FINAL REPORT

EL 23122 ‘ Krakatoa’

From 3 February 2003 to 20 December 2007

HOME OF BULLION PROJECT

Author
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Distribution:
- Department of Primary Industry, Fisheries and Mines (1)
- Central Land Council (1)
- Tanami Gold NL (1)

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1.0 SUMMARY

The Home of Bullion Project lies in Central Australia at the boundary of the Arunta Region and the Southern Georgina Basin, approximately 230 km north of Alice Springs (Figure 1). In 2000, Tanami Gold NL identified the potential for Palaeoproterozoic gold and Neoproterozoic base metal mineralisation at Home of Bullion.

EL 23122 ‘Krakatoa’ was part of the Home of Bullion Project. The tenement was granted in February 2003 to Tanami Exploration NL (TENL), a wholly owned subsidiary of Tanami Gold NL (TGNL), a publicly listed company. This report describes exploration carried out on the final area of the tenement after the required relinquishments (Figure 2).

Exploration consisted of regional reconnaissance including rock chip and fine lag sampling, as summarised in the table below.

Table 1: Summary of Exploration

<table>
<thead>
<tr>
<th>Rock chip Sampling</th>
<th>Fine Lag Sampling</th>
</tr>
</thead>
<tbody>
<tr>
<td>39</td>
<td>126</td>
</tr>
</tbody>
</table>

No significant elevated gold or base metal values were returned from the reconnaissance sampling. The best gold assay value returned was 193ppb from rock chip sample HBK 141 taken of a haematitic quartz vein. The tenement was relinquished based on lithology, lack of previously identified mineralisation and negative exploration results.

2.0 INTRODUCTION

The Home of Bullion Project is located approximately 230 km north of Alice Springs (Figure 1). Access to the project area is via the Stuart Highway, which crosses the northwestern part of EL 23122. Station tracks and the Ghan Railway service track provide further access throughout the area.

This report covers all exploration on EL 23122 carried out between the date of grant, 3 February 2003, and the surrender date of the 20 December 2007.

3.0 TENURE

EL 23122 formed part of the Home of Bullion Project. TENL, the registered holder of the tenement, surrendered EL 23122 on the 20 December 2007. Tenement details are shown in Table 2.

Table 2: Tenement Details

<table>
<thead>
<tr>
<th>Tenement</th>
<th>Tenement No</th>
<th>Blocks Granted</th>
<th>Blocks Relinq. 2004</th>
<th>Blocks Relinq. 2005</th>
<th>Blocks Relinq. 2006</th>
<th>Blocks Retain</th>
<th>Grant Date</th>
<th>Surrender Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Krakatoa</td>
<td>EL 23122</td>
<td>497</td>
<td>265</td>
<td>60</td>
<td>94</td>
<td>78</td>
<td>3 Feb 03</td>
<td>20 Dec 07</td>
</tr>
</tbody>
</table>
For the purposes of conducting initial reconnaissance exploration, a ‘self clearing’ program was granted by the CLC in April 2003, whereby TENL could conduct geological appraisal of the tenements combined with wide-spaced non-systematic ‘grab’ sampling to assess prospectivity. Areas of possible cultural significance recorded within the Aboriginal Areas Protection Authority (AAPA) database were obtained and avoided.

4.0 GEOLOGY

The regional geology has been described in Rohde, C., 2007.

The Home of Bullion Project tenements cover parts of the northern Arunta Inlier and the southern margin of the Georgina Basin (Plates 1 and 2). The surface geology has been mapped and described by the Northern Territory Geological Survey (NTGS) in the 1:250 000 scale Barrow Creek (SF53-6) sheet and explanatory notes (Haines et al. 1991). The project area comprises outcropping Palaeoproterozoic crystalline Arunta basement rocks and Neoproterozoic to Palaeozoic Georgina Basin sedimentary sequences. The remaining areas are covered by Cainozoic sediments, predominantly variably vegetated colluvium, un cemented aeolian sand plains and dunes.

The Palaeoproterozoic Arunta basement rocks consist of tightly folded metasediments intruded by massive granites of the Barrow Creek Granite Complex. The metasediments have been mapped as the Bullion Schist to the north-east and the Ledan Schist to the south-west. The Bullion schist is an interbedded sequence of schists with minor micaceous arenite and metamorphosed felsic volcanics. The Ledan Schist is dominated by tourmaline-bearing biotite-muscovite-quartz schist with lesser interbedded quartzite, metamorphosed conglomerate, metamorphosed felsic rocks and amphibolite.

Previously it was thought that the Bullion and Ledan Schists may be lateral equivalents of the Lander Group, which in turn is interpreted to be contiguous with the Killi Killi Formation – a host unit to major Au mineralisation in the Tanami region. Recent work by the NTGS suggests the Ledan Schist is contemporaneous with the Oonagalabi sequence, Mendip Metamorphics and Utopia Quartzite (pers comm. Christine Edgoose, NTGS, December 2006). The dated age is 1765 +/-4 Ma for a volcaniclastic unit in the Oonagalabi sequence. All these units unconformably overlies the Ongeva Succession of the Strangways Metamorphic Complex. They are interpreted to have been deposited between the Yambah (1780-1770 Ma) and Strangways (1730-1715 Ma) Events.

The Bullion and Ledan Schists form inliers within the Neoproterozoic Georgina Basin sediments, and where outcropping, were tested for gold mineralisation. Along strike to the northwest of EL 10050 the Bullion Schist hosts the abandoned Home of Bullion copper mine. In addition to copper, the Home of Bullion deposit is also enriched in lead, zinc, silver and gold. Quartz-tourmaline and tourmaline-pegmatites also occur within the Bullion Schist, and become increasingly common in the northern exposures. In the northernmost exposures (adjacent to the Stuart Highway) tourmalinised metasediments host a number of minor W, Sn and Ta mineral occurrences.

The Ledan Schist is probably a lateral equivalent to the Home of Bullion Schist but has a lower metamorphic grade in the project area.

The southern Georgina Basin sedimentary succession unconformably overlies the Palaeoproterozoic basement. It outcrops as flat to gently dipping tabletop hills and mesas, typically with basement exposed at the base of the hills and in the plains between ranges. The basal sediments in this area are the Neoproterozoic Forster Member of the Central Mount Stuart Formation which is locally exposed in unconformable contacts with the basement. The Forster Member is overlain by a thick sequence of red
beds, the Tops Member, which is in turn overlain by a white quartzite, the Adnera Member, which often forms the resistant cap to the hills. Further south, older Georgina Basin sedimentary units are present beneath the Forster Formation. The Central Mount Stuart Formation is interpreted as a deltaic sediment and its thickness ranges from 200 m in the northwest to almost 600 m in the southeast.

The **Wapiti** gold prospect, situated on EL 23122, comprises intensely deformed pelitic schist with thin psammitic interbeds (Plate 3). These rocks are considered to be part of the Ledan Schist sequence [Pln] (Haines *et al*., 1991). In general, the metasediments have been intensely altered to fine white mica and cut by numerous generations of quartz veins. The dominant foliation is sub-parallel to bedding and dips steeply towards 240°. A major northwest-trending fault runs along the eastern flank of a prominent strike ridge and separates a more prospective area with abundant quartz veins to the east from one with coarser metasediment and few quartz veins. This fault is probably a splay off the regional Stirling Fault (Haines *et al*., 1991).

### 5.0 EXPLORATION COMPLETED

Exploration over five years included 39 rock chip samples and 126 fine lag samples. All sample locations are shown on Plate 3 and all sample and assay data are included in the digital appendix.

#### 5.1 Year 1

Exploration by TENL in the first year of tenure concentrated on a broad zone over the Palaeoproterozoic Ledan Schist (Pln) and Narwiestooma Metamorphics (Na) contact near the **Wapiti** prospect area (Plate 3).

A total of 23 rock chip samples and 126 fine lag samples on 12 north-south soil sample traverses were taken. All samples were assayed for Au, Ag, Cu, Pb, Zn and Bi.

No significantly elevated gold or base metal values were returned from the sampling, apart from the best result of 20 ppb Au approximately 6.8km south west of the Wapiti prospect.

#### 5.2 Year 2

Exploration in the second year of tenure consisted of further reconnaissance / rock chip sampling at the **Wapiti** prospect as well as investigating the Stirling Fault to the north. A total of thirteen samples were collected approximately 7 km south west of the Wapiti prospect along an east-west traverse, including quartz veins with abundant specular haematite and Fe-oxide alteration (Plate 3). The rock chip samples were assayed for Au, Ag, Cu, Pb, Zn, As, Bi, Co, Mo, Ni, Sb and W.

Four samples returned elevated Au-Cu values, although the original >1 g/t Au result was not repeated by additional sampling. The best result was returned from sample HBK135 with 98ppb Au from a 1m wide quartz vein with significant FeMn-oxide staining and inclusions. No anomalism was noted in the altered country rock.

#### 5.3 Year 3

No field exploration was carried out in the third year of tenure.
5.4 Year 4

A regional reconnaissance was carried out over the Ledan Corridor to attempt to define the boundaries of the prospective Ledan Schist host unit. The Ledan schist is considered to be a prospective host for gold mineralisation. Selected outcrops of Ledan Schist along the entire length of the corridor were visited as well as the western extent of the mapped retrograde greenschist facies along the Delny-Mt Sainthill shear zone.

The Wapiti Prospect area was selected for further exploration in 2006. Abundant haematite-quartz veins are hosted by Ledan Schist metasediments near the contact with quartz-epidote altered metamorphic rock, rhyolite and nearby quartz porphyry. A total of three samples were taken approximately 6.2km south west of the Wapiti Prospect (Plate 3). All samples were assayed for Au, Ag, Cu, Pb, Zn, As, Bi and Sb. They returned a best result of 193 ppb Au from float derived from a coarsely crystalline massive quartz (50%)-specular haematite (50%) vein.

5.5 Year 5

A data review, which considered the geological setting and lack of mineralisation indicative of the potential for a stand-alone mineral resource, led to the decision to surrender the tenement.

6.0 REHABILITATION

No ground disturbing work was conducted and therefore no rehabilitation is required.

7.0 FINAL EXPENDITURE FOR EL 23122

The final expenditure for EL 23122 for the period 3 February 2007 to 20 December 2007 is shown below in Table 4.

Table 4: Final Expenditure for EL 23122

<table>
<thead>
<tr>
<th>Cost Element</th>
<th>$</th>
</tr>
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<tbody>
<tr>
<td>Salaries and Wages</td>
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<tr>
<td>Contractors</td>
<td>123</td>
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<tr>
<td>Computer &amp; Drafting</td>
<td>43</td>
</tr>
<tr>
<td>Travel, Meals, Communications etc..</td>
<td>68</td>
</tr>
<tr>
<td>Storage/ Freight</td>
<td>34</td>
</tr>
<tr>
<td>Administration/Overheads</td>
<td>540</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$4,140</strong></td>
</tr>
</tbody>
</table>
8.0  BIBLIOGRAPHY

AGES, 2003. Annual Geoscience Exploration Seminar, NTGS.


