Partial Surrender Report for EL29520

For Period 15\textsuperscript{th} January 2014 to 14\textsuperscript{th} January 2015

Target commodity: Gold
NT 1:250,000 map series – Pine Creek SD52-8
NT 1:100,000 map series – Pine Creek 5270

Distribution:-

1. DME Darwin NT
2. Primary Gold Ltd

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EXECUTIVE SUMMARY

Tenement EL29520 lies approximately 230km SSE of Darwin along the Stuart Highway and 6km SE of the town of Pine Creek. Access is via good sealed roads from Darwin to Pine Creek and from thence via station tracks. The tenements surround areas of extensive gold mineralisation associated with the Pine Creek Shear Zone.

The tenement overlies outcropping granites of the Cullen Supersuite, including the Bonrook Granite and the McCarthy Granite with regular outcrops of Burrell Creek Formation of the Finniss River Group on the western edge of the tenement. Cainozoic soils dominate in the east of the tenement The Burrell Creek Formation interpreted as a sequence of fine to coarse marine sediments and appears to be part of continuous sedimentation process. Due to the lack of marker horizons and poor exposure the width of the unit is unknown but is thought to be >1000m. This Formation is considered prospective for large low-grade gold deposits and has the potential for small high-grade deposits.

Previously EL29520 was part of the group report GR307/13, Pine Creek One Project, with a common reporting date set to 30th June. Following a review and rationalisation process in late 2013 all tenements from this group, with the exception of EL29520 were surrendered. Following the surrender process EL29520 reverted to its original reporting date related to the grant date of 15th January.

No field work was undertaken in the 2014 field season reflecting a corporate focus on the company’s Toms Gully Project, located some 120km north of EL 29520. A review of the historic data was completed which allowed a prioritisation of target zones within the tenement and as such a portion of the tenement was surrendered to comply with the compulsory second year reduction. During the 2015 exploration year, activities will include an ongoing review of historic geochemical and geophysical data, with reconnaissance field visits and geological mapping.
2 COPYRIGHT

This document and its content are the copyright of Primary Gold Ltd (PGO). The document has been written by Ben Cairns for submission to the Northern Territory Department of Resources as part of the tenement reporting requirements as per Regulation 8. of the Mineral Titles Act.

Any information included in the report that originates from historical reports or other sources is listed in the “References” section at the end of the document.

This report may be released to open file as per Regulation 125(3)(b).
Figure 1- Tenement location map EL29520 and other Primary Gold tenements
3 INTRODUCTION

EL29520 was originally included as part of the group report, GR307/13 which was comprised of EL29520, EL29360 and EL29364, with a reporting date of 30th June. In late 2013 Primary Gold undertook a review of the Pine Creek tenements, as a result of these review process EL29360 and EL29364 were determined to have low exploration potential and were subsequently relinquished. Combined reporting status GR307/13 was nullified and reporting for EL29520 reverted to the grant date of 15th January. This report summarises exploration activity on EL29520 since the 15th January 2014 to 14th January 2015.

The tenement lies within and adjacent to the Pine Creek Shear Zone which plays host to significant mineralisation within the Pine Creek Orogenic Belt. Anomalous gold in soil samples and anomalous gold and base metal rock chip samples collected by previous explorers from within the tenement warrant further investigation.

4 LOCATION AND ACCESS

EL29520 lies approximately 230km SSE of Darwin along the Stuart Highway (Figure 1) and approximately 6km SE of the town of Pine Creek. Access is via good sealed roads from Darwin to Pine Creek and from thence via station tracks. These tracks provide good access for 4WD vehicles during the dry season, however these tracks may become impassable after heavy rain, and therefore access is restricted during the wet season from November to March.

The tenements surround areas of extensive gold mineralisation associated with the Pine Creek Shear Zone.

Figure 1 shows the location of EL29520.

5 TENEMENT DETAILS

<table>
<thead>
<tr>
<th>Lease</th>
<th>Area (blocks)</th>
<th>Sq. Km</th>
<th>Applied Date</th>
<th>Grant Date</th>
<th>Expiry Date</th>
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<tbody>
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<td>5</td>
<td>16.74</td>
<td>14-Jun-12</td>
<td>15-Jan-13</td>
<td>14-Jan-19</td>
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</tbody>
</table>

Application for EL29520 was made by Primary Minerals NL in June 2012 and in late February 2012 Hydrotech International purchased 100% of the shares in Primary Minerals NL and changed its name to Primary Gold Ltd (PGO). Primary Minerals NL is a wholly owned subsidiary of Primary Gold Ltd.

This report relates to the surrender of 1 block as per requirements at the end of the second year of tenure. The block surrendered is SD52-1655-block P leaving four blocks in the tenement.

The tenement is located on Pastoral Lease 1209, Bonrook, and falls within the Pine Creek 1:250,000 map sheet and on the Pine Creek 1:100,000 map sheet.
Figure 2 – Regional geology of the project area.
EL29520 is located within the Archean to Palaeoproterozoic Pine Creek Orogen, one of the major mineral provinces of Australia. The Pine Creek Orogen is a deformed and metamorphosed sedimentary basin up to 14 km maximum thickness covering an area of approximately 66,000 km$^2$ and extending from Katherine in the south to Darwin in the north. It hosts significant resources of gold, uranium and platinum group metals (“PGMs”), as well as substantial base metals, silver, iron and tin-tantalum mineralization.

The Pine Creek Orogen comprises series of late Archean granite-gneiss basement domes, which are overlain by a fluvial to marine sedimentary sequence. Several highly reactive rock units are included within this sedimentary sequence including carbonaceous shale, iron stones, evaporite, carbonate and mafic to felsic volcanic units of the South Alligator and Finniss River Groups. This sequence has been subjected to regional greenschist facies metamorphism and multiphase deformation, which has resulted in the development of a northwest trending fabric. Subsequent widespread felsic volcanism and the intrusion of granitoids caused contact metamorphism, in aureoles between 500 m and 2 km wide that overprint the earlier regional metamorphism. After the granitoid intrusions an extensive array of northeast and northwest trending dolerite dykes intruded the metasedimentary sequence during regional extensional deformation.

Gold mineralization within the Pine Creek Orogen is preferentially developed within strata of the South Alligator Group and lower parts of the Finniss River Group along anticlines, strike-slip shear zones and duplex thrusts located in proximity to the Cullen Granite Batholith. Of particular stratigraphic importance are the Wildman Siltstone, the Koolpin Formation, Gerowie Tuff, Mount Bonnie Formation and the Burrell Creek Formation.

6.2 LOCAL GEOLOGY

The local geology of the surrendered portion of EL29520 is dominated by members of the Allamber Springs Granite and McCarthys Granite both grey, coarse grained porphyritic biotite granites (Figure 5).

The flat undulated topography reflects the underlying geology with shallow Cainozoic and Quaternary alluvium and colluvium overlying the granite basement in much of the surrendered area.
Figure 3: General geology of EL29520, from Geology of the Pine Creek Orogen (GDA94 Z52) showing surrendered and retained portions of EL29520
7 EXPLORATION ACTIVITY YEAR ENDING 14TH JANUARY 2014

There has been no on ground exploration activity competed on EL29520 in the current reporting period, primarily due to the company focus on the nearby Toms Gully mine and a tightened exploration budget reflecting the current economic climate. Work has been limited to desktop reviews and data compilation using available NTGS data sets. These data sets have allowed the company to evaluate the potential for economic mineralisation within the tenement and has been the principle rationale behind the compulsory second year reduction.

The potential for significant economic mineralisation in the surrendered portion of EL29520 is considered low.

8 RECOMMENDATIONS AND CONCLUSIONS

The surrendered portion of EL29520 has no geological or geochemical targets considered worthy of follow up or further studies. Public domain geophysical data suggest the area is dominantly underlain by members of the McCarthy and Allamber Springs Granites. Local NW-SE bearing magnetic trends are thought to be related to late stage, un-mineralised late Proterozoic dykes and as such the potential of the surrendered block to host economic mineralisation is considered low.

9 REFERENCES


