

**BARNES HILL PROJECT
TASMANIA
EL17/2006**

ANNUAL REPORT
8TH AUGUST 2010 TO 7TH AUGUST 2011

Tenement Holder/Manager
Proto Resources & Investments Ltd

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Note: All figures and grids are according to the GDA94 datum and MGA94 grid system.

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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 resource is made up of three interconnected mineral deposits known as Barnes Hill, Mt Vulcan and Scott’s Hill. The laterite resources are wholly covered by licence EL17/2006, owned and managed by Proto.

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 and cobalt 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 Project – Mining Lease 1872P/M.

Work planned for the coming year will include follow up Air Core drilling at the Scotts Hill and Mt Vulcan prospects, continued metallurgical testwork of bulk samples to be collected at the Scotts Hill and Mt Vulcan prospects, follow up work on the previous geochemical soil sampling programs throughout the License.

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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 DPEMP Guidelines received from the EPA Board, Proto submitted a DPEMP 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 DPEMP.

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 land status plan shows 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.

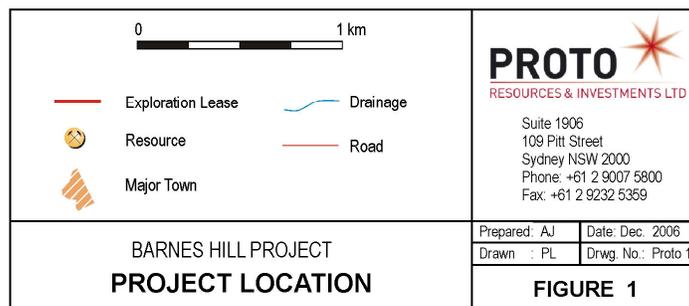
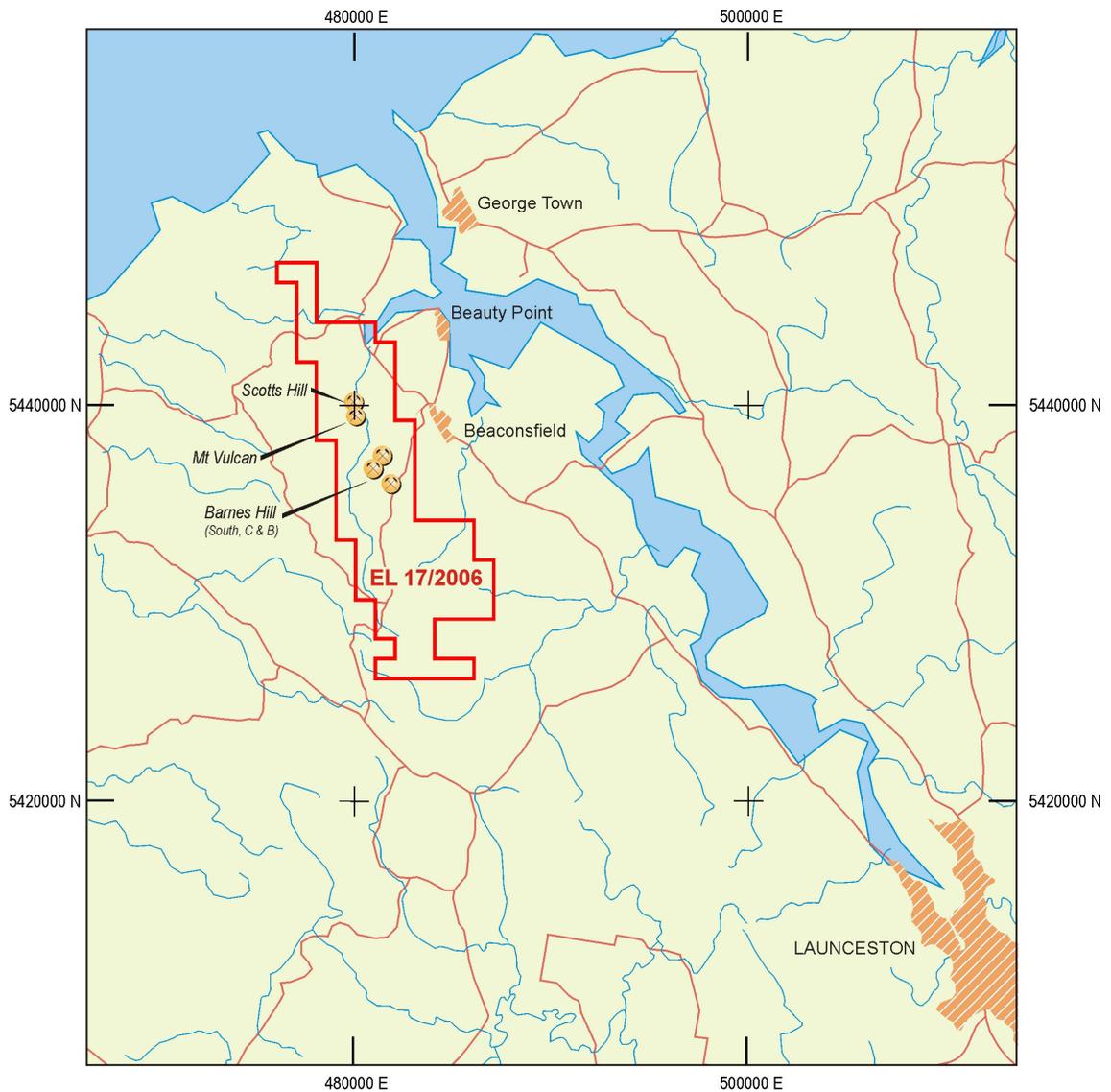


Figure 1 Barnes Hill Project & EL17/2006 location map

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.

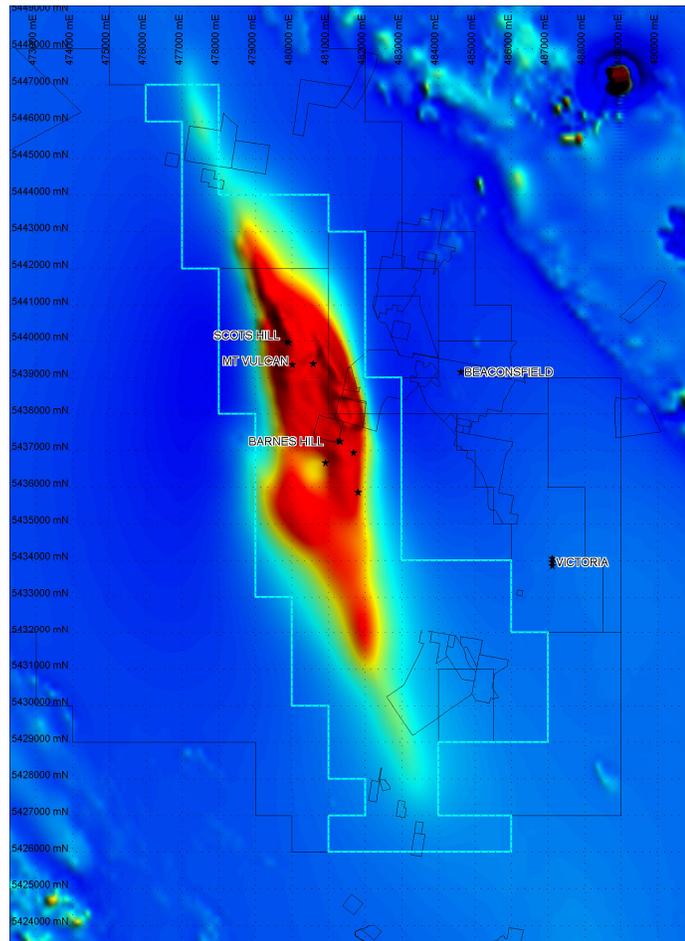


Figure 2 Barnes Hill EL17/2006 with total magnetic intensity as background clearly showing extent of the Andersons Creek Complex

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.

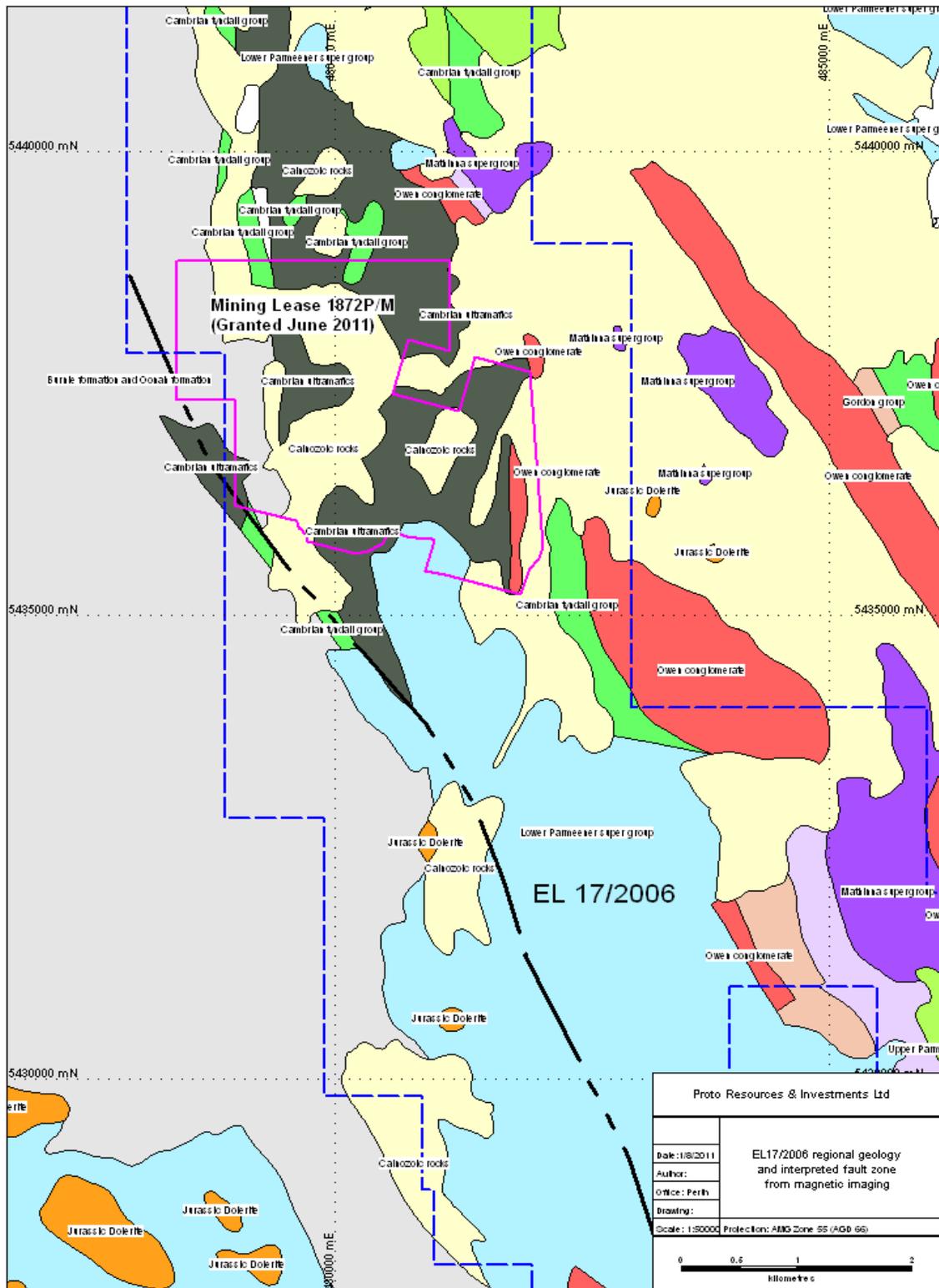


Figure 3 Regional Geological rock unit groups and interpreted fault zone from magnetic imaging

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

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 of Ni was highly 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, Scott's 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 within 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, 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 and Jervois Mining 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
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 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/serpentinities 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 Equivalent	Percentage		
					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	0.04	2,301,870	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 x %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 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 a soil sampling program in the northern and southern parts of the Licence, a Reverse Circulation drilling program for bulk sample collection and commencement of further metallurgical testwork, additional resource estimation at the Barnes Hill deposit by external consultants Snowden Mining Services, an environmental assessment by North Barker Ecosystem Services of the presence and potential impact on flora and fauna within the proposed mining and processing sites.

7.1 Geochemical Soil Sampling Programs

The Barnes Hill Extension Prospect was one of the four separate prospect areas being geochemically explored at the Barnes Hill project. These results were from 145 samples sent to ALS Laboratory Group that cover the area on the border of EL17/2006 and the Barnes Hill West Project on exploration licence EL53/2008. This identified a coincident Cu-Pb-Zn soil anomaly on EL53/2008 which corresponds with a northwest trending fault identified from airborne magnetics data (see figure 3). The soil anomaly although moderate in intensity is well above background levels and has returned a peak zinc result of 415ppm, peak lead result of 198ppm and a peak copper result of 137ppm. The anomaly occurs near the contact between sedimentary rocks of the Proterozoic Badger Head Block to the west and the Cambrian Andersons Creek Ultramafic Complex.

In addition to the soil sampling contiguous with EL53/2008, separate areas to the north and south sections of EL17/2006 were also sampled and analysed for multi-elements. A total of 191 samples were collected during this reporting period and sent to ALS Laboratory group for multi-element analyses (see appendix 1 for soil sampling location maps and multi-element assay results).

Samples were taken along uncleared east-west traverse lines with co-ordinates obtained from a handheld GPS unit. A pit between 10-30cm deep was dug and a sample, sieved using a 1mm sieve, was taken. All samples were dispatched to ALS Chemex for analysis of a multi-element suite of elements including Au, Ag, Al, As, Ba, Be, Bi, Ca%, Cd, Co, Cr, Cu, Fe%, Ga, K%, La, Li, Mg%, Mn, Mo, Na%, Nb, Ni, P, Pb, Rb, S%, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti%, Tl, U, V, W, Y, Zn, Zr. All of these elements were reported in ppm units with the exception of the elements reported as percentages, as listed above. Analysis method was ME-ICP61 for all elements except for Au done by Au-TL43 method.

Sample preparation by the Lab was to dry and pulverise entire sample to nominal 85% passing 75 microns. The ME-ICP61 Lab method entails a 0.5g sample is pre-digested for 10-15 minutes in a mixture of nitric and perchloric acids, then hydrofluoric acid is added and the mixture is evaporated to dense fumes of perchloric (incipient dryness). The residue is leached in a mixture of nitric and hydrochloric acids, the solution is then cooled and diluted to a final volume of 25mls. Elemental concentrations are measured simultaneously by ICP Atomic Emission Spectrometry. The Au-TL43 method for gold was using a 25g nominal sample weight for aqua regia extraction with graphite furnace AAS or ICP-MS finish.

7.2 Bulk Sampling Program

During the reporting period Proto completed a program of large diameter RC drilling of 430 metres, at the proposed north and south pit areas to provide 6.4 tonnes of material as a bulk sample of further mineralised nickel-cobalt ore for metallurgical pilot leach test work. The test work commenced in February 2011 and is being carried out by Australian Bio Refining Pty Ltd at Evans Head, NSW.

A plan showing the bulk sample collection sites is given in appendix 5, coordinates of the Air Core reference holes used as a control for bulk sampling locations is shown in table 5, and assay results of Ni and Co used as a control for selective material collection is shown in table 6. Approximately 2.4 tonnes of the total bulk sample was collected from the south pit area and 4 tonnes from the north pit area.

The results of this work program will provide additional information on the expected recoveries and density for each material type. It is expected that this test work in conjunction with additional infill Air Core drilling will result in the assignment of a JORC Measured classification for an area which represents at least the first 10 years of mining.

Table 5 Reference Air Core hole locations used for RC drilling and Bulk Sample site control.

South Pit Area

Bulk Sample ID	Reference Air Core Holes	Easting	Northing	EOH	Previous Intercept +0.8% Ni	RC drilling parameters
BHM002	BHA356	481793	5435916	13m	1-6m	6 holes to 10m depth
BHM002	BHA357	481850	5435875	16m	6-13m	6 holes to 20m depth
BHM002	BHA615	481753	5436153	11m	4-11m	6 holes to 10m depth
						Total 240m

North Pit Area

Bulk Sample ID	Reference Air Core Holes	Easting	Northing	EOH	Previous Intercept +0.8% Ni	RC drilling parameters
BHM003	BHA548	481438	5437116	22m	8-22m	4 holes to 25m depth
BHM004	BHA562	481479	5437250	29m	8-28m	3 holes to 30m depth
						Total 190m

Table 6 Reference Air Core hole assays and intervals used for Bulk Sampling control.

Location	Hole ID	Easting	Northing	RL	From	To	Ni %	Co %
North Pit	BHA548	481438	5437116	110.3	0	1	0.158	0.017
North Pit	BHA548	481438	5437116	109.3	1	2	0.344	0.038
North Pit	BHA548	481438	5437116	108.3	2	3	0.235	0.022
North Pit	BHA548	481438	5437116	107.3	3	4	0.138	0.011
North Pit	BHA548	481438	5437116	106.3	4	5	0.106	0.016
North Pit	BHA548	481438	5437116	105.3	5	6	0.295	0.17
North Pit	BHA548	481438	5437116	104.3	6	7	0.456	0.48
North Pit	BHA548	481438	5437116	103.3	7	8	0.719	0.122
North Pit	BHA548	481438	5437116	102.3	8	9	1.235	0.116
North Pit	BHA548	481438	5437116	101.3	9	10	1.415	0.087
North Pit	BHA548	481438	5437116	100.3	10	11	1.37	0.086
North Pit	BHA548	481438	5437116	99.3	11	12	1.315	0.081
North Pit	BHA548	481438	5437116	98.3	12	13	1.33	0.076
North Pit	BHA548	481438	5437116	97.3	13	14	1.4	0.074

North Pit	BHA548	481438	5437116	96.3	14	15	1.025	0.041
North Pit	BHA548	481438	5437116	95.3	15	16	1.485	0.065
North Pit	BHA548	481438	5437116	94.3	16	17	0.432	0.022
North Pit	BHA548	481438	5437116	93.3	17	18	0.815	0.134
North Pit	BHA548	481438	5437116	92.3	18	19	0.593	0.033
North Pit	BHA548	481438	5437116	91.3	19	20	0.95	0.042
North Pit	BHA548	481438	5437116	90.3	20	21	1.045	0.034
North Pit	BHA548	481438	5437116	89.3	21	22	1.525	0.056
North Pit	BHA562	481479	5437250	117.23	0	1	0.068	0.003
North Pit	BHA562	481479	5437250	116.23	1	2	0.064	0
North Pit	BHA562	481479	5437250	115.23	2	3	0.084	0.008
North Pit	BHA562	481479	5437250	114.23	3	4	0.188	0.013
North Pit	BHA562	481479	5437250	113.23	4	5	0.14	0.016
North Pit	BHA562	481479	5437250	112.23	5	6	0.176	0.034
North Pit	BHA562	481479	5437250	111.23	6	7	0.245	0.018
North Pit	BHA562	481479	5437250	110.23	7	8	0.342	0.037
North Pit	BHA562	481479	5437250	109.23	8	9	0.931	0.105
North Pit	BHA562	481479	5437250	108.23	9	10	0.973	0.035
North Pit	BHA562	481479	5437250	107.23	10	11	0.671	0.023
North Pit	BHA562	481479	5437250	106.23	11	12	0.677	0.021
North Pit	BHA562	481479	5437250	105.23	12	13	0.897	0.034
North Pit	BHA562	481479	5437250	104.23	13	14	0.802	0.027
North Pit	BHA562	481479	5437250	103.23	14	15	0.785	0.038
North Pit	BHA562	481479	5437250	102.23	15	16	0.813	0.027
North Pit	BHA562	481479	5437250	101.23	16	17	0.919	0.037
North Pit	BHA562	481479	5437250	100.23	17	18	0.909	0.034
North Pit	BHA562	481479	5437250	99.23	18	19	0.999	0.037
North Pit	BHA562	481479	5437250	98.23	19	20	1.105	0.04
North Pit	BHA562	481479	5437250	97.23	20	21	0.86	0.032
North Pit	BHA562	481479	5437250	96.23	21	22	0.963	0.037
North Pit	BHA562	481479	5437250	95.23	22	23	1.23	0.06
North Pit	BHA562	481479	5437250	94.23	23	24	1.135	0.057
North Pit	BHA562	481479	5437250	93.23	24	25	0.952	0.038
North Pit	BHA562	481479	5437250	92.23	25	26	1.235	0.055
North Pit	BHA562	481479	5437250	91.23	26	27	1.205	0.05
North Pit	BHA562	481479	5437250	90.23	27	28	1.16	0.048
North Pit	BHA562	481479	5437250	89.23	28	29	0.489	0.017
South Pit	BHA615	481753	5436153	94.53	0	1	0.158	0.054
South Pit	BHA615	481753	5436153	93.53	1	2	0.302	0.192
South Pit	BHA615	481753	5436153	92.53	2	3	0.43	0.233
South Pit	BHA615	481753	5436153	91.53	3	4	0.573	0.187
South Pit	BHA615	481753	5436153	90.53	4	5	1.06	0.107
South Pit	BHA615	481753	5436153	89.53	5	6	1.205	0.097
South Pit	BHA615	481753	5436153	88.53	6	7	1.5	0.107
South Pit	BHA615	481753	5436153	87.53	7	8	1.23	0.072

South Pit	BHA615	481753	5436153	86.53	8	9	1.045	0.035
South Pit	BHA615	481753	5436153	85.53	9	10	0.927	0.027
South Pit	BHA615	481753	5436153	84.53	10	11	0.804	0.017
South Pit	BHA356	481793	5435916	105	0	1	0.148	0.018
South Pit	BHA356	481793	5435916	104	1	2	1.21	0.029
South Pit	BHA356	481793	5435916	103	2	3	1.51	0.034
South Pit	BHA356	481793	5435916	102	3	4	1.17	0.023
South Pit	BHA356	481793	5435916	101	4	5	1.085	0.02
South Pit	BHA356	481793	5435916	100	5	6	0.848	0.011
South Pit	BHA356	481793	5435916	99	6	7	0.659	0.013
South Pit	BHA356	481793	5435916	98	7	8	0.607	0.013
South Pit	BHA356	481793	5435916	97	8	9	0.602	0.01
South Pit	BHA356	481793	5435916	96	9	10	0.55	0.009
South Pit	BHA356	481793	5435916	95	10	11	0.553	0.014
South Pit	BHA356	481793	5435916	94	11	12	0.345	0.007
South Pit	BHA356	481793	5435916	93	12	13	0.391	0.007
South Pit	BHA357	481850	5435875	93	0	1	0.094	0.002
South Pit	BHA357	481850	5435875	92	1	2	0.159	0.003
South Pit	BHA357	481850	5435875	91	2	3	0.171	0.014
South Pit	BHA357	481850	5435875	90	3	4	0.288	0.027
South Pit	BHA357	481850	5435875	89	4	5	0.317	0.024
South Pit	BHA357	481850	5435875	88	5	6	0.575	0.342
South Pit	BHA357	481850	5435875	87	6	7	0.946	0.207
South Pit	BHA357	481850	5435875	86	7	8	0.933	0.128
South Pit	BHA357	481850	5435875	85	8	9	0.96	0.098
South Pit	BHA357	481850	5435875	84	9	10	1.09	0.045
South Pit	BHA357	481850	5435875	83	10	11	1.09	0.055
South Pit	BHA357	481850	5435875	82	11	12	0.857	0.028
South Pit	BHA357	481850	5435875	81	12	13	0.846	0.025
South Pit	BHA357	481850	5435875	80	13	14	0.639	0.014
South Pit	BHA357	481850	5435875	79	14	15	0.551	0.012
South Pit	BHA357	481850	5435875	78	15	16	0.708	0.025

7.3 Flora & Fauna Assessment Report

During the year, the environmental report assessing the presence and potential impact on flora and fauna at Barnes Hill was completed as a requirement of the DPEMP. The report concludes that the mine plan and processing layout have successfully avoided the highest value plant populations and have minimised the environmental impact. This included mapping existing populations of *Tetrathecagunnii* or *Spyridiumobcordatum* (see appendix 4).

7.4 Reserve Estimation Report

During the year Proto received a Reserve Statement from Snowden Mining Industry Consultants for the Barnes Hill deposit (see appendix 3). This followed on from the detailed 3D model estimation of an updated JORC Mineral Resource which defined 6.6Mt at 0.82% Ni and 0.06% Co at a 0.5% Ni cut-off. Currently, a Total Reserve of 4.0 Mt @ 0.84% Ni and 0.06% Co was estimated at a 0.7% nickel equivalent ("NiEq") cut-off by Snowden under Joint Ore Reserves Committee ("JORC") guidelines. The Reserve estimate indicates the Barnes Hill deposit is economically viable and has a minimum mine life of 18 years at a proposed mining rate of 250,000t pa. This resource does not include two other subsidiary areas of mineralization that are on the EL but outside of the ML area (namely Scotts Hill and Mt Vulcan). Drilling these areas is required and would be pursued during the extension period.

A Mine Plan for the mining of nickel and cobalt from the pit-shells used in the Barnes Hill Reserve Statement is included in the Snowden report. This plan presents the approach to mining and details progressive operations over time and is based on a number of other engineering studies that contribute to the DPEMP planning undertaken. This includes assessment of how efficient access to and from the site can be provided and the processing layout. The extensive geotechnical work undertaken, that included a comprehensive set of bore holes and geotechnical excavations by a local Tasmanian contractor, have provided confidence in the placement of the processing facilities and the spent ore dam.

7.5 Metallurgical Test Work

Column leach testwork studies have been previously completed on aircore sample material from Barnes Hill by HRL testing in Brisbane. In addition further Air Core drilling samples of material and bulk samples of Reverse Circulation drilling material has been sent to Australian Bio Refining Pty Ltd at Evans Head, NSW. The metallurgical test work is still progressing and no formal metallurgical report is currently available for inclusion in this report, so it is anticipated that results of these tests will be reported in the next EL17/2006 annual report.

The aims of these further tests are:

1. Leachability of the ore
 - Ni recovery over time
 - Co recovery over time
 - Fe recovery over time
 - Mg recovery over time
 - Physical characteristics of ore after leaching
 - Start state head grade
 - End state head grade
 - bulk density of the samples before and after leaching
2. Acid/water consumption
 - total Kg of acid per tonne of ore
 - acid consumption over time
 - water consumption
3. Makeup of PLS
 - Daily narrow analysis (Ni, Co, Fe, Mg, free acid)

- Broad spectrum analysis weekly (Ni, Co, Fe, Mg, Al, As, Ca, Cl, Cr, Cu, K, Mn, Mo, Na, P, Pb, S, Si, Ti, V, Zn, free acid)
4. Parameters
- 80-90% Ni recovery from ore
 - max 60 day leach
 - an average of about 50 GPL H₂SO₄ as the leach solution
 - vat leaching - liquor introduced at the bottom and percolating up.
 - 3 vats in isolation with different ore head grades in each
 - PLS bled at about 5 GPL tenor
 - Storage of bulk PLS @ 5 GPL Ni for further testing - the PLS from the 3 vats to be stored separately.

8 EXPENDITURE

Expenditure from 8th August 2010 to 7th August 2011 is summarised below for the Barnes Hill EL17/2006 licence.

Table 7 Expenditure 8 August 2010 to 7 August 2011.

Administration & Management	\$76,657
Geology, Hydrology, Personnel	\$157,125
Process Engineering, Metallurgy, Laboratory Analyses	\$92,211
Mining Consultants, Project Management, Resource Estimation	\$350,476
Environmental Consulting & Contracting	\$42,568
RC Drilling for Bulk Sampling collection	\$85,025
Travel, vehicle hire, accommodation, freight, consumables	\$99,366
TOTAL - ELIGIBLE	\$903,428

9 PROPOSED EXPLORATION

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

- Follow up Air Core drilling at the Scotts Hill and Mt Vulcan prospects (see Appendix 5 – 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.
- Continued metallurgical testwork of bulk samples to be collected at the Scotts Hill and Mt Vulcan prospects.
- Follow up work on the previous geochemical soil sampling programs throughout the License, in particular an extension of further soil sampling is recommended along the interpreted structural trend, south-easterly onto EL17/2006, as a further test for potential Cu-Pb-Zn anomalism. This requires an examination of trace levels at other areas on the license and then ground geophysics would be the first stage. This is a reason to extend the broad license area.

10 KEY REFERENCES

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Appendix 1 Geochemical Soil Sampling Locations & Assay Results

Appendix 2 Bulk Sampling Sites at proposed north & south pits

Appendix 3 Reserve estimation report by Snowden Mining Industry Consultants

Appendix 4 Environmental Report by North Barker Ecosystem Services

Appendix 5 Proposed exploration Air Core drilling at Scotts Hill & Mt Vulcan.