

**SCOTTS HILL AND MT VULCAN PROJECT  
TASMANIA  
EL2/2017**

ANNUAL REPORT  
15<sup>TH</sup> AUGUST 2017 TO 14<sup>TH</sup> AUGUST 2018

**Tenement Holder/Manager**  
Monclar Pty Ltd  
8 Amour Avenue Maroubra NSW 2035

**Prepared By:** Dr Pierre RICHARD - Director  
On behalf of Monclar Pty Ltd

**Distribution:** Mineral Resources Tasmania  
Monclar Pty Ltd

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

## **ABSTRACT/EXECUTIVE SUMMARY**

The Scotts Hill and Mt Vulcan Hill Project (EL2/2017) is located in northern Tasmania, 5km west of the township of Beaconsfield. The exploration licence covers an area of 13km<sup>2</sup>.

The main focus of Monclar Pty Ltd (“Monclar” or “the Company”) at the Scotts Hill and Mt Vulcan Project is lateritic nickel-cobalt mineralisation. The project area contains a historical 3.64Mt inferred resource (completed in 2001 under the Australasian Joint Ore Reserves Committee code as it then was) at 0.71% Ni & 0.09% Co (Douglas McKenna and Partners Pty Ltd, A. Jannink 2006). This laterite resource consists of two interconnected mineral deposits known as Mt Vulcan and Scotts Hill, both contained by licence EL2/2017. Monclar aims to develop an open pit mining operation at Scotts Hill and Mt Vulcan with production of nickel and cobalt products undertaken off-site in Tasmania.

Since purchase of the project, Monclar has secured historical databases including drilling and geochemistry, planned a program of metallurgical testwork and collected auger samples to check proposed bulk sample locations.

Work planned for the coming year will include metallurgical sampling to be undertaken using Air core drilling at Scotts Hill and Mt Vulcan, which is to be followed by further bulk sampling from the same locations, and metallurgical testwork of those bulk samples.

## TABLE OF CONTENTS

|     |  |    |
|-----|--|----|
| 1   | INTRODUCTION .....                                       | 1  |
| 2   | REVIEW OF PREVIOUS WORK .....                            | 2  |
| 2.1 | Geological setting .....                                 | 4  |
| 2.2 | Scotts Hill and Mt Vulcan Nickel Laterite Resource ..... | 6  |
| 2.3 | Scotts Hill and Mt Vulcan Metallurgy .....               | 6  |
| 3   | EXPLORATION COMPLETED DURING THE REPORTING PERIOD .....  | 7  |
| 4   | DISCUSSION OF RESULTS .....                              | 7  |
| 5   | CONCLUSIONS .....  | 7  |
| 6   | PROPOSED EXPLORATION .....                               | 7  |
| 7   | ENVIRONMENTAL MANAGEMENT .....                           | 8  |
| 8   | EXPENDITURE .....  | 10 |
| 9   | KEY REFERENCES .....                                     | 12 |

## APPENDICES

- Appendix 1    Soil Sample Results
- Appendix 2    Map of proposed infill Air Core Drilling Program

## 1 INTRODUCTION

The Scotts Hill and Mt Vulcan Project (EL2/2017) is located in northern Tasmania and contains a historical 3.64Mt inferred resource (completed in 2001 under the Australasian Joint Ore Reserves Committee code as it then was) at 0.71% Ni & 0.09% Co (Douglas McKenna and Partners Pty Ltd, A. Jannink 2006). The resource is made up of two interconnected resources known as the Mt Vulcan and Scott's Hill deposits (see figure 1).

The Scotts Hill and Mt Vulcan Hill Project is located 5km west of the township of Beaconsfield near the Tamar River in northern Tasmania (see figure 1). The Scotts Hill and Mt Vulcan tenement can be accessed via a number of gazetted roads on the western side of the Tamar River. The Scotts Hill and Mt Vulcan resource can be directly accessed using Tattersall's Road, just west of Beaconsfield.

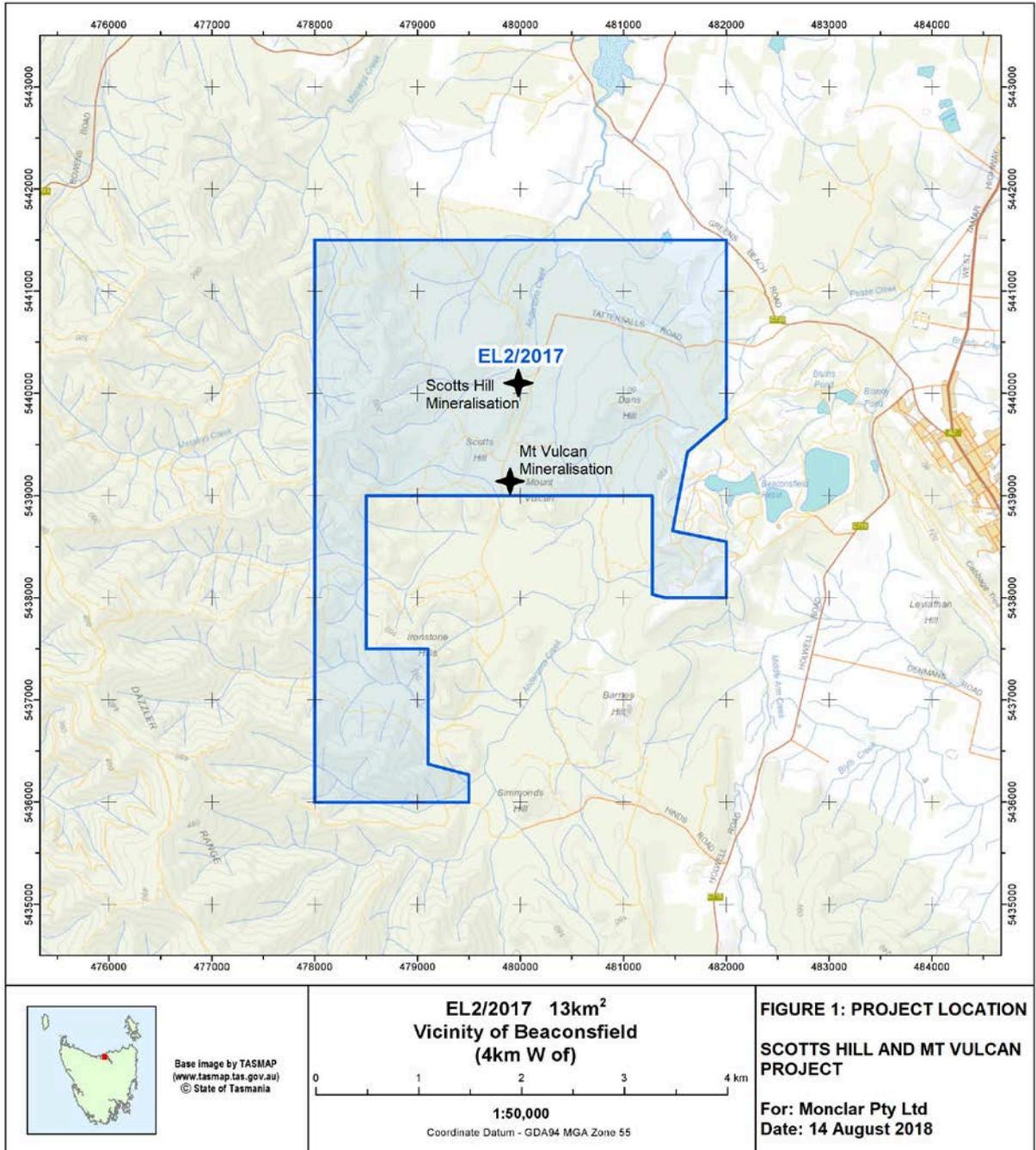
The exploration licence covers an area of 13km<sup>2</sup> and was granted on 15<sup>th</sup> August 2017 for a period of five years. It is owned 100% by Monclar Pty Ltd and is not subject to any current agreements with other companies. The exploration target is lateritic nickel-cobalt mineralisation.

The land tenure plan shows EL2/2017 is covered by both Crown and Private Land. The Crown Land is variously classified. The private land only minorly impacts the Scotts Hill Ni-Co mineralisation to the east of the Tattersalls Road. 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). No exploration is currently proposed for private land.

Most of the Crown Land is classified either as Future Potential Production Forest (Crown) ("FPPF"), Regional Reserve, and finally Conservation Area associated with the Dans Hill Conservation Area. The Scotts Hill mineralisation sits on FPPF, while Mt Vulcan sits on FPPF west of the Tattersalls Road and the Dans Hill Conservation area east of the Tattersalls Road.

Recent advances in leaching techniques and the availability in northeast Tasmania of grid power, roads, water, port facilities and a workforce make the Scotts Hill and Mt Vulcan Project attractive. 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.

Exploration completed during the reporting period has included a geochemical soil sampling program (using an auger) to test sample locations as being suitable for bulk sampling collection. However, results were too low to be used in the planned metallurgical testwork. A program of air core drilling to collect the required sample from deeper in the laterite profile has now been designed to overcome this.



**FIGURE 1 SUMMARY ACTIVITY MAP FOR SCOTTS HILL AND MT VULCAN**

## 2 REVIEW OF PREVIOUS WORK

Substantial exploration has been carried out over the last 50 years. A summary table below (Table 1) has been compiled by assessing old reports and specifically compilations made by Lindsay Newham (1997) and Dan Hampton (2012). King Island Scheelite (KIS), Allegiance Mining, Jervis Mining and Proto Resources & Investments Ltd completed most of the recent work on the Barnes Hill Ni-Co Laterite, including Scotts Hill and Mt Vulcan.

**Table 1 Summary of historic exploration activities**

| Company                             | Start | Finish | Focus                            | Work Completed  | Results   | Conclusion   | Report/EL |
|-------------------------------------|-------|--------|----------------------------------|---|---|--|-----------|
| Proto Resources and Investments Ltd | 2008  | 2013   | Ni, Co                           | Satellite imagery including ASTER and Quick-bird, air core drilling of Barnes hill part of license, metallurgical testwork, completed regional soil sampling, flora & fauna studies, and Aboriginal and European heritage surveys | Mining reserve issued over Barnes Hill part of EL then included in ML1872P/M                        | Financial pressure meant license was let to lapse in favour of neighbouring ML | 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)   | 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 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  |           |

## 2.1 Geological setting

The Scotts Hill and Mt Vulcan 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.

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. Significant geological units are:

**Precambrian** metamorphosed graywackes and sub-graywackes outcrop along the western extremities of EL 2/2017.

**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.

**The Andersons Creek Complex (ACC)** is a layered wedge of Cambrian mafic and ultramafic stratigraphy consisting mainly of 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. 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. 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. 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, Scotts Hill and Mt Vulcan 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. 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 2.

**Table 2 Idealised Scotts Hill and Mt Vulcan 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, Scotts Hill and Mt Vulcan 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 Scotts Hill and Mt Vulcan South area was therefore thought to occur as garnierite, in serpentinite, chlorite and hydrated iron oxides. 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 favourable 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.

## 2.2 Scotts Hill and Mt Vulcan Nickel Laterite Resource

The nickel laterite is developed above serpentinites of the Andersons Creek Ultramafic Complex. Two separate deposits are known in the area, Mt Vulcan and Scott's Hill. Previous explorers of the Scotts Hill and Mt Vulcan laterite completed drilling as part of a wider program also covering Barnes Hill (now mining lease 1872P/M) that included a total of 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 air core holes along with eight diamond drill holes in 1997 covering Scotts Hill/Mt Vulcan and Barnes Hill. Of these 39 RC holes were into Scotts Hill and Mt Vulcan, as were a further 5 of the diamond holes. The Scotts Hill and Mt Vulcan laterites have been drilled at a density of 100-150 metre centres.

Resources were 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 these historical resources is given below:

**Table 3 Combined Resources for Scotts Hill and Mt Vulcan (McKenna, 2001)**

| Lithology              | Ni<br>%     | Co<br>%     | Tonnes           | %Ni<br>Equivalent | Percentage |       |       |
|------------------------|-------------|-------------|------------------|-------------------|------------|-------|-------|
|                        |             |             |                  |                   | Tonnes     | Ni    | Co    |
| Hematite               | 0.29        | 0.18        | 83,272           | 0.92              | 2.3%       | 0.9%  | 4.8%  |
| Limonite               | 0.37        | 0.16        | 370,591          | 0.91              | 10.2%      | 5.2%  | 18.0% |
| Saprolite              | 0.75        | 0.09        | 2,290,486        | 1.05              | 62.9%      | 66.0% | 62.7% |
| Weathered Serpentinite | 0.81        | 0.05        | 895,955          | 0.99              | 24.6%      | 27.9% | 14.5% |
| <b>Totals</b>          | <b>0.71</b> | <b>0.09</b> | <b>3,640,303</b> | <b>1.02</b>       |            |       |       |

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  |

## 2.3 Scotts Hill and Mt Vulcan 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 Scotts Hill, Mt Vulcan and Barnes Hill Deposits**

| <b>Temperature</b> | <b>Recovered Ni</b> | <b>Recovered Co</b> | <b>Acid Consumption (kg/t)</b> |
|--------------------|---------------------|---------------------|--------------------------------|
| 240 °C             | 89%                 | 83%                 | 397                            |
| 260 °C             | 92%                 | 93%                 | 326                            |

### **3 EXPLORATION COMPLETED DURING THE REPORTING PERIOD**

Since purchase of the project, Monclar has secured historical databases including drilling and geochemistry, planned a program of metallurgical testwork and collected auger samples to check proposed bulk sample locations. First samples would be used for first-pass metallurgical work. With grades confirmed at the selected locations, a larger bulk sample would be drawn for follow-up and larger scale metallurgical testwork.

The auger sampling used a petrol driven auger (a Dormer Hydraulic Powered Auger) to collect soil samples from the upper metres of the regolith. Samples were collected proximal to and along existing road access. On Monday, 18 June 2018, 13 samples were collected with a total weight of 60.9kg. The samples were tied in plastic sample bags using cable ties and then submitted to ALS Burnie. They were then shipped to ALS in Brisbane for assay using borate fusion XRF. Samples were finely crushed and split using a Boyd Rotary Splitter. Fusion XRF was completed using a typical laterite suite of elements with Loss on Ignition also undertaken. Although nickel and cobalt mineralisation was intersected, grades were not sufficiently high to be used as a representative or purposive sample of the expected resource grade. Accordingly, a further program to collect the required metallurgical sample is now planned. Results are included in Appendix 1.

Following this, further work during the reporting period has included planning of Air Core drilling programs at the Mt Vulcan and Scotts Hill laterite resources and assessment of the potential impact of the proposed infill drilling program that would follow these.

### **4 DISCUSSION OF RESULTS**

The sample results from the auger program were not suitable for testwork. They were much below the resource average (see Appendix 1). Although mineralisation was intersected, there were no usable samples. The highest grade was sample MON010 reporting 0.46% Ni - but this was below the historical resource average of 0.71% Ni. It seems the samples were not taken from deep enough in the laterite profile.

### **5 CONCLUSIONS**

It has been concluded that the proposed sampling method is not suitable. Instead, air core drilling across several locations is now recommended as an alternative. A program has been designed to do this. This would drill up to 20 air core holes to generate first pass sample material and also identify locations for the collection of future bulk samples.

### **6 PROPOSED EXPLORATION**

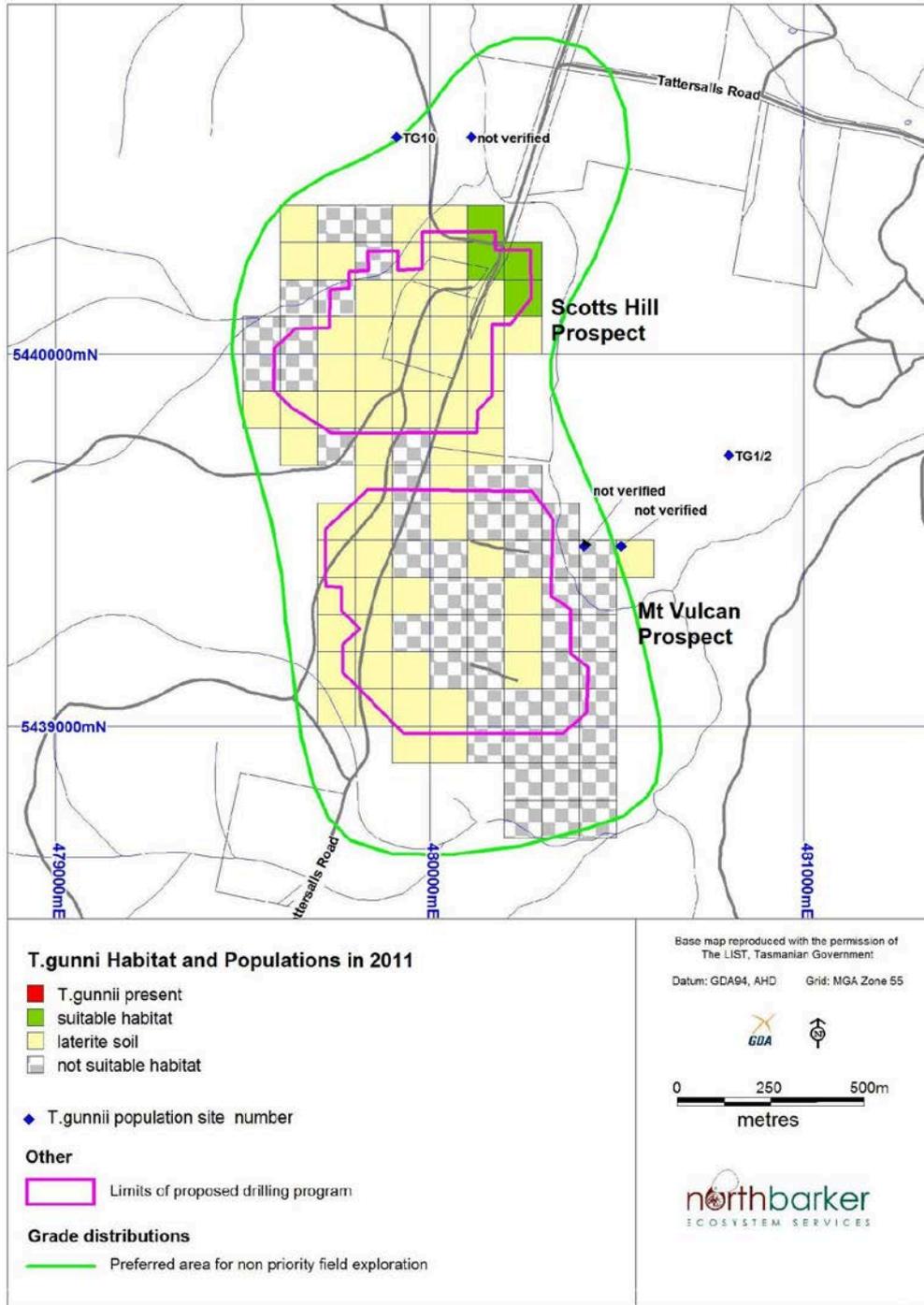
The activities proposed to be undertaken at the Scotts Hill and Mt Vulcan Project on EL2/2017 in the coming term include:

- Air core drilling of 20 holes in three phases along the roads and tracks that cross the Scotts Hill and Mt Vulcan prospects (see Appendix 2 – Proposed Air Core Drilling Program). The program contains three phases, of 12, 6 and 2 holes that will be drilled in order until sufficient sample of limonite/transitional and saprolite material has been collected. These holes will form part of a future drill-out and so have been selected to cover part of an indicative grid (also shown in the map in Appendix 2, as small numbered holes. However, currently only the large circled holes are proposed for the upcoming period to generate the required bulk sample.
- Metallurgical testwork of bulk samples to be collected at the Scotts Hill and Mt Vulcan prospects from the Air Core drilling program samples.

## **7 ENVIRONMENTAL MANAGEMENT**

Allegiance Mining, Jervois Mining and Proto Resources & Investments Ltd have all recognised and tabled the existence of endangered flora species in the Scotts Hill and Mt Vulcan area, including *Tetratheca gunni* and *Epacris virgata*. In 2011, Proto engaged North Barker Ecosystem Services to complete a “Botanical Survey and Fauna Habitat Assessment” report over the Scotts Hill and Mt Vulcan nickel-cobalt laterite deposit areas. That report was included in a previous annual report for EL17/2006 and concluded that further drilling of the Scotts Hill and Mt Vulcan mineralisations do not impact the highest value plant populations.

From this existing work it seems *Tetratheca gunni* has been verified as present in only two known locations and was reported at another three where no population was able to be confirmed in 2011 (see figure 2 adapted from that earlier report). None of these sites occur over the Ni-Co resource areas at Scotts Hill or Mt Vulcan and are not areas where future drilling is proposed. Further, none are close to the air core drilling locations proposed for the upcoming bulk sample collection program.



**FIGURE 2 SCOTTS HILL AND MT VULCAN T. GUNNI FIELD SURVEY MAP 2011**

*Epacris virgata* is widely distributed in the region, including over parts of the Scott's Hill and Mt Vulcan Ni-Co resource areas (see figure 3). The impact on *E. virgata* is limited due to a population of more than several hundred thousand trees, of which only a small proportion are impacted by the proposed works.

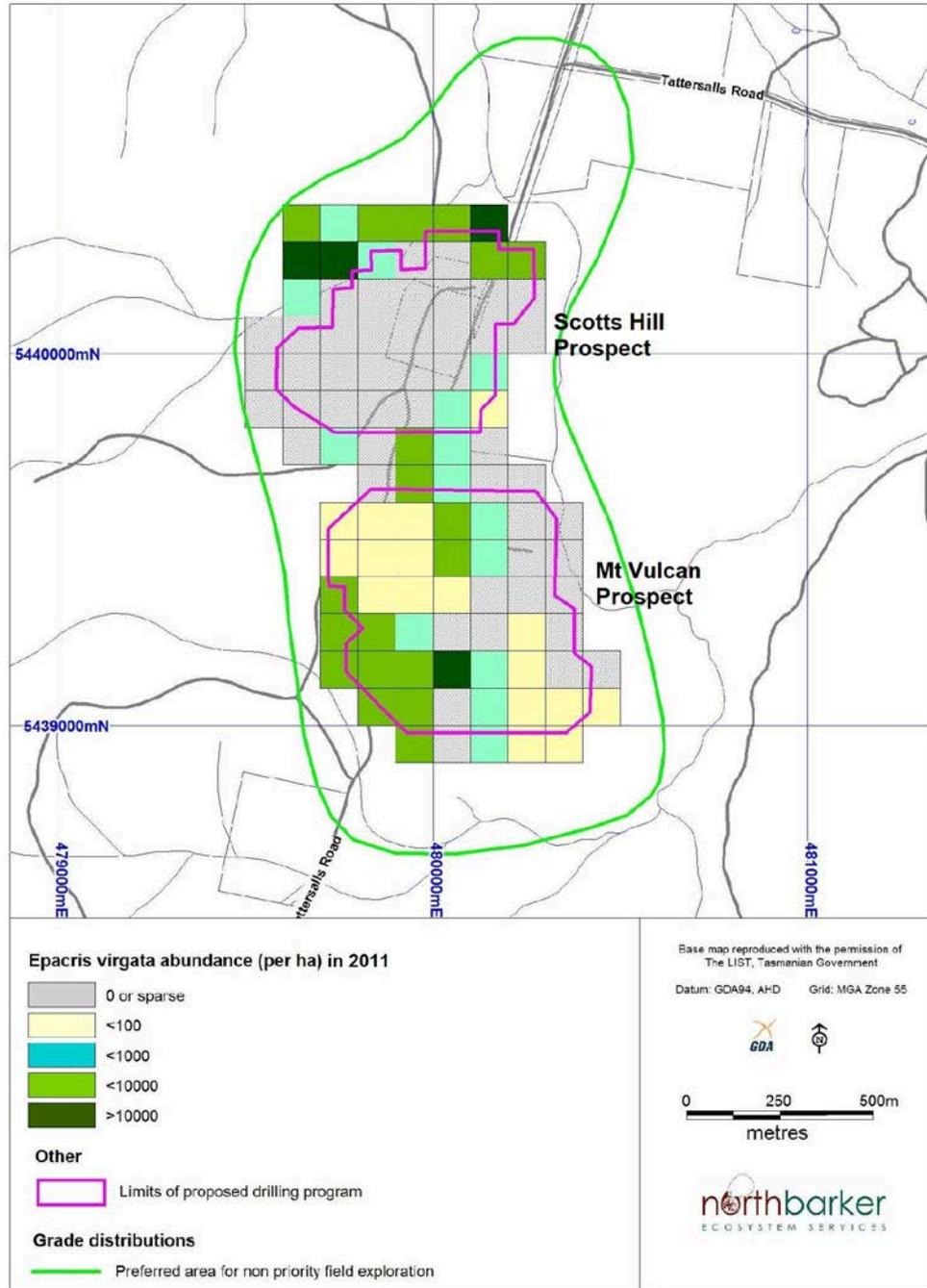


FIGURE 3 SCOTTS HILL AND MT VULCAN E. VIRGATA FIELD SURVEY MAP 2011

## 8 EXPENDITURE

Expenditure from 14<sup>th</sup> August 2017 to 15<sup>th</sup> August 2018 is summarised below for the Scotts Hill and Mt Vulcan EL2/2017 licence.

**Table 5 Expenditure 15 August 2017 to 14 August 2018.**

|                          |                 |
|--------------------------|-----------------|
| 1. Geoscience            | \$3,110         |
| 2. Drilling and Gridding |                 |
| 3. Land Access           |                 |
| 4. Rehabilitation        |                 |
| 5. Feasibility Studies   | \$9,936         |
| 6. Other                 |                 |
| 7. Administration        | \$1,400         |
| <b>TOTAL - ELIGIBLE</b>  | <b>\$15,136</b> |

## 9 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 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, 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).

**Appendix 1**  
**SOIL SAMPLING RESULTS**

**Appendix 2**

**MAP OF PROPOSED AIR CORE DRILLING PROGRAM**