MLN 792 PINE CREEK AREA NORTHERN TERRITORY AUSTRALIA

ANNUAL REPORT FOR THE PERIOD ENDED 31st DECEMBER 2018

> Data presented in GDA 94 Datum

Map sheets: Pine Creek 1:250 000 Sheet No. SD52-08 Pine Creek 1:100 000 Sheet No. 5270

Target commodity: Au

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SUMMARY

MLN 792 was granted on 26/01/1982 for 21 years, renewed for an additional 10 and 5 years, and on 30/06/2018 for another five years. The lease encompasses 3 hectares. The tenement was purchased by Mr Ray Woodridge in part for its prospectivity within the International area and to serve as a location to operate an assay lab to service the mining industry within the NT.

Preliminary talks have been conducted over the years with the various holders of the surrounding MLN1130 tenement, however they have often been forestalled by the failure of the holder of MLN1130 to be able to continue economic operations.

There is evidence that drilling has occurred on this tenement and as a priority, this drilling information needs to be sourced, compiled and interpreted.

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1. INTRODUCTION

The following report describes work completed on the mining lease ML792 during the period 30 December 2017 to 30 December 2018.

This tenement is located to the immediate north-west of the Pine Creek township, approximately 200 km southeast of Darwin, Northern Territory. Access is gained via the Stuart Highway, with a western turn off into Pine Creek

Ray Wooldridge signed an agreement with Pine Creek Goldfields to acquire the tenement in 1994 primarily to serve as a location to operate an assay lab to service the mining industry within the NT. Mr Wooldridge is in the process of converting MLN 792 to freehold in order to better facilitate the ongoing provision of assay laboratory services.

The area surrounding ML792 is surrounded by ML1130 which is held by Kirkland Lake Gold Pty Ltd.

ML792 hosts the highly prospective Burrell Creek Formation of the Finniss River Group and may contain strike extensions to known mineralisation occurring in and around the International pit. There has been drilling in the past on this tenement, however the current tenement holder does not have this information, and it is unavailable from the Department of Primary Industry and Resources as it was reported as part of a larger tenement now held by Kirkland Lake Gold Pty Ltd. Since Kirkland Lake Gold Pty Ltd has recently merged with the previous holders, Newmarket Gold Ltd, future work will entail discussion with Kirkland Lake Gold Pty Ltd in an attempt to obtain the information and/or some form or JV for work to progress on this tenement.

2. TENURE

Table 1 lists lease details for MLN792

Table 1: Lease Details

ML	AREA	GRANT	EXPIRY
		DATE	DATE
792	3 Ha	26/01/1982	31/12/2022

Tenure history

The tenement was purchase by Mr Ray Wooldridge in 1994 from Pine Creek Goldfields, and an assay lab was installed and upgraded to provide services to mining projects within the NT. North Australian Laboratories Pty Ltd (NAL) was and still is the sole provider of rapid turnaround sample assays required by the mining industry when conducting grade control and exploration. Current clients are Kirkland Lake Gold Ltd, Vista Gold Australia, Thor Mining, Thundelarra Exploration, Pine Creek Gold, Ark Mines Ltd and Core Exploration Ltd.



Figure 1: General Location

3. REGIONAL AND LOCAL GEOLOGY

Regional geology

The Precambrian rocks of the Northern Territory have been divided into two principal orogenic provinces, the North Australian Craton and the Central Australian Mobile Belts. Orogenic domains within the North Australian Craton include the Pine Creek Orogen, the Tanami Region, the Murphy, Tennant and Arnhem Inliers, and the northern Arunta Province.

Historically, the Pine Creek Orogen has been the most prospective region of the Northern Territory (Ahmed et al, 1999). The Orogen extends southeast 260 km from Darwin to Katherine and east from Darwin to 130 km northeast of Jabiru. The Mount Todd Project lies in the southern end of the Central Region of the Pine Creek Orogen.

The Pine Creek Orogen has had a long and complex history of sedimentation, deformation, metamorphism and plutonism. It comprises an alternating sequence psammitic and pelitic rocks with minor carbonate and volcanic rock. The age of the sequence is constrained between 2470 and 1870 Ma (Page et al 1980). Regional metamorphism grades range from subgreenschist facies in the Central Region to upper amphibolites facies along the western and eastern margins.

There are over 250 gold occurrences and two operating gold mines in the Pine Creek Orogen region. The primary trend of gold mineralisation on the Pine Creek goldfield lies between the Tabletop Granite on the western side and Allamber Springs and Bonrook granites on the eastern side. All three of these granites have been measured to have a radiothermal heat-producing value (HHP) of greater than $7 \,\mu\text{W/m}^3$, which places them in the highest category of radiothermal heat-producing granites in the Cullen Batholith as interpreted by Klominsky et al (1996) in their anorogenic, post-magmatic low-temperature hydrothermal model for the mineralisation in the Pine Creek Orogen.

Local geology

The oldest lithostratigraphic units exposed within the lease area are those of the Finniss River Group, which includes the Burrell Creek and Tollis Formations (Poxon et al. 1994).

The Burrell Creek Formation represents a turbidite sequence deposited in a deep-water, high energy environment. This unit consists of greywacke, siltstone and shales with minor volcaniclastic beds. The Burrell Creek Formation covers the entirety of ML792. It is also one of the most prospective in the Pine Creek Orogen, hosting a significant proportion of gold occurrences in and around the Pine Creek township.

MLN 792 sits within the primary mineralised trend on the Pine Creek Goldfield, as indicated in Figure 2. The lease lies between the Gandy's Hill and Enterprise deposits, both of which consist of vein-hosted mineralisation occupying the axial plane of an antiform, with the Gandy's Hill deposit interpreted to occur on an extension of the Enterprise Antiform. Concordant saddle reefs and ladder quartz veins are prominent at the southern extremity of the Gandy's Hill

deposit, and there is considered to be a high probability that this style of mineralisation will project into MLN 792. The abandoned Maid of Erin mine which occurs within MLN 792 may occur on a southerly extension of the Gandy's Hill mineralisation; further work is required to test this hypothesis.

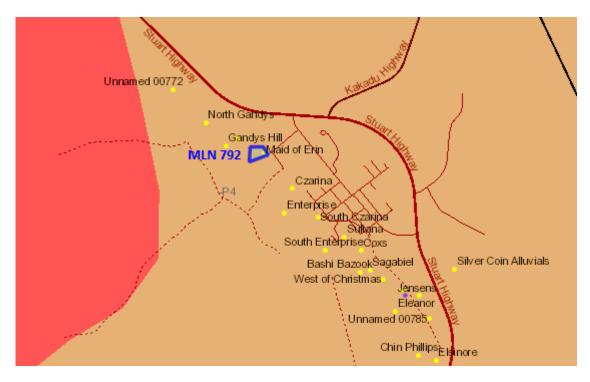


Figure 2 Geological setting of MLN 792

The MLN is surrounded on three sides by ML1130 currently held by Kirkland Lake Gold Pty Ltd. Anecdotal information indicates that drilling has occurred on the tenement and a thorough search needs to be conducted for this information as it is critical to the geological understanding of this tenement. This tenement may host resource extensions to the known mineralisation at the surrounding deposits.

4. WORK COMPLETED

Work this year mainly focussed on upgrading the existing laboratory facilities for the installation of a second ICP-OES in order to convert the final instrument reading in the fire assay process from AAS to ICP. Substantial expenditure was also committed to laboratory equipment upgrades.

Mr Peter Harris Bsc.Geol MAIG, Dr John Stockfeld BSc Hons, MAIG of Stratus Resources Pty Ltd, and Mr Glen McIlwain BSc.Hons, MAIG of Vibe Exploration Pty Ltd conducted office-based studies and report preparation and whose services have been retained to assist in the geological interpretation and to evaluate the tenement for J.V purposes.

5. EXPLORATION EXPENDITURE

No exploration activities have taken place on the tenement apart from site visits by geologists from Stratus Resources Ltd and Vibe Exploration Pty Ltd and literature review required for the compilation of this report.

Table 2: 2018 Expenditure

Mining Lease	Expenditure
MLN792	\$353,000

7. WORK PROGRAMME PROPOSED FOR 2019

With the ownership of the surrounding MLN 1130 having changed, another attempt will be made to source the drill-hole data on this tenement, and if this information is forthcoming, then Datamine mining software will be used to generate sections and an interpretation of any mineralisation that may have been identified. The ongoing running of the NAL assay lab is the leading commercial activity being carried out on the lease, and the process of conversion of the lease to freehold will continue in order to better support the commercial activities of NAL.

Table 3: Proposed 2018 Expenditure

Tenement	Expenditure
MLN 792	\$300,000