

The Block 14 Gold Project, Republic of the Sudan

Hugh Stuart, Orca Gold Inc, Coventry, UNITED KINGDOM

The Block 14 Gold Project, managed by Orca Gold Inc (Orca) through its 70% owned subsidiary Meyas Sand Minerals Company Ltd., is located in the Nubian Desert in the Sudan 1,000 km north of the capital Khartoum. The property covers 2,170 km² of the Arabian Nubian Shield (ANS).

Since 2011, the Sudan in general, and the Nubian Desert and Red Sea Hills in particular, has seen one of the largest gold rushes in modern times. This explosion in artisanal gold mining activity has propelled Sudan to second place in the list of African gold producers in 2016. However, it remains one of the least explored countries in Africa, with little more than regional scale drainage geochemistry in most areas.

Orca identified the potential of the Sudan in 2011 and entered into the Block 14 Joint Venture in 2012 based on property's location, which straddles the Keraf Shear Zone, and the widespread artisanal mining activity.

High resolution satellite imagery has been the mainstay of reconnaissance exploration, with almost 20,000 ancient and modern artisanal sites mapped. The mapping was followed by systematic appraisal and prioritisation of targets.

As a result of this exploration approach, within three months of starting field work, geologists identified a large alteration system, and the Galat Sufar South (GSS) was discovered. Initial channel sampling of the main outcrop returned up to 88 m at 2.20 g/t Au, and the first drill hole in November 2012 intersected the Main Zone of the orebody returning 94 m at 2.38 g/t Au.

A maiden resource of 1.31 Moz Indicated and 0.40 Moz Inferred (1 g/t cut off) was published in early 2014, and current resources stand at 30.6 Mt grading 1.82 g/t (1.79 Moz) in the Indicated category and 9.7 Mt grading 1.7 g/t (0.54 Moz) in Inferred resources.

The company published a Revised PEA on the project in 2017 based on 3.4 Mtpa plant through put and is in the process of completing a Feasibility Study on the project based on 6 Mtpa. Of importance to the project has been the discovery of a large water resource hosted in Cretaceous sandstones 85 km west of the proposed process plant.

Orca is in the process of completing a 25,000 m drill programme to expand resources and define reserves as part of the Feasibility Study.

Gold mineralisation at GSS is closely associated with strongly altered albite-quartz-sericite-carbonate pyrite schists hosted within a package of intermediate volcanics and volcanoclastics. The mineralisation appears to have been folded post-formation and overprinted by a late, well-developed axial planar foliation.