

Gold Exploration in Sudan

We studied a large territory covering more than 60 km² in one area and 200 km² in the second area, and identified anomalies associated with quartz veins. Only satellite image interpretation data was provided to the client.

Let us consider the 60 km² area as an example.



Fig. 1. The anomalies we identified are shown in red. The symbols indicate the sampling zones with approximate gold grades in g/t (grams per ton).

Later, activity was detected in this area on satellite images, and the client provided the coordinates of the sampling points along with the gold content in the samples.

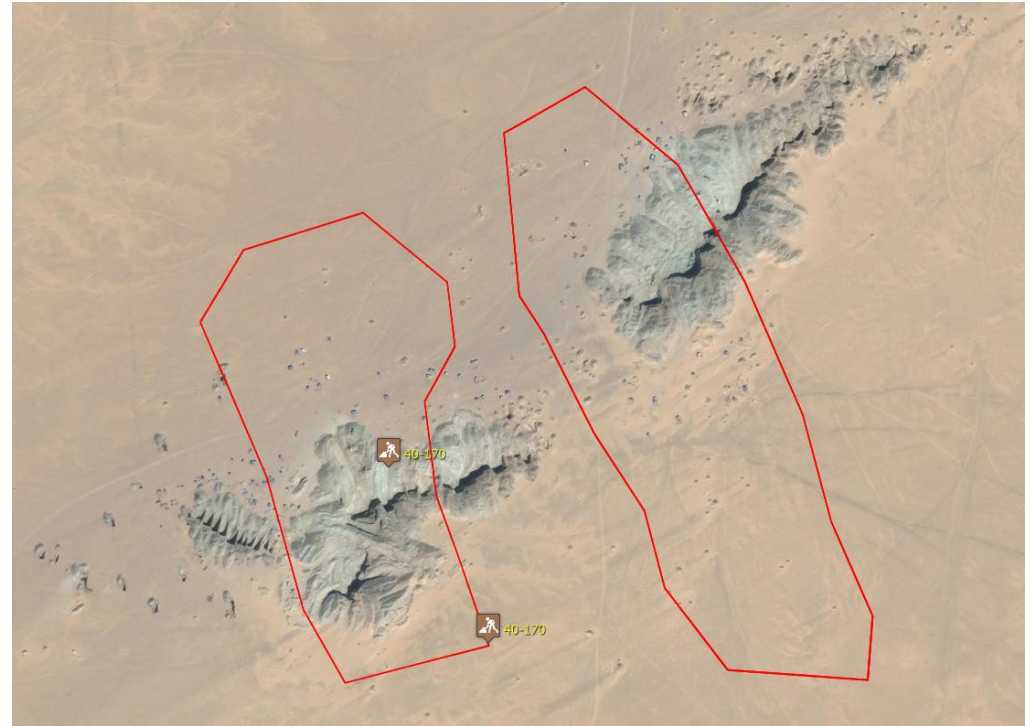
Tractors were used to excavate trenches in order to expose the gold-bearing veins. This made it possible to reach depths of up to 10 meters. Therefore, in Fig. 1 we see “0” results, which from our point of view indicates a deeper occurrence of productive rocks. Field investigations could determine the actual depth of these formations.

The following figures show the anomalies in this area in greater detail. The 2013 satellite images (at the time when the remote sensing data interpretation was carried out) are compared with the 2015 images, when the client provided the sampling results.



2013

40-170 gr/ton



2015

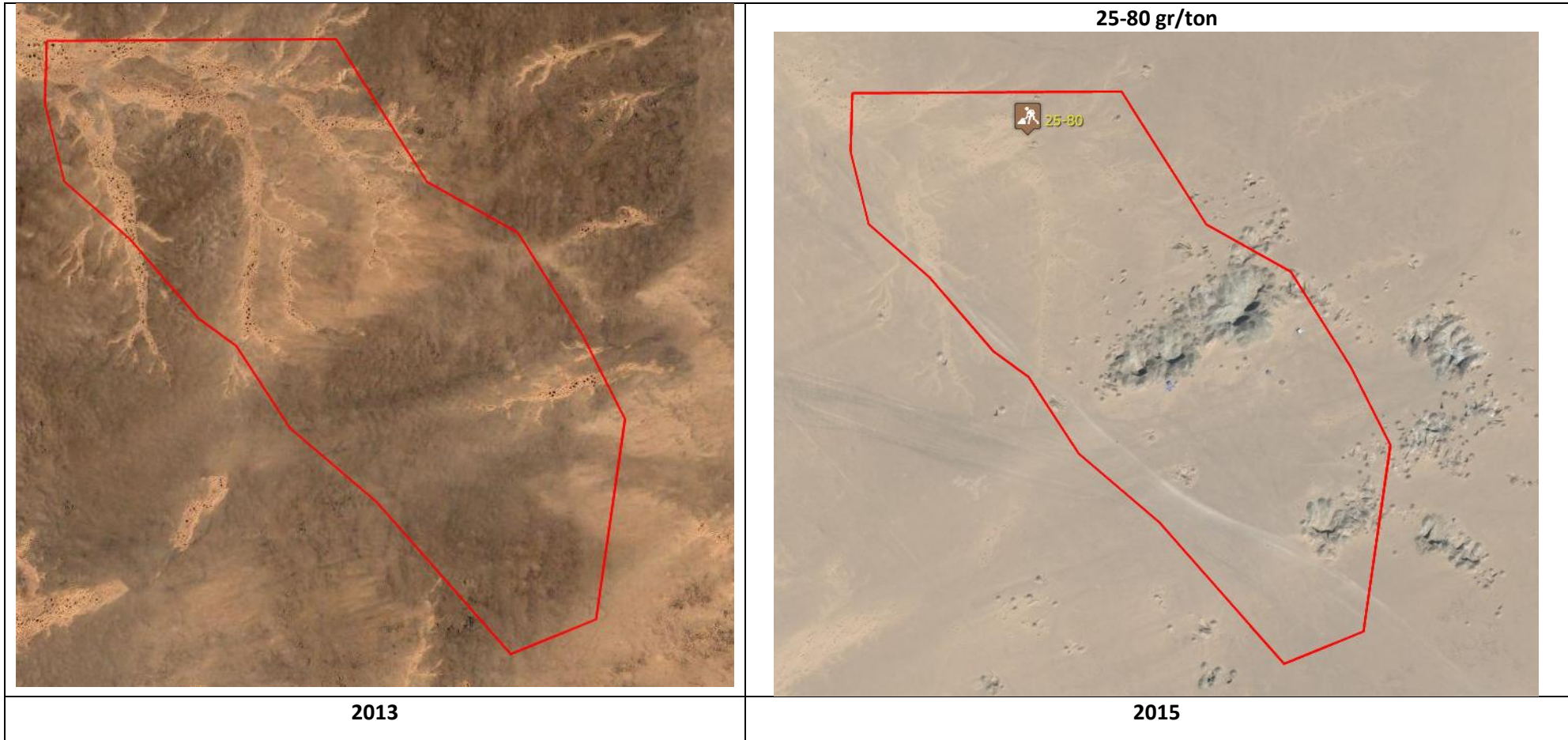


2013



Small exploration trenches can be observed; therefore, the anomaly was abandoned for further prospecting. Exploratory drilling is required.

2015



Conclusions:

As a result of the work, the main objective was accomplished — mapping of anomalous zones associated with quartz veins containing high gold grades. Verification of the results was carried out by trenching to expose the gold-bearing veins.

Three exposed anomalies confirmed the presence of gold in the collected samples, with grades of up to 170 g/t. Three other anomalous zones did not reach the vein depth, and therefore the results are currently negative.

Conducting fieldwork using the Vertical Electric Resonance Sounding (VERS) method would make it possible to determine the depth of the productive formations. The application of other geophysical methods (such as the Induced Polarization (IP) method, ground-penetrating radar surveys, etc.) or exploratory drilling operations is also possible.