1st ANNUAL REPORT for WAVE HILL
EL27413
EL27617
EL27618

FOR THE YEAR ENDED
14 March 2011

Compiled by:
M Muir – Geologist
On behalf of Proto Resources & Investments Ltd

Distribution:
Proto Resources & Investments Ltd – Sydney
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Map Sheet:  Wave Hill 1:250,000 Scale Sheet SE 52-08
Victoria River 1:250,000 Scale Sheet SE 52-04

Datum:  GDA94, Zone 52

Submitted:  8 June 2011
Executive Summary

The Wave Hill Project is located approximately 550km south of Darwin and 300km SW of Katherine in the Northern Territory. The region is dominated by a series of the Cambrian Age Antrim Plateau Volcanics (part of the Kakarindji Volcanic Group). The Proterozoic Wattie Group sediments cover small regions, with much younger laterite and sand dunes and black soils characterizing the area. The region is cut by the north easterly trending ‘Neave Fault’. The Kalkarindji Volcanic Group is considered to be analogous to continental flood basalts in other parts of the world, most importantly the Nadezhdinsky series (Norilsk basalts) which host the world’s largest Ni-Cu-PGE deposits at Norilsk in Russia.

Exploration activities conducted by Proto Resources & Investments Ltd (Proto) and their JV partners are based on the possibility of the Antrim Plateau Volcanics (as part of the Kalkarindji Volcanic Group) hosting economic “Norilsk-style” Ni-Cu-PGE mineralisation.

Work during the reporting period has included:

• Regional re-imaging of available data
• QUT review of the region including field visit
• ZTEM survey

The total expenditure for Wave Hill 2010-2011 was $98,550.07. The shortfall in expenditures can be attributed to a change in exploration methods. That is from drilling based towards the airborne “ZTEM” surveying. Proto Resources believes this to be a cost effective and practical method to cover the area of ground based on recommendations from various parties.

Work for the upcoming year (2011-2012) should include the following:

• Mapping programmes using the expertise of M Widdowson (Open University UK) and PHD student as well as a Masters and Honours student from QUT to cover the NT ground.
• Ground geophysics
• Soil geochemistry

Proposed Expenditure for the coming year has been put at a minimum of

EL27413 $25,000
EL27617 $25,000
EL27618 $35,000
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Note: All maps are in datum GDA94 (Zone 52)
1. INTRODUCTION

The Wave Hill Project is located approximately 300km southwest of Katherine in the Northern Territory. The region is dominated by the Cambrian-age Antrim Plateau Volcanics which are part of the Kalkarindji Flood Basalt Province. The Kalkarindji Volcanic Group is considered to be analogous to the Nadezhdinsky series (Norilsk basalts) which host the world’s largest Ni-Cu-PGE deposits at Norilsk in Russia.

Exploration activities conducted by Proto Resources & Investments Ltd (Proto) and their JV partners are based on the possibility of the Antrim Plateau Volcanics hosting economic “Norilsk-style” Ni-Cu-PGE mineralisation. Jones (2010)

2. PROPERTY DESCRIPTION AND TENURE

The Wave Hill Project comprises three granted exploration licences (ELs 27413, 27617 & 27618) which cover a combined area of 3,469 square kilometres. A fourth licence is held in its Application stage, ELA 27414 and is contiguous with the other three. The licences are held 100% by Proto Resources & Investments Ltd. See Table below for further details on grant dates. Jones (2010)

Table 1: Tenement Details

<table>
<thead>
<tr>
<th>Title</th>
<th>Status</th>
<th>Grant/Application</th>
<th>Expiry</th>
<th>Area (Sq Km)</th>
<th>Current Rent</th>
<th>Expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL 27413</td>
<td>GRANTED</td>
<td>15/04/2010</td>
<td>14/04/2016</td>
<td>277</td>
<td>$1,045.00</td>
<td>$50,000.00</td>
</tr>
<tr>
<td>ELA 27414</td>
<td>APPLICATION</td>
<td>17/06/2009</td>
<td>359</td>
<td>$1,243.00</td>
<td>$50,000.00</td>
<td></td>
</tr>
<tr>
<td>EL 27617</td>
<td>GRANTED</td>
<td>13/05/2010</td>
<td>12/05/2016</td>
<td>1,593</td>
<td>$5,357.00</td>
<td>$50,000.00</td>
</tr>
<tr>
<td>EL 27618</td>
<td>GRANTED</td>
<td>13/05/2010</td>
<td>12/05/2016</td>
<td>1,599</td>
<td>$5,357.00</td>
<td>$50,000.00</td>
</tr>
</tbody>
</table>

During the first half of 2011 Group Reporting was requested and granted by the Department of Resources – Minerals and Energy with the new Report dates as follows 15th March to 14th March the following year.
3. ACCESSIBILITY AND INFRASTRUCTURE

The Wave Hill Project tenements are located approximately 550km south of Darwin and 300km southwest of Katherine in the Northern Territory. The tenements are accessed from Katherine via the Victoria Highway and then the Buntine Highway (Figure 1). Accommodation is available at Top Springs Road House located 50km north of the project area along the Buntine Highway. The licence lies within the Wave Hill Station, Camfield Station and Cattle Creek Station Perpetual Pastoral Lease.
Figure 1: Location of Wave Hill Tenements, EL27413, 27617 & 27618 on local topography with inset showing location relative to Katherine. Plans in GDA94.
4. GEOLOGICAL SETTING

Jones (2010) states that a large portion of the Wave Hill Project area is covered by basalts of the Cambrian-aged Antrim Plateau Volcanics. In addition to the basalts, small areas are covered by sedimentary units of Proterozoic Wattie Group with other areas of younger laterite, sand Dune cover and black soil plains.

The area is covered by the WAVE HILL & VICTORIA RIVER 1:250,000 map sheet and explanatory notes. Also the 1:100,000 mapsheets are as follows,

EL27618/27617  5163 CAMFIELD  1:100,000 38/2
EL27618  5264 MONTEJINNI  1:100,000 32/6
EL27618/27617  5263 BURGOYNE  1:100,000 38/3
EL27617  5162 JUNJAMINJINJI  1:100,000 38/5
EL27617/27413  5062 WATSON  1:100,000 38/4

The project area is transected by the northeast trending Neave Fault. The Neave Fault is a major structure that is believed to have been active for a long period of time. The fault is an important part of Proto Resources Exploration strategy to locate a Norilsk Style Deposit. The Antrim Plateau Volcanics make up part of the Kalkarindji Volcanic Group Continental Flood Basalt Province. This province is considered analogous to continental flood basalts in other parts of the world, most importantly the Nadezhdinsky series (Norilsk basalts) which host the world’s largest Ni-Cu-PGE deposits at Norilsk in Russia. The PGE, Ni and Cu depletion from the Nadezhdinsky series has been attributed to assimilation of continental crust, which stimulated sulphide segregation, thus sequestering the chalcophile elements from the basaltic magma. The correspondingly low PGE and Ni values for the Kalkarindji basalts may indicate a similar process took place (Glass, 2002).

The recorded mineral occurrences around the Wave Hill Project area lie adjacent to the tenements and include copper, Prehnite and quartz amethyst.

The location of Antrim Basalt vents has proved difficult to establish. Based on vent location in other continental flood basalt provinces these vents could be widely scattered. The only currently known Antrim vent is located on EL 27618 at the western termination of the Wave Hill Rille, a >120 km long, 0.4 – 4 km wide and approximately 50 m deep trough (Bultitude,
1971; Gole, 2003). This trough represents a thermal erosion channel formed by the last basalt lava flow that vented from the intersection of a NW fracture system and the NE trending Neave Fault on EL 27618.

Figure 2: Wave Hill vent location over geophysics
Figure 3: Regional surface geology from NT 1:250,000 mapping. Plan in GDA 94.
5. PREVIOUS EXPLORATION

Jones (2010) has completed a comprehensive study of the previous exploration completed in the region and is as follows. The Wave Hill Project area has been the subject of various exploration programs since the 1960’s through to the present day although the majority of recorded exploration has consisted of only minor field work. The table below provides information on historic activities in the project area. From review of the historic exploration reports the most relevant work to Proto’s target style was completed by Metals Exploration NL and AusQuest Limited.

Metals Exploration NL undertook widespread stream sediment sampling exploring for copper deposits. This work did identify several small areas of copper anomalism within Proto’s Wave Hill project area. These copper anomalies were not followed up by further sampling.

AusQuest Limited’s work was also targeting Ni-Cu-PGE deposits and interpretation of geophysics identified a potential Antrim volcanic vent near Wave Hill and also a possible intrusive sill beneath Antrim basalts southwest of Wave Hill Homestead. No work was undertaken around the volcanic vent locality. The interpreted sill was covered by ground EM but no drilling was completed.

Table 2: Review of Exploration in the Waterloo Region

<table>
<thead>
<tr>
<th>Date</th>
<th>Company</th>
<th>Target</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996-1998</td>
<td>Stockdale Prospecting Limited</td>
<td>Diamonds</td>
<td>Air Mag interpretation, heavy mineral samples taken, possible kimberlite indicators found and one diamond recovered in Proto project area.</td>
</tr>
<tr>
<td>1995 - 1996</td>
<td>R. Armfield</td>
<td>Diamonds</td>
<td>Landsat TM &amp; air photo interpretation. Large circular anomaly defined in project area which has a corresponding gravity high. No field work undertaken.</td>
</tr>
<tr>
<td>1993 - 1994</td>
<td>Aradon Pty Ltd</td>
<td>Gemstones - prehnite &amp; quartz</td>
<td>Gemstone prospecting and small scale mining.</td>
</tr>
<tr>
<td>1978 - 1979</td>
<td>Anaconda Australia Inc</td>
<td>Base metals</td>
<td>Most work off project area. On project area minor rock chip samples. No anomalies defined.</td>
</tr>
<tr>
<td>1971 - 1972</td>
<td>Murramulla - Gurindji Co Pty Ltd</td>
<td>Base metals</td>
<td>Air photo interpretation and 60 rock analyses. No anomalies.</td>
</tr>
<tr>
<td>1968 - 1970</td>
<td>Metals Exploration NL / Freeport Australia Inc</td>
<td>Cu</td>
<td>Widespread stream sediment sampling for Cu covering project area. Small areas of Cu anomalism defined.</td>
</tr>
</tbody>
</table>
6. **EXPLORATION COMPLETED DURING THE REPORTING PERIOD 15\textsuperscript{TH} MARCH 2010 TO 14\textsuperscript{TH} MARCH 2011.**

Work during the reporting period has included:
- Regional re-imaging of available data
- QUT review of the region including field visit.
- ZTEM survey

### 6.1 Reprocessed Data

The Reprocessed data includes the data available from the NTGS that has been reprocessed by Southern Geoscience Consultants. An Image Atlas in PDF format has been provided in Appendix 1.

This data will provide new insights into the current tenement holdings of Proto Resources and be of use in selecting ground for further exploration and project generation.

### 6.2 Queensland University of Technology (QUT) Field Work Report

Several university research projects are being scoped for Proto Resources NT Tenements. A field trip to the region (Lindeman's Bore, Wave Hill and Waterloo) was completed in midyear 2010 with the subsequent report being presented in Appendix 2.

Current planning has a PhD student from the Open University (UK) as well as an Honours and Masters student from QUT researching the volcanology and regional setting of the Kalkarindji Volcanics.

The company hopes to second Mike Widdowson to Darwin from the Open University in the UK for six months during 2011.
6.3 ZTEM Airborne Geophysical Survey

The ZTEM airborne geophysical programme commenced during December 2010. The processing was completed during February 2011. However a report on the interpretation of the work is still awaited. The survey covered Lindeman's Bore (EL25307) and the Wave Hill Tenements (ELs 27413, 27617 and 217618) for a total of 957 line kilometres at 1 kilometre line spacing. ZTEM (Z-axis Tipper ElectroMagnetic system) airborne geophysical survey is the first known commercial use of the system in Australia. The survey will assist in the broad scale exploration of the project areas in delineating conductive structures / bedrock targets for future analysis.

6.3.1 The ZTEM Geophysical survey method

“ZTEM is the latest implementation of and airborne AFMAG system first commercialised in late 2006 and now is being utilised by Geotech Limited of Canada. It is an innovative airborne EM system which utilises the natural or passive fields of the Earth as the source of transmitted energy, with these fields being sourced by worldwide atmospheric thunderstorm activity. As the ZTEM system detects EM generated by lightning strikes, it is considered that the Northern Territory is ideal due to the high level of lightning strikes there.”

“At the frequencies used for ZTEM (25-600Hz), the penetration depths for the method likely range between approximately 500m to 2km for resistive geological environments. In areas of less resistive basement or where conductive overburden is present the penetration depth or depth of investigation can be somewhat reduced.”

“The ZTEM data acquired during the surveys reflects relative contrasts in basement conductivity/resistivity, and is not dependant on absolute conductance, as measured by standard airborne EM systems. Therefore poorly conductive targets, such as alteration / fault zones can be mapped, as well as higher conductance features, like graphitic / massive sulphide units. Overall the ZTEM can be effective, all-round deep resistivity mapping tool, making it unique among airborne EM methods.” This description of the ZTEM system is taken for the Proto Resources & Investments Ltd and Peak Ming and Exploration Limited, December 22, 2010 Stock Exchange Announcement – 'ZTEM Airborne Geophysical Survey Commences and Extending at Waterloo'.
6.3.2 The ZTEM Survey

Helicopter-Borne Z-Axis Tipper Electromagnetic (ZTEM) and Aeromagnetic Geophysical Survey. During mid December, 2010 Geotech Ltd. carried out a helicopter-borne geophysical survey for Proto Resources and Investments Limited over the Wave Hill (EL27413, EL27617 and EL27618) and Lindeman’s Bore (EL25307) Projects situated ~200km SSE and ~200km SSW respectively of Timber Creek, Northern Territory. Principal geophysical sensors for the survey included a Z-Axis Tipper electromagnetic (ZTEM) system, and a cesium magnetometer. Ancillary equipment included a GPS navigation system and a radar altimeter. A total of 549 and 408 line-kilometres of surveying were completed at Wave Hill and Lindeman’s Bore Projects respectively.

Figure 4: ZTEM Survey preliminary data
7. EXPENDITURE

The covenant for reporting period for EL27413 (15-04-10 to 14-04-11) was $50,000.

The covenant for reporting period for EL27617 (13-05-10 to 12-05-11) was $50,000.

The covenant for reporting period for EL27617 (13-05-10 to 12-05-11) was $50,000.

The majority of the annual expenditure on Wave Hill for the period 29 December 2010 to 28 December 2011 is on costs related to the ZTEM survey and field costs related to the geological survey/QUT field work. Proto considers the exploration across these tenements to be linked necessarily in order to generate meaningful targets for follow-up work. Consequently, treatment as a group appropriately reflects the highly exploratory nature of the work being undertaken. This high risk exploration requires the development of a careful understanding of the Antrim Plateau Volcanics across a large area in order to generate potential targets, particularly given the depth of cover and formation hypotheses being pursued. It is also important to keep these ELs contiguous to support Mike Widdowsons (in association with QUT) vulcanology work planned for the coming year which includes detailed field mapping and analysis of the relatively unknown Antrim Plateau Volcanics.

Table 3: EL27413 - Expenditure for the period 15 April 2010 to 14 April 2011

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geophysics – ZTEM</td>
<td>$17,895.32</td>
</tr>
<tr>
<td>Reprocessing of Geophysical Data</td>
<td>$2,205.13</td>
</tr>
<tr>
<td>QUT Field Work</td>
<td>$2,493.17</td>
</tr>
<tr>
<td>Technical Direction</td>
<td>$425.00</td>
</tr>
<tr>
<td>Report writing</td>
<td>$1,000.00</td>
</tr>
<tr>
<td>Administration</td>
<td>$683.65</td>
</tr>
<tr>
<td><strong>TOTAL – including non-admissible costs</strong></td>
<td><strong>$24,702.27</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$24,702.27</strong></td>
</tr>
</tbody>
</table>

* Non admissible costs include legal, native title, marketing and tenement rent.
Table 4: EL27617 - Expenditure for the period 13 May 2010 to 12 May 2011

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
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</thead>
<tbody>
<tr>
<td>Geophysics – ZTEM</td>
<td>$17,895.25</td>
</tr>
<tr>
<td>Reprocessing of Geophysical Data</td>
<td>$-</td>
</tr>
<tr>
<td>QUT Field Work</td>
<td>$1962.93</td>
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<tr>
<td>Report writing</td>
<td>$638.03</td>
</tr>
<tr>
<td>Administration</td>
<td>$440.61</td>
</tr>
<tr>
<td><strong>TOTAL – including non admissible costs</strong></td>
<td><strong>$20,936.82</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$20,936.82</strong></td>
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</tbody>
</table>

* Non admissible costs include legal, native title, marketing and tenement rent.
<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geophysics – ZTEM</td>
<td>$51,339.16</td>
</tr>
<tr>
<td>Reprocessing of Geophysical Data</td>
<td>$-</td>
</tr>
<tr>
<td>QUT Field Work</td>
<td>$493.18</td>
</tr>
<tr>
<td>Report Preparation</td>
<td>$200.00</td>
</tr>
<tr>
<td>Administration</td>
<td>$878.64</td>
</tr>
<tr>
<td><strong>TOTAL – including non admissible costs</strong></td>
<td><strong>$52,910.98</strong></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$52,910.98</strong></td>
</tr>
</tbody>
</table>

* Non admissible costs include legal, native title, marketing and tenement rent.
8. CONCLUSIONS AND RECOMMENDATIONS

2010 - 2011 provided Proto Resources with a chance to reassess exploration methodology which led to the implementation of the ZTEM airborne geophysical survey to help in the delineation of further targets. Analysis of the data and implementation of programmes to follow up any significant anomalies should be prioritised in 2011-2012.

Further work was completed in this area with the reprocessing of the publicly available regional geophysical data to provide a solid basis for future ground selection for further exploration and project Generation.

Several university research projects are being scoped for Proto Resources NT Tenements. A field trip to the region (Lindeman's Bore, Wave Hill and Waterloo) was completed in October 2010. Current planning has a PhD student from the Open University (UK) as well as Honours and Masters students from QUT researching the volcanology and regional setting of the Kalkarindji Volcanics. The company hopes to second Mike Widdowson to Darwin from the Open University in the UK for six months.

Proposed expenditures for the coming year would be estimated as follows:

EL27413 $25,000
EL27617 $25,000
EL27618 $25,000
9. REFERENCES


Gole M, 2003. Wave Hill EL 22812 Annual Report for the period 18/10/02 to 18/10/03, Northern Territory. *AusQuest Limited*.
