons Creek Complex (ACC) is a layered wedge of Cambrian mafic and ultramafic stratigraphy consisting of mainly serpentinite, pyroxenite and gabbro. It has been thrust into a sequence of Cambrian sediments lying on the eastern margin of the Badger Head Precambrian block. Septa of Cambrian sediments are caught up in the complex. The Andersons Creek complex is probably Early Cambrian in age (neo-Cambrian) and one of 15 discrete ultramafic/mafic complexes found mainly in the north west and west coasts of Tasmania.

Upper Palaeozoic tectonism has resulted in Ordovician Cabbage Tree Formation sediments being thrust over the eastern margin of the ultramafics.

Aero-magnetics shows ACC as being a NNW trending lozenge shaped body approximately 20 km long and up to 3 km wide. 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. However, in the Scotts 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. The fresh members of this ultramafic complex contained variably amounts of nickel, chrome and cobalt, in differing mineralogical forms.

Variable weathering profiles with differing mineral assemblages and metal concentrations are developed on different areas of the ultramafic complex. An appreciation of the ultramafic weathering profiles is important because they contain most of the higher grade Ni-Co. 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. 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. They subdivided a typical weathering profile as follows:

Laterites	Pisolitic Zone	Hard ironstone with red clay matrix
	Ferruginous Red Zone	Soft chocolate-red clay, pisolitic grains and black ironstone
	Limonitic Yellow Zone	Soft yellow- orange clay, some red clay
	Mottled	Soft bright red, brown, yellow, purple clay with black and white specks

Clays	Transition Zone Soft	decomposed serpentinite, dark light green, minor red clay,
	Bleached Zone	Soft, pale yellow green serpentinite with some magnetite.
Serpentinite	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 Scotts Hill area, the pyroxenite has been extensively replaced by amphibole, then altered to talc and 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 of Ni was very variable and was deepest adjacent to rodingite dykes because of the high relative permeability in 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, Scotts Hill, Barnes Hill-Mt Vulcan, and Barnes Hill South, Ni possibly occurs as different species, concentrated in different hosts in the weathering profiles of different ultramafic areas. However, whilst there is mineralogical and host variation, a common feature is that the greatest concentration of Ni occurs in thick clay/partly decomposed serpentinite zones towards the base of the weathering profile. Substantial tonnages of this favorable zone are only likely to exist beneath the protective cover of either laterites, or Tertiary gravels, either of which may be concealed beneath Quaternary sediments.

Ordovician Junee Group Consists of Sandstone siltstone slate limestone quartzite's 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 Group, Golden Valley Group, Mersey Group, Woodbridge group, Ferntree group and Cygnet Coal measures.

Tertiary Sediments consist mainly of sandy clays and sandstones and more 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 from magnetic features in the regional magnetics, 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 and Jervois Mining completed most work on the Barnes Hill Ni-Co Laterite.

Company	Start	Finish	Focus	Work Completed	Results	Conclusion	Report/EL
Jervois Mining	2001	2004	Ni, Co	Re-assaying, campsite sampling for met work	12.4 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 gave 3m at 1g/t)	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 Indicated Resource (JORC)

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 drilled 1178.4 meters in 116 air core holes along with eight diamond drill holes in 1997. The laterites have been drilled at a density of 100 to 150 meter centers, adequate to meet the requirements of JORC indicated status.

The nickel laterite has developed above serpentinite in the area, part of the Andersons Creek ultramafic/mafic complex. All nickel in Tasmania seems to be related to the serpentinites including the new Avebury nickel sulphide project being developed by Allegiance near Zeehan.

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

Table 1:

Lithology	Ni %	Co %	Tonnes	%Ni Equivalent	Percentage Tonnes	Ni	Co
Hematite	0.63	0.12	167657	1.05	1.3%	1.0%	2.3%
Limonite	0.39	0.12	794699	0.81	6.4%	3.0%	11.3%
Saprolite	0.88	0.07	9213728	1.13	73.8%	77.7%	75.9%
Weathered Serpentinite	0.82	0.04	2301870	0.96	18.5%	18.3%	10.5%
Totals	0.83	0.07	12477955	1.07			

The individual calculation sheets follow. 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 (the target of the metallurgical testing). 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 submitted nine composite samples to Amdel Laboratories for high pressure acid leach metallurgical testing (two from Scotts Hill, three from Mt Vulcan and four from Barnes Hill). The samples averaged 1.16% nickel oxide (0.91% nickel) and 920 ppm 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 prelim tests) with high recoveries and low acid consumption. Tests were done at 2400C and 2600C producing the following average recoveries after two hours of leaching:

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

7: EXPLORATION COMPLETED DURING THE PERIOD

Immediately after acquisition, Proto commenced an in-house scoping study on Barnes Hill. The research and assessment revealed a substantial amount of work had previously been collected and compiled by previous explorers in the area. Most importantly a 161 drill hold data base was reviewed with considerable geochemistry along with met testing including HPAL and regular atmospheric leach tests.

Proto also purchased both multi-spectral Aster satellite data and 60cm Quick Bird satellite data to help with assessment and planning. Integrating the satellite data and validated historical drill data (used to calculate the indicated resource) enabled assessment of data against resource polygons to define sites for re-sampling (geochemical assessment), and target large scale samples for column leaching tests. Combining all datasets has also shown a number of obvious areas for new exploration, which should enable Proto to increase the size of the resource, Both around Barnes Hill, and in the district.

7.1 Metals Finance Corporation (MFC) Joint Venture

On August 2nd 2007, Proto announced that the Company has signed a binding finance and development agreement with Anglo-Canadian company Metals Finance Corporation (“MFC”). MFC is a specialist developer and financier of metal production projects and have agreed to fund the pre-feasibility study of Barnes Hill nickel laterite project and to engineer the production facility that will produce a high-grade nickel salt from the nickel ore. MFC will finance 100% of the capital expenditure on the processing facility.

8: EXPLORATION POTENTIAL

Potential exists to expand the Ni laterite around the existing under areas of shallow cover, glacial till. A review of Cr potential is also planned to assess the resources originally defined and mined by Northern Chromite.

The gold intersection drilled by BHP and assayed by CRA will also be assessed in terms of location and setting, Gold is an obvious target in the area considering its proximity to the Beaconsfield gold field. However there seems to be some conjecture about the exact location of this result after speaking with geologists working at the Beaconsfield operation.

9: PROGRAM AND BUDGET

As set out above, review of historical work at Barnes Hill confirms a JORC indicated resource of 12.1 Mt at a combined nickel grade of 1.04%. In addition extensive metallurgical, geoscientific and environmental studies have been completed. The metallurgical studies indicate the potential for excellent recoveries using high pressure leach techniques and also good recoveries using low pressure hydrochloric acid based techniques.

Proto plans to assess the historical databases available and embark on scoping work with a preliminary budget of \$100,000 before determining the next course of action.

The company feels that the nickel deposit acquisition is a very significant step forward in its bid to become a nickel producer in the long term. The company is particularly pleased with the grade of the nickel, its surface and near-surface location, and its proximity to port and engineering facilities. More than this, Proto feels that nickel has a strong demand future to look forward to.

Proposed Project Development

1: Engage Metallurgist to review both HPAL and Column leach tests, and assess viability of large column leach tests previously proposed by Jervois Mining, Mike Gunn retained to oversee met work. HRL testing Brisbane engaged

2: Identify key stake holders and formulate plans to ensure support and participation in our plans for the Barnes Hill Ni-Co laterite.

3: Review resource calculations and move data into modern mine planning software such as DataMine or Vulcan. This will allow integration with environmental study data, social data and primary tenure and infrastructure information. Snowden engaged.

4: Initiate review of previous environmental studies to assess reliability and completeness of work. Prepare plan and budget to fully assess both extent of protected species in the Barnes Hill area and viability of various techniques to remove/relocate the species from resource sites during mining and then repatriate during rehabilitation phase. North Barker Ecosystem services have initiated work.

5: Begin dialogue with Tasmanian Department of Mines and Energy to promote a good relationship and assess their expectations for the project. Initiated and ongoing.

6: Commence desktop exploration over Barnes Hill Lease to review previous work to identify any areas missed during exploration. Underway.

7: Begin scoping discussions with contract mining groups with expertise in mining shallow resources like Ni laterites, Mn or Al resources. MFC deal signed.

10: KEY REFERENCES

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APPENDIX A: Phase 1 Work Program



**BARNES HILL NICKEL LATERITE
PROPOSED 2007 SAMPLING**

**EL17/2006 'Barnes Hill'
TAMAR REGION
TASMANIA**

JULY 2007

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INTRODUCTION

Proto Resources and Investments Limited (Proto) acquired the Barnes Hill (formally known as Beaconsfield) nickel/cobalt laterite in northern Tasmania from Discovery Metal Limited in early 2007. Since purchase Proto has reclassified the previously defined resource to JORC Indicated status and secured historical databases including drilling and geochemistry along with standard GIS layers. Proto has also purchased detailed Satellite imagery including: ASTER multi channel and Quick-bird visual band (60cm cell) datasets. Proto plans to quickly asses the viability of a heap leach operation in the area. Three tiers of work will be required to asses the resource for heap leaching.

<i>Phase 1</i>	Repeat geochemistry testing	July 2007
<i>Phase 2</i>	Larger Column Tests	July/August 2007
<i>Phase 3</i>	Bulk Sampling	August 2007

Proto would like to take the four large samples (Phase 2) asap, followed by smaller samples (Phase 1) a bulk sample site will be determined after phase 1 and 2 sampling.

Proto plans to carry out more detailed vegetation surveys later in 2007, where all historical sample locations would be re-assessed and new sites cleared for sampling to attempt to increase the current resource size.

BARNES HILL TENEMENT

The Barnes Hill Tenement EL 17/2006 covers 76 km² and has a minimum exploration commitment of \$57,000 over the first two years. The license was granted on 8th August 2006 for a period of five years.

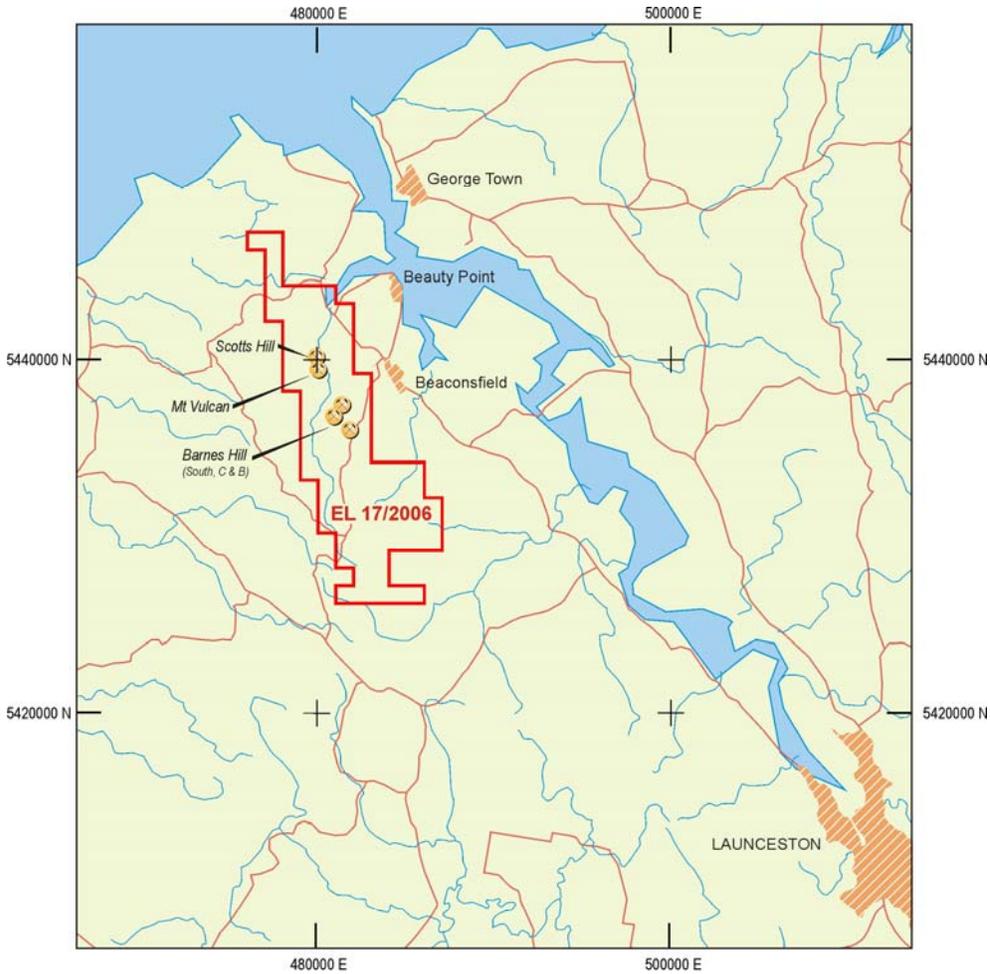
The Barnes Hill tenement EL 17/2006 is located approximately 30km north of Launceston and 5km west of Beaconsfield near the Tamar River in northern Tasmania.

The land status plan shows EL 17/2006 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 Forestry Commission. Several reserves and mining tenements also exist.

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.



		<p>PROTO RESOURCES & INVESTMENTS LTD</p> <p>Suite 1906 109 Pitt Street Sydney NSW 2000 Phone: +61 2 9007 5800 Fax: +61 2 9232 5359</p>
Exploration Lease Resource Major Town Drainage Road	<p>Prepared: AJ Date: Dec. 2006 Drawn: PL Drwg. No.: Proto 1</p>	
<p>BARNES HILL PROJECT PROJECT LOCATION</p>		<p>FIGURE 1</p>

The prime reason for the AHA and Dans Hill RAP areas is to protect two plant species: *Tetradlea gunni* and *Epacris virgata*. *Tetradlea* is present near and over the some portions of the Ni-Co Laterite areas (areas from previous surveys are shown on later maps).

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.

Summary of land tenure covered by the Barnes Hill tenement:

- Anderson's Creek Forest Reserve
- Peaked Hill Forest Reserve
- Dans Hill Forest Reserve
- Proposed Barnes Hill Conservation Area
- Private Property
- State/Multiple Use Forest
- MDC Informal Reserve

BARNES HILL RESOURCE

Previous explorers of the laterite deposits have drilled 161 holes. King Island Scheelite (1947) Ltd. put down 37 diamond drill holes for approximately 580 metres in the late 1960's and Allegiance Mining N.L. drilled 1178.4 metres in 116 aircore holes and eight diamond drill holes in 1997. Consequently, the main laterites have been drilled at a density of 100 to 150 metre centres.

Resources have been calculated using the Allegiance assay data (since not all the KIS data were available at the time). The lithologies are based on Jervois' re-logging of the Allegiance chip trays and the resources have been drawn up using those lithological categories. A summary of the resources is:

Lithology	Ni %	Co %	Tonnes	%Ni Equivalent	Percentage		
					Tonnes	Ni	Co
Hematite	0.63	0.12	167657	1.05	1.3%	1.0%	2.3%
Limonite	0.39	0.12	794699	0.81	6.4%	3.0%	11.3%
Saprolite	0.88	0.07	9213728	1.13	73.8%	77.7%	75.9%
W. Serpentinite	0.82	0.04	2301870	0.96	18.5%	18.3%	10.5%
Totals	0.83	0.07	12477955	1.07			

The individual calculation sheets follow. 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 (the target of the metallurgical testing). 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

PROPOSED 2007 WORK PLAN

Phase 1:

Previous Evaluation by Jervois Mining NL involved the testing of over 130kg of lithologically selected composite samples from previous drilling of the Beaconsfield deposits. Proto plans to reassess 15 of these sites to firstly test the integrity of the original work and apply modern QA QC methods to the process. Secondly expand the analysis to include a number of elements not originally assessed by Jervois. Each sample will also contribute to a small column program to demonstrate the leachability of as many areas/types of the existing resource as possible, nominally 8kg/test. Sampling by small Toyota mounted core rig.

Phase 2:

Take four larger samples with either a small back hoe or large diameter coring rig. For logistical ease a back hoe is probably best option. The samples are needed to conduct larger definitive columns in the lab environment to mimic full scale operations as closely as possible 4 tests x 80kg each (leached for 100 days)

Phase 3:

The final phase of leaching assessment will require a larger sample to obtain enough leach fluid (pregnant fluid) to fully assess chemistry needed to extract nickel salt from the fluid in economic grades. A bulk sample 20 tonnes of 5t x 4 representative of the saprolite and weathered serpentinite is required for this phase of work. It would be hard to get a bulk sample that is representative thus the middle tier of lab work. Leaching time 3 - 6 months).

At Barnes Hill, it should be possible to obtain a representative sample from a shallow depth using a once again backhoe (or, if necessary, an extended backhoe which reaches to 15 metres).

Work by Jervois in NSW on the Young laterite shows saprolite has a 28% moisture content and weathered serpentinite 22%. Thus about 1.25 tonnes should be collected from each metre excavated to produce a 15 (dry) tonne sample (from 15 metres excavated depth). At Young, a sample collecting device was designed. When the Calweld bucket was emptied into the catcher, a head sample of approximately 10kg was taken (for each metre). Subsequently, a slide in the base of the catcher was opened to allow the sample to drop into a 44 gallon drum. The drums were then weighed on a scale (see photographs Calweld Drilling Programme). It required 5 drums to make up 1 dry tonne. For a vertical metre to produce 1 dry tonne (5 x 44 gallon drums) the area of the pit needs to be 0.7 square metres or 80cm by 80cm across.

SAMPLING TECHNIQUES

The key criteria for sampling for the all phases of work are virtually identical, irrespective of sample size. Key criteria listed below.

- Lithologically representing the resource
- Average grade representing the resource
- Spatially representing the resource
- Near tracks - good access, no clearing
- Away from historical mapped locations of *Epacris virgata* and *Tetratheca gunni* (protected species)
- Phase 2 and 3, Depth within reach of a backhoe

The following table shows the first choice of four old drill sites located on land owned by Beams Bros (Holdings) P.L. and M.I.Beams & Sons P.L. (2 of which lie within "Private Land Reserve (RFA)"):

Toyota Drill sampling will be confined to existing tracks and historical sample locations. The foot print will be very minimal and all material expelled by the rig will be sampled/ removed. Any disturbance will be rehabilitated within days of program completion.

Sampling for phase two and three: The backhoe will remove topsoil first and put it aside. Overburden will also be put to one-side. When a sample metre depth is reached, sample from that metre will be placed in the sample catcher, a head sample taken and then the sample be allowed to drop into a 44 gallon drum which is subsequently sealed. Once 5 drums are full, sampling of the next metre will commence. Each drum will be weighed and labeled (pit number, depth, lithology etc) then stored at a central location for easy pick-up by truck. The pits will be fenced off and at the end of the programme, the pits will be backfilled with sand/gravel from the local gravel pits or old chromite tailings (if appropriate) and with the dumped overburden and finally topsoil.

The drums will subsequently be picked up, washed and containerized for dispatch to Lab or Demo Plant location.

2007 SAMPLE LOCATIONS

Phase 2 of the sampling program is the first priority. Clearing these areas first is important to initiate assessment of the resource.

PHASE 2 Large Sample locations.....Priority 1

PROPOSED BACK-HOE SAMPLES FOR COLUMN TESTING

Hole No.	E	N	From	To	Lithology	%Ni	%Co
	WGS84_SUTM54		m	m			
S031	481289.5	5436874.5	6	7	Saprolite	0.60	0.095
			7	8	Saprolite	0.70	0.065
			8	9	Saprolite	1.12	0.060
			9	10	Saprolite	1.17	0.048
			Average				
S032	481569.5	5436904.5	5	6	Saprolite	1.03	0.024
			6	7	Saprolite	1.23	0.045
			7	8	Saprolite	1.50	0.039
			8	9	Saprolite	1.72	0.033
			Average				
S048/SD075	481554.5	5435791.5	2	3	Saprolite	0.64	0.049
			3	4	Saprolite	0.88	0.049
			4	5	W. Serp	0.72	0.027
			5	6	W. Serp	0.91	0.031
			Average				
S065	481020.5	5437023.5	2	3	Saprolite	0.38	0.098
			3	4	Saprolite	0.43	0.092
			4	5	Saprolite	0.45	0.063
			5	6	Saprolite	0.75	0.044
			Average				
Average						0.89	0.054
(Equivalent Resource Average						0.90	0.058)

These locations are all on or very close to known roads and tracks. There is flexibility to move the locations up to 10m to make clearances easier. These locations are all existing sites that were cleared in the past. Figures 2 shows the entire resource area and its proximity to Beaconsfield. It also shows proposed phase 1 and 2 sampling locations. Figures 3 and 4 show the 4 phase 2 sample locations in detail.

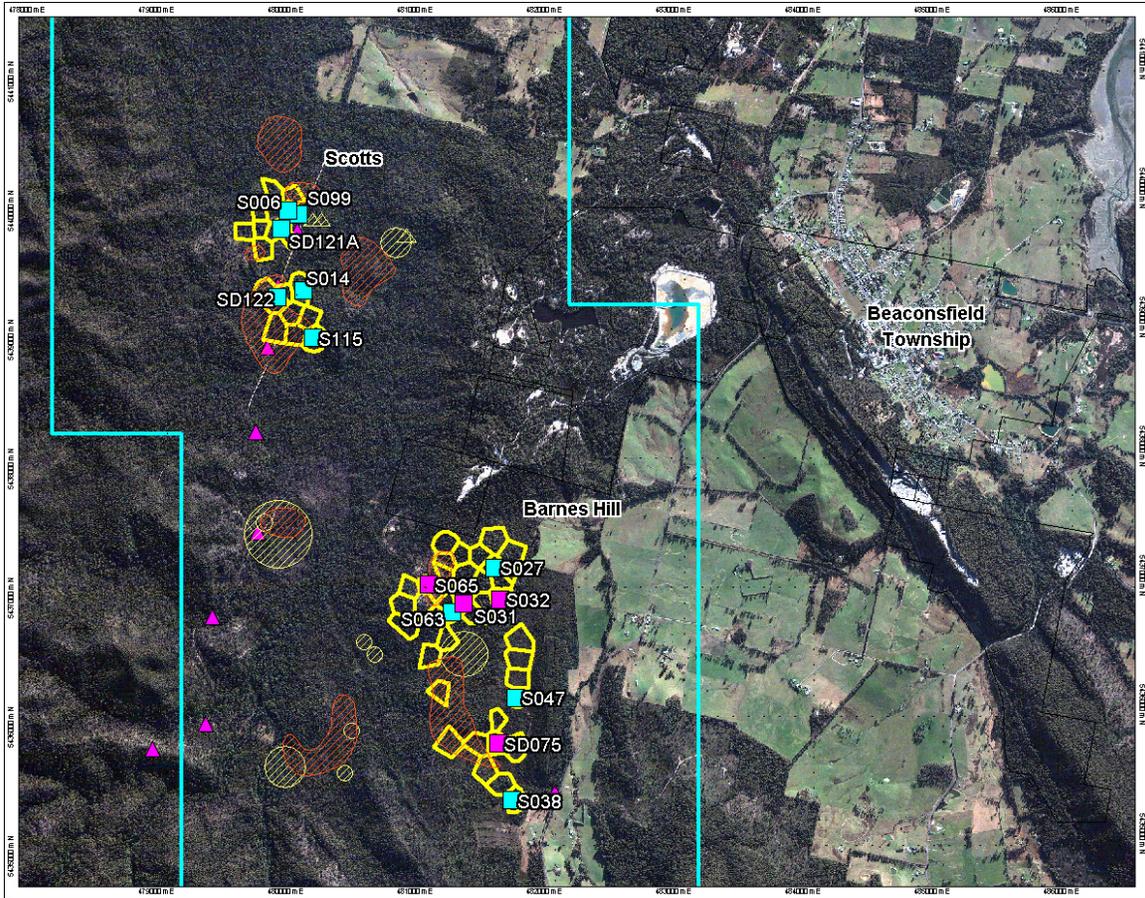


Figure 2: Phase 1 sample locations (blue), Phase 2 Large sample locations (Pink squares) areas of rear and endangered plants (*Epacris Virgata* Orange) and (*Teratheca Gunni* lt. Yellow). Blue line shows tenement boundary. Yellow polygons - resource area



Figure 3: Large Sample location SD75, close to Hinds Road. Yellow polygons - resource area



Figure 4: Large Sample locations S032 S031 and S065, in the vicinity of old chromite working and on existing bush tracks. Yellow polygons - resource area



Figure 5: S65 Photo of existing disturbance, very open and no surface vegetation.

PHASE 1 Geochemical Sample Locations.....Priority 2

The phase 1 samples are designed to assess historical work and get a better handle on geochemical variation in the resource. Figure 6 and 7 show the locations of the sample locations.

SAMPLES FOR GEOCHEMICAL TESTING

Bulk Sample Site	EAST	NORTH	Projection
S027	481529.52	5437150.52	WGS84_SUTM54
S063	481200.52	5436808.52	WGS84_SUTM54
S047	481692.52	5436145.52	WGS84_SUTM54
S038	481664.52	5435348.51	WGS84_SUTM54
SD122	479847.57	5439249.52	WGS84_SUTM54
S014	480050.57	5439298.52	WGS84_SUTM54
S115	480128.56	5438931.52	WGS84_SUTM54
S099	480015.58	5439891.52	WGS84_SUTM54
S006	479934.58	5439919.51	WGS84_SUTM54
SD121A	479881.57	5439774.51	WGS84_SUTM54

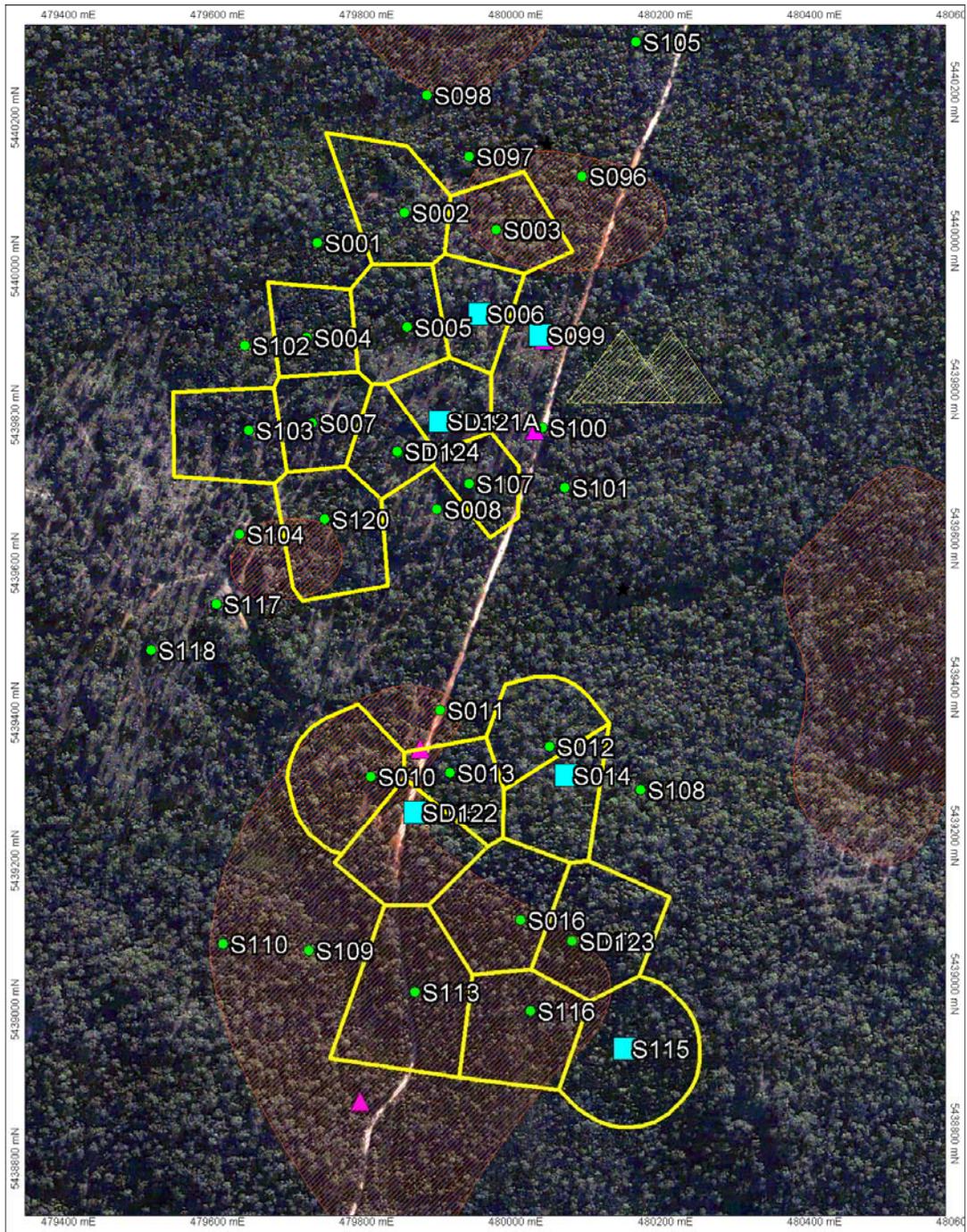


Figure 6: Northern part of resource “Scotts” Phase 1 sample locations (blue), areas of rare and endangered plants (*Epacris Virgata*, Orange) and (*Teratheca Gunnii*, Yellow). Pink triangles are GPS points from visit. Yellow polygons - resource area

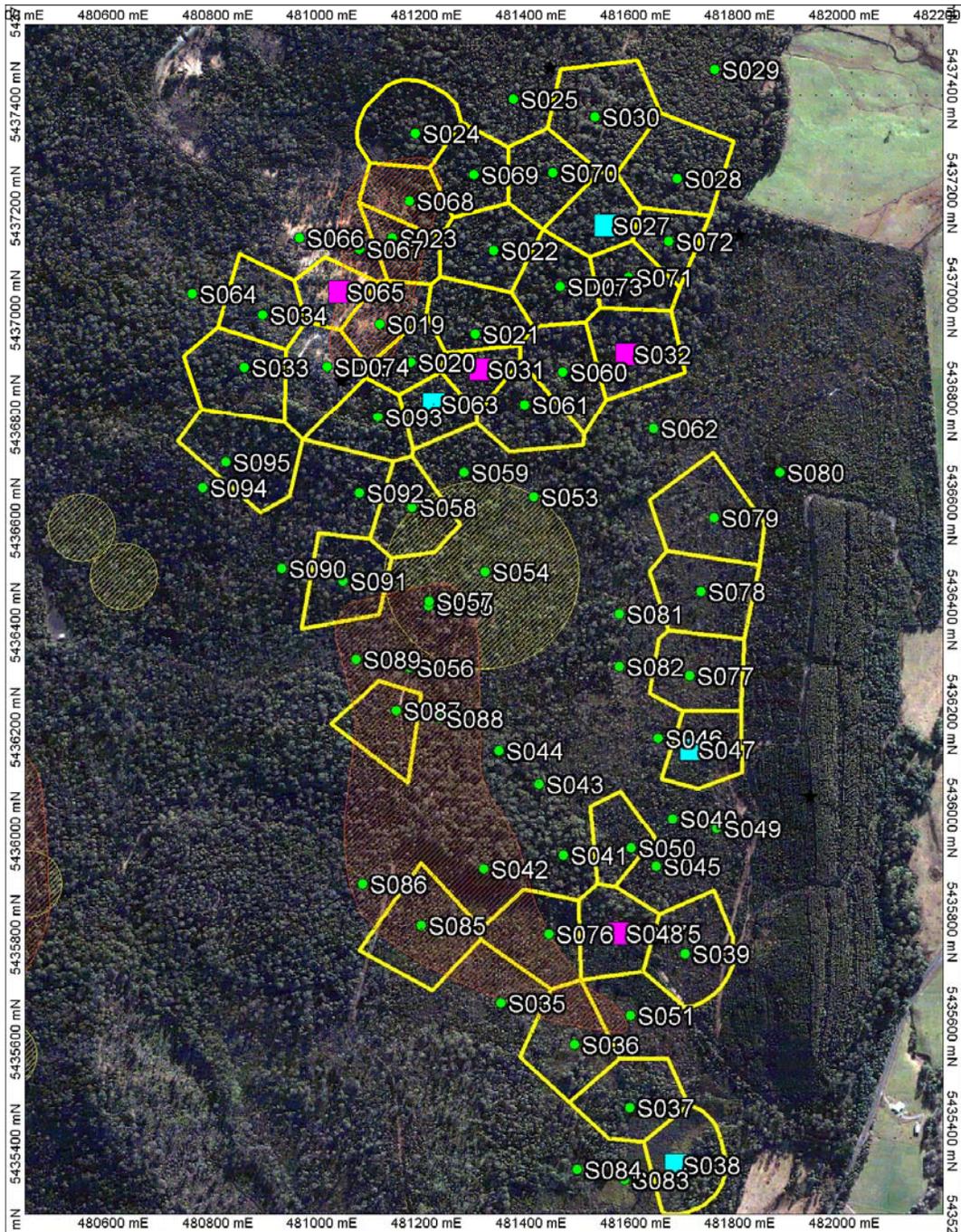


Figure 7: Southern part of resource “Barnes Hill” Phase 1 sample locations (blue), areas of rare and endangered plants (*Epacris Virgata*, Orange) and (*Teratheca Gunni*, Yellow). Pink triangles are GPS points from visit. Pink squares show locations of large samples. Yellow polygons - resource area.

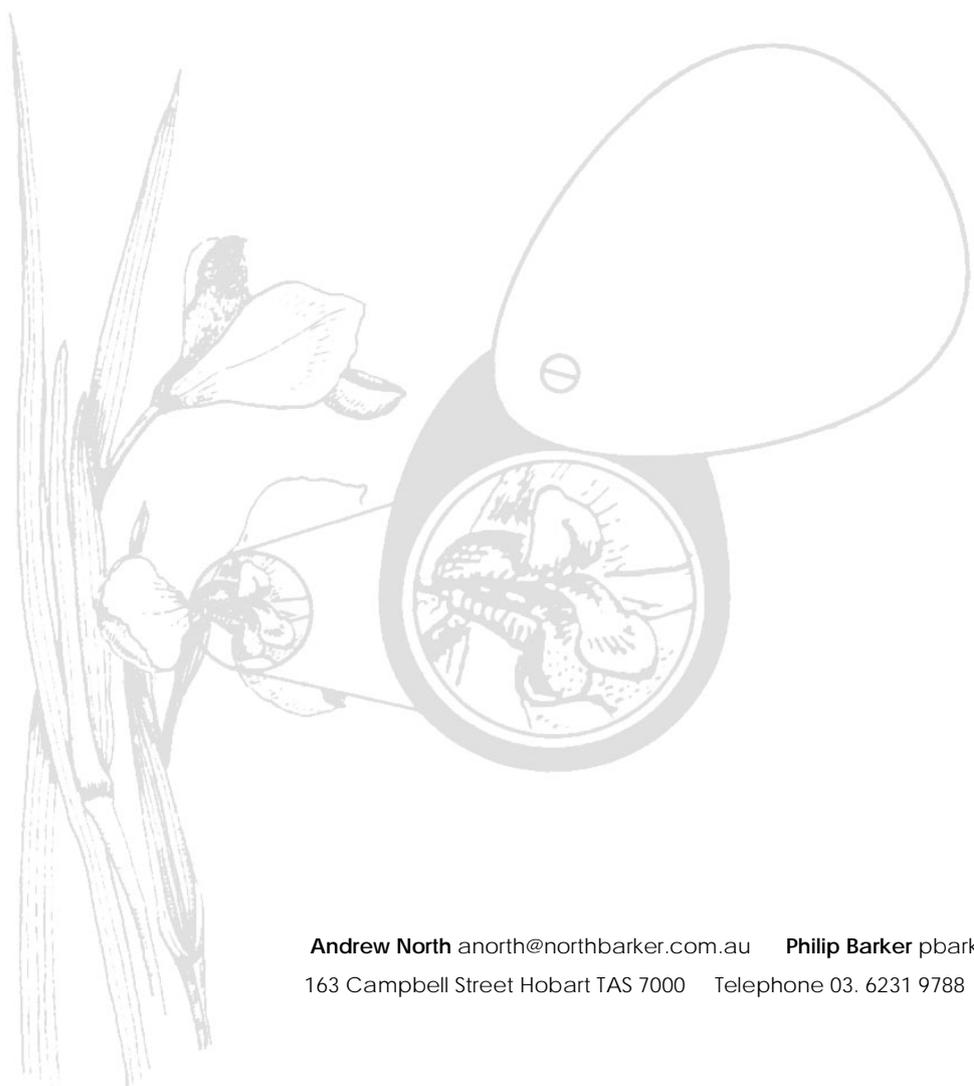
APPENDIX B: North Barker Report

Barnes Hill, Beaconsfield

**Threatened flora assessmenty at proposed drill holes &
Phytophthora Management Strategy**

September 2007

For Proto



Threatened flora survey and *Phytophthora* management strategy for the proposed sample sites at Barnes Hill, Beaconsfield for PROTO – Resources and Investments Ltd.

Background Proto engaged North Barker to undertake a vegetation survey of 5 proposed bulk sample sites and 9 drill sites at Barnes Hill, Beaconsfield on the 7th August 2007. It is proposed that a detailed survey of the broader exploration area will be carried out in the flowering season for *Tetratheca gunnii*. Following that survey a report fulfilling the DPIW consultants brief will be prepared.

As vegetation in the area is known to be susceptible to disease caused by *Phytophthora cinnamomi* Proto have committed to undertake suitable hygiene protocol for *Phytophthora cinnamomi* and develop a strategy to manage the associated risks of working in a region where there is susceptible vegetation.

Aims:

1. To survey the four proposed bulk sampling sites for the threatened flora species with a focus on *Epacris virgata*, *Tetratheca gunnii* and *Spyridium obcordatum* which are three threatened species known to occur in the vicinity.
2. Also, to provide a strategy to minimise the risk of introduction and spread of plant root pathogen - *Phytophthora cinnamomi* during activities associated with bulk sampling for minerals and the twin sampling of areas previously drilled.
3. Undertake a broader flora and fauna habitat assessment during the flowering season of T. gunnii.

Method: A survey was carried out of the proposed sample sites including the bulk and drill sites. In situations where a threatened species was located the sample site was relocated to avoid the species. In all cases sites were chosen where vegetation had been removed or disturbed.

The bulk sample sites were marked out on the ground with aerosol paint in areas lacking vegetation or with flagging tape in areas with vegetation.



Large sample S039 moved to avoid *Epacris virgata*



Twinned drill sample SD122 on track

Species lists are for the sample sites only and are given in **Appendix 1**.

Results: All proposed sample sites could be located in a way to avoid impact to any threatened species. The only threatened species encountered near any of the proposed sample sites was *Epacris virgata*.

The survey did not reveal the occurrence of any *Phytophthora cinnamomi* symptoms, in the vicinity of the proposed mineral sampling.

Strategy:

It is a central plank to the Tasmanian *Phytophthora cinnamomi* Threat Abatement Plan (2001) to minimise the potential for the introduction and spread of this plant pathogen.

The proposed mineral sampling occurs partly on land that is used for the conservation of vegetation that is susceptible to *Phytophthora cinnamomi* in the CAR reserve system - this being the Dans Hill Forest Reserve. Works that occur within reserves should conform to the Reserve Management Code of Practice.

The following strategy should minimise the potential for introduction and spread of *Phytophthora cinnamomi*.

1. Implement the wash down guidelines for *Phytophthora cinnamomi* control.
 - a. All machinery and hand tools should be cleaned prior to entry to exploration license area.
 - b. Undertake work in dry weather. Alternative to water wash down- if dirt adhering to machinery is dry – is to physically remove clods with a crow bar or similar. This should be followed by a high pressure air blast to remove remaining loose dirt. The dry weather cleaning should be done at the wash down locations as indicated on the map.
 - c. In moist conditions wash down at designated wash down sites (marked on the maps) using water tankers or pump from the creeks and drain effluent into the adjacent riparian vegetation. All boots and hand tools which are in contact with earth should be washed.
 - d. It is proposed that washdown should occur when moving equipment between Scotts Hill and Barnes Hill areas.
2. As no visible evidence of *Phytophthora cinnamomi* was seen it can be presumed that there is no active front on infection. Therefore the suggestion that the sites furthest from formed roads are sampled first and machinery is walked out

References:

Barker, P. C. J. and Wardlaw, T. (1994). The susceptibility to *Phytophthora cinnamomi* of rare and threatened plants in Tasmania. *Aust. J. Bot* **43**, 379-386.

Barker, P. C. J., Brown, M. J. and Wardlaw, T. (1996). The selection and design of management areas for protection from *Phytophthora cinnamomi*. *Conservation Biology* **76**, 187-193.

Barker, P. C. J. (1996). Extension surveys and long term monitoring plots for selected species threatened by *Phytophthora cinnamomi*. Forestry Tasmania and the Australian Nature Conservation Agency.

DPIWE (2005) Interim *Phytophthora cinnamomi* management guidelines. Nature Conservation Report 05/07.

Environment Australia (2001). Threat abatement plan for die back caused by Root Rot Fungus *Phytophthora cinnamomi*.

Parks and Wildlife Service, Forestry Tasmania and Department of Primary Industries, Water and Environment 2003, *Tasmanian Reserve Management Code of Practice*, Department of Tourism, Parks, Heritage and the Arts, Hobart.

Appendix 1. Flora species list.

Site: 1 S039 - large sample

Grid Reference: 481794E, 5435937N
Accuracy: GPS (within 10 metres)
Recorder: Karen Ziegler
Date of Survey: 7 Aug 2007

Trees: *Allocasuarina monilifera*, *Eucalyptus amygdalina*
Tall Shrubs: *Leptospermum scoparium*
Shrubs: *Epacris impressa*, *Euryomyrtus ramosissima*
Low Shrubs: *Lissanthe strigosa*
Herbs: *Correa reflexa*, *Euchiton collinus*, *Viola betonicifolia*
Graminoids: *Gahnia grandis*, *Lomandra longifolia*
Grasses: *Ehrharta distichophylla*
Ferns: *Pteridium esculentum*

Site: 2 S065 - large sample

Grid Reference: 481133E, 5437208N
Accuracy: GPS (within 10 metres)
Recorder: Karen Ziegler
Date of Survey: 7 Aug 2007

Trees: *Allocasuarina littoralis*, *Eucalyptus amygdalina*, *Eucalyptus viminalis viminalis*
Tall Shrubs: *Banksia marginata*, *Kunzea ambigua*, *Leptospermum scoparium*
Herbs: *Gonocarpus teucrioides*, *Goodenia lanata*, *Viola betonicifolia*
Weeds: *Poa annua*

Site: 3 FUM - S074 - large sample

Grid Reference: 481030E, 5436950N
Accuracy: GPS (within 10 metres)
Recorder: Karen Ziegler
Date of Survey: 7 Aug 2007

Trees: *Allocasuarina littoralis*
Tall Shrubs: *Acacia dealbata*, *Kunzea ambigua*, *Leptospermum scoparium*
Grasses: *Ehrharta stipoides*
Weeds: *Lagenophora stipitata*

Site: 4 S031 - large sample

Grid Reference: 481402E, 5437059N
Accuracy: GPS (within 10 metres)
Recorder: Karen Ziegler
Date of Survey: 7 Aug 2007

Trees: *Eucalyptus amygdalina*, *Eucalyptus obliqua*, *Eucalyptus viminalis viminalis*
Tall Shrubs: *Acacia dealbata*, *Banksia marginata*
Shrubs: *Amperea xiphioclada*, *Bossiaea prostrata*, *Coprosma hirtella*, *Epacris impressa*, *Lomatia tinctoria*
Herbs: *Acaena novae-zelandiae*, *Acianthus sp.*, *Gonocarpus tetragynus*, *Helichrysum*

Graminoids: *scorpioides*, *Hydrocotyle hirta*, *Oxalis perennans*, *Pterostylis* sp., *Viola hederacea*
Lepidosperma laterale, *Lomandra longifolia*
Ferns: *Pteridium esculentum*
Weeds: *Lagenophora stipitata*

Site: 5 S032 - large sample

Grid Reference: 481682E, 5437089N
Accuracy: GPS (within 10 metres)
Recorder: Karen Ziegler
Date of Survey: 7 Aug 2007

Trees: *Allocasuarina littoralis*, *Eucalyptus amygdalina*, *Eucalyptus obliqua*
Tall Shrubs: *Banksia marginata*
Shrubs: *Epacris impressa*, *Leucopogon* sp., *Lomatia tinctoria*, *Pimelea linifolia linoides*
Low Shrubs: *Lissanthe strigosa*
Herbs: *Acianthus* sp., *Drosera pygmaea*, *Galium australe*, *Gonocarpus tetragynus*, *Goodenia lanata*, *Helichrysum scorpioides*, *Viola hederacea*
Graminoids: *Lepidosperma concavum*, *Lepidosperma laterale*, *Lomandra longifolia*
Grasses: *Ehrharta stipoides*
Ferns: *Adiantum aethiopicum*, *Pteridium esculentum*
Climbers: *Comesperma volubile*
Weeds: *Lagenophora stipitata*

Site: 6 S063 - small

Grid Reference: 481313E, 5436993N
Accuracy: GPS (within 10 metres)
Recorder: Karen Ziegler
Date of Survey: 7 Aug 2007

Trees: *Allocasuarina littoralis*, *Eucalyptus amygdalina*, *Eucalyptus obliqua*
Tall Shrubs: *Banksia marginata*
Shrubs: *Epacris impressa*, *Lomatia tinctoria*
Low Shrubs: *Lissanthe strigosa*
Herbs: *Acaena novae-zelandiae*, *Drymophila cyanocarpa*, *Euchiton collinus*, *Gonocarpus tetragynus*, *Hydrocotyle hirta*, *Oxalis perennans*, *Viola hederacea*
Graminoids: *Gahnia grandis*, *Lepidosperma laterale*, *Lomandra longifolia*
Grasses: *Ehrharta stipoides*
Ferns: *Pteridium esculentum*
Weeds: *Hypochoeris radicata*, *Lagenophora stipitata*

Site: 7 SD121 - small sample

Grid Reference: 479994E, 5439959N
Accuracy: GPS (within 10 metres)
Recorder: Karen Ziegler
Date of Survey: 7 Aug 2007

Trees: *Eucalyptus amygdalina*
Shrubs: *Bossiaea prostrata*, *Epacris impressa*, *Lomatia tinctoria*
Herbs: *Acianthus* sp., *Correa reflexa*, *Gonocarpus teucroides*, *Hypericum gramineum*,
Oxalis
perennans, *Poranthera microphylla*, *Viola hederacea*
Graminoids: *Lomandra longifolia*
Grasses: *Ehrharta stipoides*
Ferns: *Pteridium esculentum*
Climbers: *Comesperma volubile*
Weeds: *Lagenophora stipitata*