WOODLEIGH NOMINEES PTY. LTD.

ABN 92 050 120 057

REPORT ON EL25903

for the period

14/11/2011 to 13/11/2012

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Contents:

Summary, page 2.
History, 2.
Climate, 2.
Geology, 2-9
Exploration, 10.
Further work required, 11.
1. **Summary:**

Previous exploration planned to implement a small drilling programme on the “Misses Mine” but was postponed due to what appears to be a general disinterest in doing small drilling programmes among the drilling fraternity so this part of the planned programme remains on hold.

An application for a Mineral Lease was made covering the western corner of the EL which contained a portion of the Saddle Extended iron ore deposit as well as an area to the west of MLN’s 759, 760 and others intended to provide additional working space for these tenements. This application was deemed not appropriate for a Mineral Lease as it did not meet the “criteria” for a mineral lease. The “Saddle Extended” deposit was drilled in the late 1960’s and early 1970’s to the extent of reporting an estimate of approx. 800,000 tons of Iron Ore to a depth of 60 metres.

2. **History:**

The Casey Family and later Woodleigh Nominees Pty. Ltd. has been involved with the Francis Creek area for approximately 50 years both in their own right or as a joint venture partner with CSR Limited. An estimated $0.75M was spent collectively on exploration of the area. After CSR Ltd. withdrew from the mining industry the Caseys and/or Woodleigh purchased their interests in the area and proceeded with further exploration. Development work completed on the adjoining group of MLNs comprising the Francis Creek Gold mine has been valued in excess of $1M in 1991 by Renison personnel. All of this work was completed and funded by the Caseys and/or Woodleigh.

Exploration work completed by FIMCO and others in the 1960’s lead to the opening of the adjoining Francis Creek Iron Ore mine which is currently being operated by Territory Resources.

In or about June 2007 Woodleigh applied for EL25903 which was subsequently granted in November 2007 for a period of six years.

3. **Climate**

The Francis Creek area is in general terms typical Top End country comprising open Eucalypt woodland and open savannah grasslands. The Top End enjoys an annual rainfall around 1500mm, most of which falls in the Wet Season, from November to April.

4. **Geology**

In the Dominion EL7487 report dated April 1993, S.J.Pooley described the geology of this area as follows;
3.0 GEOLOGY

3.1 Regional Geology
3.1.1 Regional History

The Pine Creek Inlier is a roughly triangular area of about 66,000km² south and east of Darwin, which contain Early Proterozoic metasedimentary rocks resting on a gneissic and granitic Archaean basement. The metasediments represent fluviatile, shallow water, intertidal basinal and flyschoid sequence up to 14km thick within an intracratonic basin setting (Needham et al, 1980).

During the Top End Orogeny (1870–1780Ma) rocks within the Pine Creek Inlier were metamorphosed to mainly greenschist facies, however, amphibolite facies metamorphic mineral assemblages dominate in the Alligator Rivers region. Known Archaean rocks are restricted to granite–gneiss of the Rum Jungle, Waterhouse and Nanambu complexes which form mantled gneiss domes near the exposed eastern and western margins of the inlier. (Page, et al, 1980).

The sedimentary rocks are mainly shale, siltstone, sandstone, conglomerate, carbonate rocks and iron formations. Felsic to mafic volcanism and associated tuffaceous sediments are also present. The sedimentary sequence is intruded by transitional igneous rocks including pre–tectonic dolerite sills and syn to post tectonic granitoid plutons and dolerite lopoliths and dykes. Largely undeformed platform covers of Middle Proterozoic to Mesozoic strata rest on these with marked unconformity. (Figure 3).

Since the Cretaceous the area has generally remained above sea level. The dominant forces which moulded today's landscape were chemical weathering to produce laterite and "cut and fill" modification of the land surface by repeated erosional and aggradational cycles.

3.1.2 Structure

During the Top End Orogeny, the Early Proterozoic sediments, volcanics and dolerite were intensely deformed and regionally metamorphosed, resulting in tight to isoclinal folding and extensive faulting. Two phases of folding have been recognised. The older F₁ folds are tight to isoclinal folds with northwest to northeast trending axial planes. A penetrative slaty cleavage is present in pelitic rocks and a less prominent spaced fracture cleavage in sandstone. The younger F₂ folds are widely spaced, open types with east to west trending axial planes. Both folding events pre date granitoid intrusions. (Figure 4).
REGIONAL STRUCTURE - PINE CREEK INLIER

FIGURE 4
3.1.2 Structure (Cont’d)

Regional folding is locally modified by the major SE trending Noonamah – Katherine lineament zone, which consists of a 20 to 25km wide zone of shearing and folding with coincident gravity and magnetic anomalies. In the Pine Creek area the lineament is represented by the Pine Creek shear zone, which contains numerous aligned tight folds and shears and which hosts a concentration of gold occurrences. (Needham and Stuart-Smith, 1984a).

3.1.3 Metamorphism

All the Early Proterozoic rocks have been both regionally metamorphosed to greenschist facies and contact metamorphosed by the syn orogenic to post orogenic granitoids. The regional metamorphic grade ranges from predominantly lower greenschist to amphibolite facies in the NE of Pine Creek Inlier. Table 1 shows the characteristic metamorphic mineral assemblages for various rock types. Regional metamorphism is contemporaneous with regional deformation of the sedimentary pile during the Top End Orogeny. Throughout most of the area, regional metamorphism of pelitic rocks produced fine grained sericite and quartz. Sandstones usually exhibited fractured and/or strained quartz grains and minor sericite, chlorite and muscovite. (Figure 5).

Contact metamorphism largely overprints regional metamorphism indicating syn–post deformation. The contact metamorphic aureole is primarily albite–epidote hornfels with a narrower inner continuous zone of hornblende hornfels. K–feldspar–cordierite hornfels is present immediately adjacent to the granitoids. The contact metamorphic aureole varies in width from a minimum distance of 500m to up to 15km – 20km. In general, granitoids with steeply dipping margins will produce a narrower contact aureole whilst relatively shallow, flat lying granitoids will produce a more extensive contact aureole, although the extent of a contact aureole can be significantly wider or narrower under different temperature – pressure regimes.
3.2 Local Geology

The stratigraphy of the Frances Creek area comprises Early Proterozoic metasediments including Mundogie Formation and Wildman Siltstone. Mapping by the BMR indicates significant outcrop of underlying Masson Formation mapped in structural highs and lows and always in valleys. Nowhere in the mapped area did distinct lithologies of Masson Formation outcrop. In broad terms, the Frances Creek stratigraphy consist of uppermost carbonaceous metasiltstones intruded by dolerite sills which corresponds to the Wildman Siltstone. Underlying this sequence are carbonaceous metasiltstones which contain quartzite beds of various thickness. Lower most are carbonaceous sand/siltstones containing coarse ferruginous conglomeratic quartzite units. These underlying units correspond to the Mundogie Formation. The occurrence of the first quartzite horizon in the upper part of the sequence marks the transition from Wildman Siltstone to Mundogie Formation.

This Early Proterozoic metasedimentary sequence is bounded on the southern and eastern side of EL7487 by Early Proterozoic granite intrusives which include the Allamber Springs Granite and the Minglo Granites. (Figure 6).

Regional 1:25,000 scale mapping has defined sheared/faulted and folded metadolerites and schist of the Wildman Siltstone trending NW/SE. Quartz veining is common within localised faults and shears. Mundogie Formation metasediments outcrop along the eastern boundary of the licence area. These comprise NW/SE trending strike ridges of predominantly quartzites interbedded with lesser shale units. Contact of these metasediments and granite occurs within the south eastern graticular block. The contact is faulted and sheared and often contain gossanous haematite/limonite quartz veining within a hornfelsed metasiltstone.
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5. **Exploration:**

The main objective of the year’s programme was to continue to examine the area surrounding the old “Misses Mine” and the possible connection to the existing Francis Creek Gold Mine deposit.

The “Misses Mine” is located approximately 1Km to the east of MLN 770. This area consists of a small shaft sunk to approx. 12metres on a quartz reef generally 1 metre wide. This reef trends in a north westerly direction for about 100 metres towards the quartz vein exposed on MCN1645 and 1646. Between these tenements and the “Misses Mine” are a number of old costeans (believed to have been dug by Carpentaria Exploration and outside EL25903) which appear to confirm the connection between the two areas.

Viewing the area via a satellite image indicates a “U” shaped formation. It is indeterminate as to whether it is a syncline or an anticline. This indecision is due to the vein exposed in the “Misses Mine” is almost vertical and the reef exposed in “Murphy’s” (MLN771) starts to descend vertically before dipping to the west. 1600 metres to the south the reef dips to the east. More recent intrusive events have evidently distorted the area. Efforts are underway to obtain a small drilling rig to allow shallow drilling activities to be done “in house”. Either by drilling the area or simply exposing the vein system by a small scale mining programme the true nature will be determined. Initially a small scale mining operation would be expected to involve the removal of alluvial material followed by a shallow open-cut operation. Alternatively, the existing shaft could be cleaned out and sunk to a greater depth of 30 metres which would put the base on a similar level to the base of the workings on MLN 771 located approx. 1Km to the west. Either of these scenarios would generate considerable ground disturbance in varying degrees which would require the preparation of a mine plan etc..

Three samples of 10Kgs each were collected from within the shaft. These were treated in the same manner as earlier samples taken from the exposed vein between the two areas, that is; the samples were crushed to minus 74 micron and gravity concentrated. The concentrate was amalgamated with a measured quantity of mercury and the resulting amalgam weighed. A portion of the remaining material was reduced further to minus 45 micron and examined under a microscope for remaining gold as it was considered too fine for amalgamation to occur.

The result of this work was that a gravity type treatment plant should recover 50-60% of the available gold to provide an estimated grade of 2-3g/t Au. This is consistent with earlier results obtained. Working with the results obtained so far, it is estimated that approx. 3000 tonnes of ore @ 2.5/gm/t Au could exist to a depth of 12 metres over a strike length of 100 metres.

This year’s programme continued to seek either alluvial or hard rock resources which may have been connected with the existing Francis Creek Gold mine.
6. **Further work required:**

It is considered worthwhile applying for a mineral lease over the “Misses Mine” area.

Further work is underway in the search for iron ore areas by Territory Resources under an agreement reached in early 2012 which has been registered with the Department. At the time of writing the author does not have a detailed programme available for this work. Any approvals required for this work will be sought as needed and Territory Resources will be named as the operator conducting said work.