

ZEZ Kai Shi

MINING CERTIFICATE 8853 CM (MOZAMBIQUE)

PRELIMINARY NOTES ON AU POTENTIAL

Report No.	2018/09-02
Date	September 2018
Author (s)	Dr A.S. Rodionov



ASR Geology Consulting & Mineralogical Services

3, Poole Street
Klisserville
Kimberley 8301
South Africa

Mobile: +27 (82) 342 9234
Tel/Fax: +27 (53) 831 2430
E-mail: asr.geology.consulting@gmail.com

1. INTRODUCTION.

ASR was instructed by Mr D.A.Goris to make a preliminary review of gold potential of Mining Certificate 8853 CM (Tete Province, Mozambique), hereafter referred as the Project.

Provided information included:

1. Several photographs allegedly taken on the site and covering some aspects of mining and concentrate recovery. Another group of photos shows offices and smelting equipment;
2. Copy of Mining Certificate and Letter of granting the certificate;
3. Copy of the Mining Operator Certificate of the Company owner;
4. A map showing the licence borders and presumably additional target block (Target hereafter) with sampling points and their coordinates. Unfortunately no grades data were provided for the collected samples;
5. Draft Budget Projection in Excel format.

This report provides summary of preliminary case study and recommendations on the way forward.

Financial analysis was not implemented for the reasons explained further in this report.

2. PROJECT LOCATION AND LICENCE VALIDITY.

Project block is located in the Tete Province (Caborabasa District) ~ 10-12 km to the NE from the border with Zimbabwe (Figure 1). Total area is equal to 218.71 Ha.

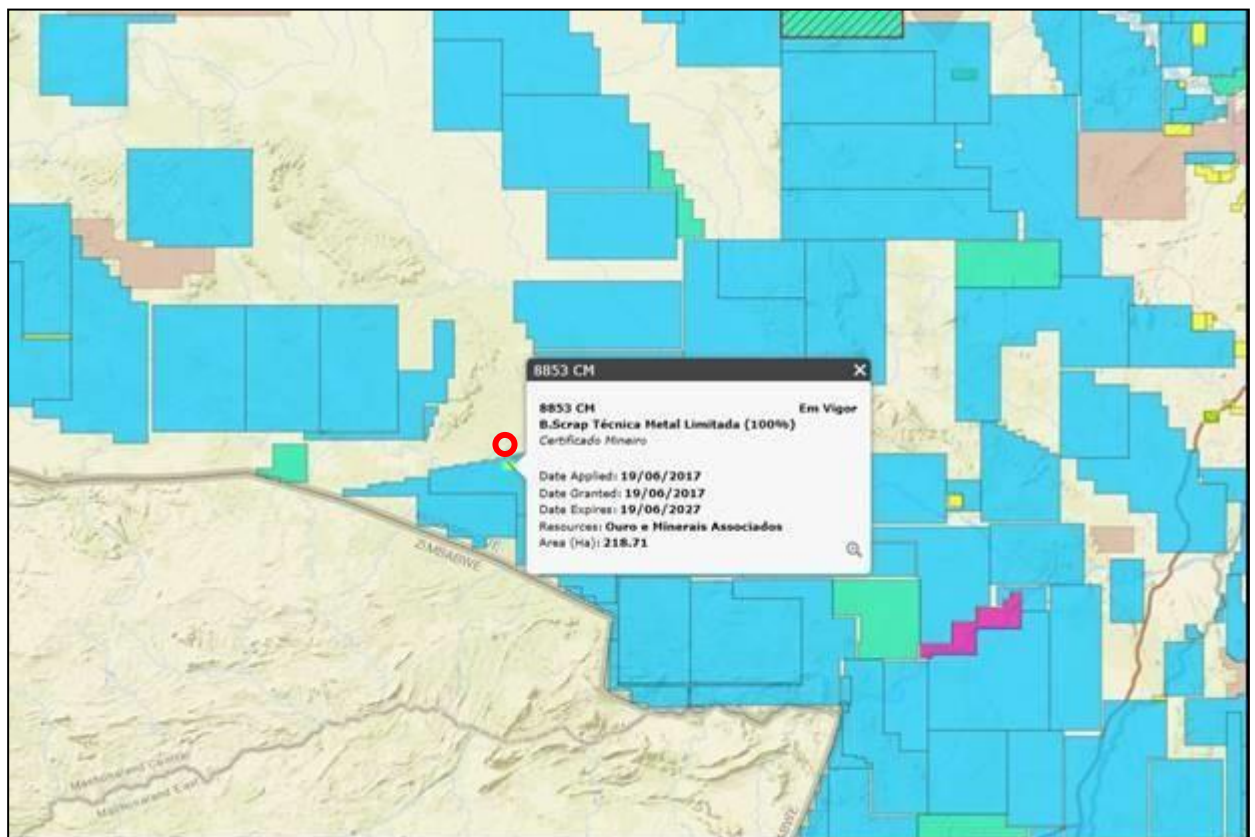


Figure 1. Project location and licence details on the Mining Cadastre Portal. Red circle – Target area open for claim.

Official website “Mozambique Mining Cadastre Portal” :

portals.flexicadastre.com/mozambique/en/ informs that the licence is valid till 19/06/2027 and issued in the name of B.Scrap Tecnica Metal Limitada. It was granted on 19/06/2017.

Luia River, well known for carrying alluvial gold is crossing the Project Block (Figure 2); total extent of the river channel within licence borders is ~ 8.5 km.

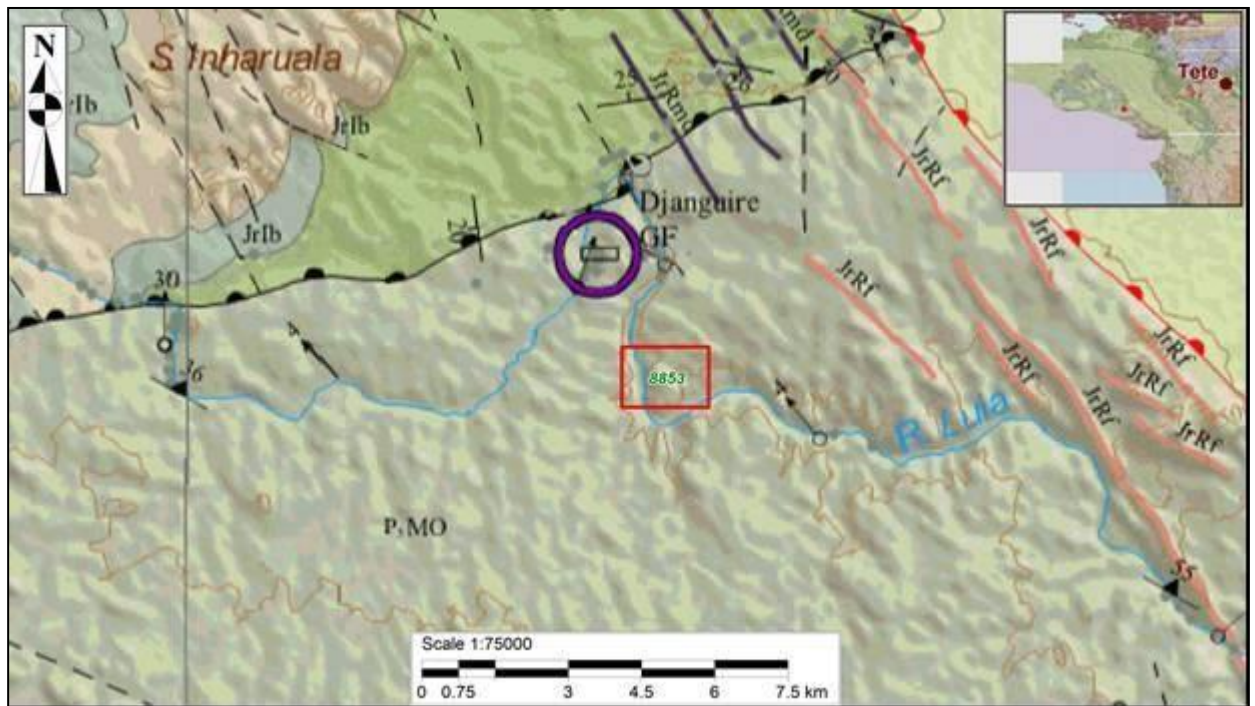


Figure 2.Project borders on geological map (1:250,000). Note Luia River crossing the block; purple circle – fluorite deposit.

3. ALLUVIAL GOLD POTENTIAL OF THE PROJECT.

Study of the Google Earth image allowed delineate alluvial gravels (terraces) area, which totals ~55.8 Ha (Figure 3).



Figure 3. Alluvial gravel targets derived from Google Earth.

Assuming average terrace gravels thickness of 2 m the model potential gravel resource can be estimated as follows (Table 1).

Additional gravel resource is concentrated in the riverbed.

The river channel width varies between ~ 145 and ~ 240 m. Google Earth image on the above Figure 3 was taken on the 5th of May 2012, i.e. in the middle of dry season at lowest water level. Conservative average channel width of 100 m at 1m thickness was used for the model presented in the Table 1.

Table 1. Potential gravels resource (tonnage).

Target	S, m2	H, m	V, m3	Tons
Target 1	41,577	2	83,154	149,676
Target 2	246,153	2	492,306	886,151
Target 3	270,258	2	540,516	972,929
Subtotal	557,988	-	1,115,976	2,008,756
Riverbed	850,000	1	850,000	1,530,000
TOTAL	1,407,988	-	1,965,976	3,538,756

No information on the grades is available. However, based on accumulated information in this part of Mozambique, we can assume that the average terrace gravel grade should be in the range between 3.5 and ~ 7.5 g/ton.

Riverbed gravels especially in the midstream section typically have elevated grades (up to several folds).

This high energy and turbulence section works like a natural gravitational concentrator. As an example licence 6607 on Revue River located ~ 90 km downstream from the Manica-Mutare Greenstone Belt (major source of gold) has grades up to 30-50 g/t in the midstream traps.

Another positive factor is that some sections of Luia River channel are crossed by natural “rifles” formed by regional strike of the layered gneisses composing surrounding area (Figure 4).

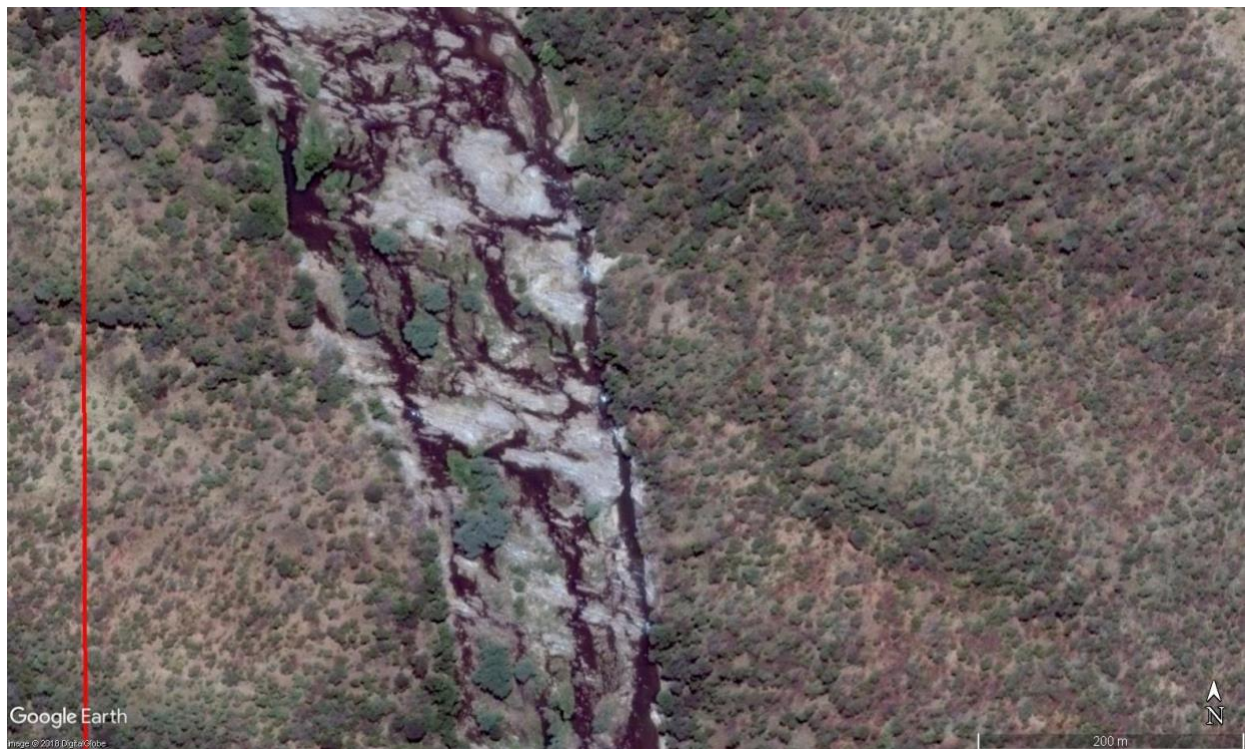


Figure 4. Natural sluice box in NW part of the Project.

Bearing the above in mind the potential model gold resource in Table 2 is extended to the grades up to 3 g/t.

Table 2. Potential model Au resource of the Project.

Model Grade	Au,kg	USD
0.3	34.13	\$ 1,297,019
0.5	56.89	\$ 2,161,699
1.0	113.77	\$ 4,323,398

1.5	170.66	\$ 6,485,097
2.0	227.55	\$ 8,646,797
2.5	284.43	\$10,808,496
3.0	341.32	\$12,970,195

4. NEW TARGET BLOCK.

Presented limited information indicates that prospecting activity concentrates in another Target block located ~ 4-5 km to the North from the Project (Figure 5).

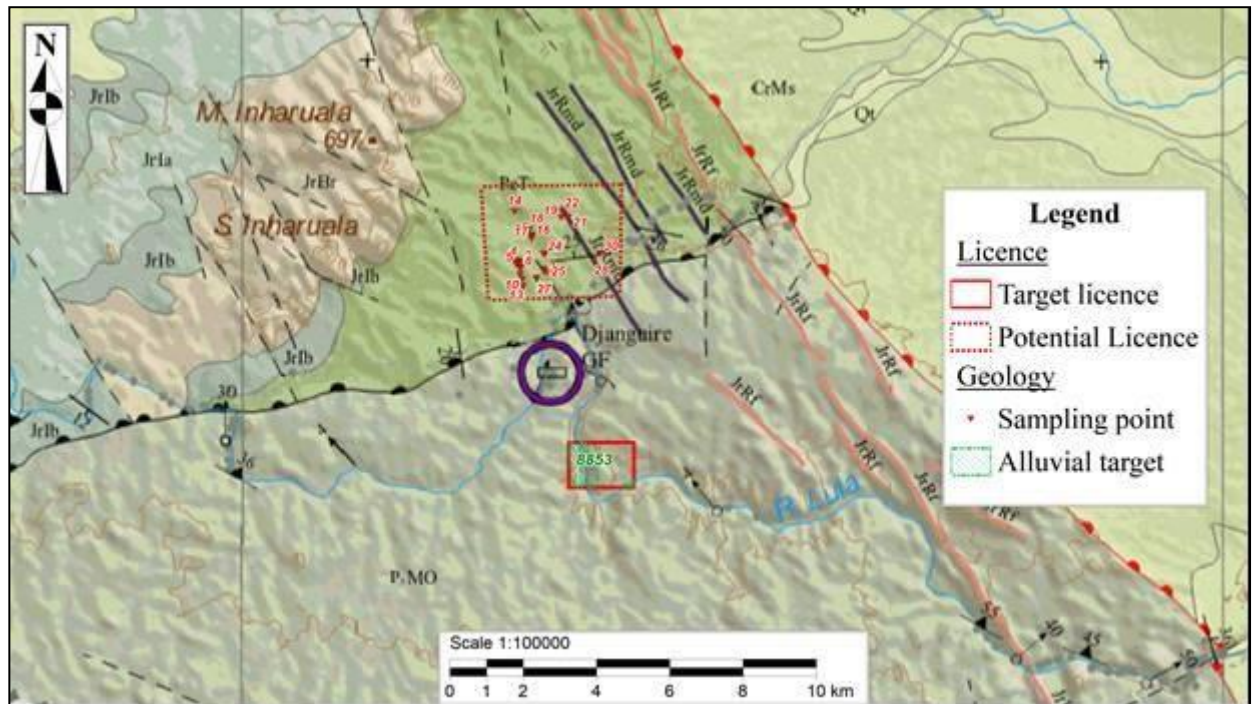


Figure 5. Relative location of the Project and Target.

Analysis of geological map indicates high potential and prospectivity for the primary (“reef”) gold deposits in this area. This is supported by some of the provided photos and concentration of sampling points shown on Figure 5.

Coarse gold visible in the concentrate (Photo 1) supports proximity of the primary source.



Photo 1. Coarse gold in concentrate. *Largest grain is ~ 3.5 mm.*

No attempt to estimate gold potential of the Target was done at this stage. The reasons are:

1. Lack of valid licence over the Target;
2. Lack of prospecting/sampling results (lithology, volumes, grades).

5. CONCLUSIONS AND RECOMMENDATIONS.

Preliminary study of the case allows concluding:

1. Project is relatively small in terms of the terrace alluvial gravels resource;
2. If the bedrock gravels are included, it becomes suitable for a medium scale mining operation;
3. Bedrock gravels can be mined by dredging, which is one of the cheapest mining techniques;
4. Target block seems to have high potential for the primary auriferous ore bodies, which cannot be evaluated with limited available information.

Recommendations are:

1. Meeting with licence holder (Mr Luis Ernesto Antonio Casquinha) and follow up site visit to verify status of the Target;

2. Negotiate agreement and urgently apply for the Prospecting Licence over the Target area in the name of JV (or newly registered Mozambican company) between Mr Casquinha and Investor;
3. Based on the outcomes of the above, prepare detailed Budget Projection, prospecting and mining plans both for Project and Target blocks.

Dr. Alexander S.

Rodionov

Diamond Geology Consultant
Prof. Nat. Sci., Reg. No
400018/2000
Geol. Soc (RSA), Min Soc. (Rus)



Tete, January 2024