Newmarket Gold Inc provides an update on the Maud Creek Gold Project

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The Maud Creek Gold Project is situated 20 km to the east of Katherine in the Northern Territory, Australia (**Figure 1**). It lies within a group of mineral tenements totalling approximately 633.5 km² held by Newmarket Gold Inc., a Canadian listed (TSX) corporation. The tenements include an inventory of historical gold discoveries, historical and modern gold mines, and current Mineral Resources and Mineral Reserves of the Maud Creek Deposit. The Maud Creek Gold Project can be categorized as a project in development.

The Maud Creek Deposit occurs within the Archaean to Palaeoproterozoic Pine Creek Orogen, one of the major mineral provinces of Australia. The Pine Creek Orogen is a deformed and metamorphosed sedimentary basin extending from Katherine in the south to Darwin in the north. It hosts other significant resources of gold such as the Cosmo Mine and the Union Reefs deposits near Pine Creek (Bremner and Edwards 2013).

Gold mineralisation within the Pine Creek Orogen is preferentially developed within strata of the South Alligator Group and Finniss River Group along anticlines, strikeslip 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, Burrell Creek Formation and in the case of the Maud Creek Deposit, the Tollis Formation (**Figure 2**).

In the Pine Creek Orogen, gold mineralisation is generally associated with quartz that occurs as stockwork veins, sheeted veins, discordant veins in faults and shear zones, as well as frequent saddle-reefs. There is a common association of gold with antiformal structures.

A total of over 3.7 million ounces of gold have been produced from the Pine Creek Orogen and it has been estimated that around 3 million ounces have been produced historically from the current Newmarket Gold properties.

The Maud Creek deposit trends north-south and dips 60° to the east. It mainly occurs within an intense shear zone along a faulted contact between lithic sedimentary rocks in the footwall and mafic tuffs in the hanging wall. The deposit has approximate dimensions of 800 m along-strike, 450 m down-dip and up to 50 m across-strike. The contact mineralised zone at Maud Creek is characterized by multiple phases of stockwork and massive quartz veining, silica flooding, brecciation and commonly intense graphite and/or chlorite alteration.



Figure 1. Newmarket Gold projects location plan.

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Primary mineralisation occurs in gold-arsenopyritepyrite quartz vein systems that have up to 5% total sulfides. Gold is present as both free gold and refractory gold in pyrite and arsenopyrite. Arsenic is highly anomalous with assays reaching 2% arsenic (Bremner and Edwards 2013).

Maud Creek has a lengthy exploration and development history spanning over 140 years, including historical prospecting and mining and several waves of modern exploration and development in the 1980s, 1990s and during the early part of the 2000s.

During 2011, Newmarket Gold completed a 3180 m diamond drill program at Maud Creek. This drilling, along with approximately 71 800 m of pre-existing drill data, was used to complete a Mineral Resource update in December 2012. This work resulted in Indicated Mineral Resources of 7.7 Mt at 3.5 g/t Au for a total of 871 000 contained ounces of gold.

In 2014, Newmarket Gold approached 11 independent consulting groups to tender for the completion of a three-staged feasibility study for a stand-alone operation to be based at the Maud Creek site with reference to potential synergies with Newmarket Gold's current Union Reefs Mill operations in the Northern Territory.

On the 22nd July 2015, Newmarket Gold announced that SRK Consulting (Australasia) Pty Ltd had been awarded the feasibility study contract. SRK has commenced stage 1 of the feasibility study consisting of a preliminary economic assessment (PEA), which under the requirements of the Ontario Security Commission (OSC) includes a National Instrument 43-101 Technical Report. This NI 43-101 Technical Report is due to be completed by the end of March 2016.

References

Bremner P and Edwards M, 2013. Report on the Mineral Resources and Mineral Reserves of the Maud Creek Gold Project in the Northern Territory, Australia for Crocodile Gold Corp. NI 43-101 Technical Report, SEDAR media release, 14 August.



Figure 2. Maud Creek geological plan.