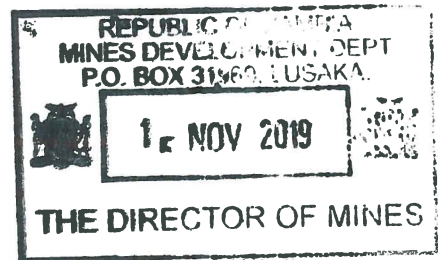


**QUARTERLY REPORT FOR  
DECEMBER 2018 - MARCH 2019**

**LICENSE NO.23493-HQ-LEL  
FOR  
BLAZE METALS LIMITED**

By G. Siame (Geologist)

MARCH 2019



Registered Office:  
Blaze Metals Limited  
Plot No 6811 Chiwalamabwe Road  
Olympia Extension  
Lusaka



## General Summary

Blaze Metals Limited holds a large scale prospecting license 23493-HQ-LEL in Solwezi in Northern part of Zambia. The LEL is for Ag, Au, Cu, Fe, Zn

## Licence

23493-HQ-LEL was obtained on 27/11/2018 and will run till 26/11/2022.

## Location

The licence is located in Solwezi District of the Northern Province of Zambia (Fig 1). The area can be reached via the Solwezi - Mujimanzovu road. It is 80km from Solwezi and 26km before Mujimanzovu across the Kafue River. The Prospecting licence occupies an area of 3067.9141ha. A 4x4 vehicle is required to navigate the predominantly bushy landscape area. The prospect lies in topographic sheet SD-35-2 Solwezi.

## Grid Reference4

It is found at grid reference 12d 40m 30.3s 26d 38m 10.4s.

The figure shows the location of the plot.

### Location Map Solwezi District

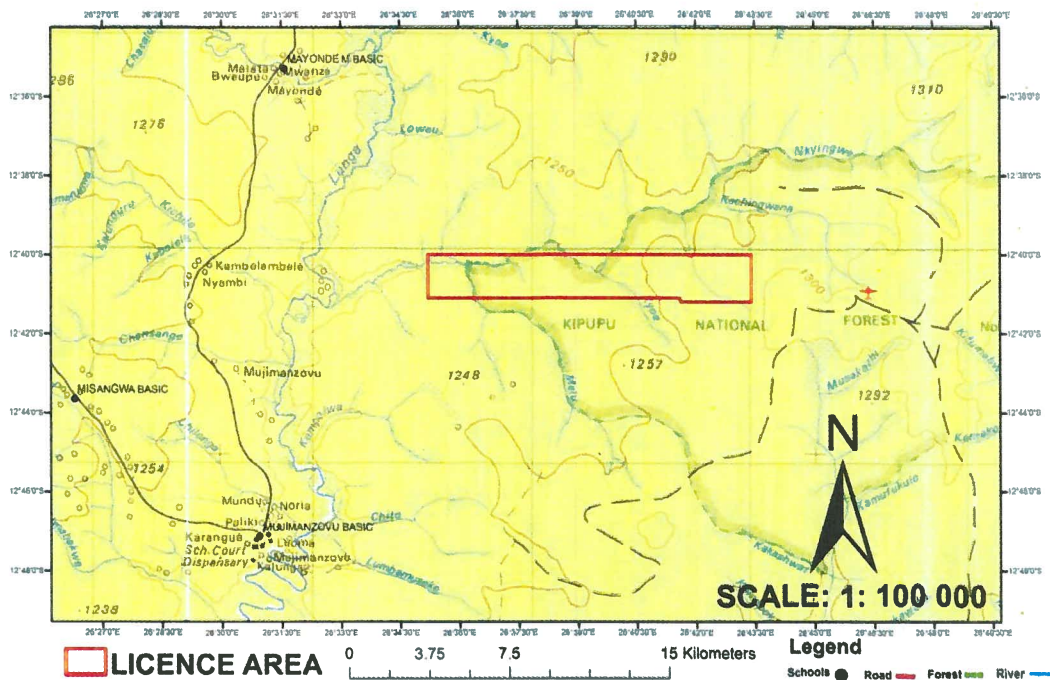


Fig. 1. Location of 23493-HQ-LEL

## Topography

The topographic altitude stands between 1000m to 1300m above sea level. The highest point lies in the western region whereas the lowest altitude lies in the central-eastern area towards the Nkyingwe River (Fig 1).

## Climate Vegetation and Soils

The area has a tropical climate with heavy rains starting from late October till April. Temperatures vary from 30°C (maximum 35°C) to 20°C during the rainy season. The cool season stretches from late May to late July with temperatures varying between 10°C and 22°C.

Miombo woodland is a 15 to 20 m high, two storied woodland with an open or partly closed canopy of semi-evergreen trees including species of *Brachystegia*, *Isobertinia*, *Julbernadia* and *Marquesiamacarour* with *Erythrophleum africanum*, *Parinaricuratellifolia* and *Pericopsis angolensis* associates (Edmonds, *op. cit.*). Grasslands associated with the drainage lines are divided into dambo (headwater valley) grassland, riverine grassland and floodplain grasslands (Edmonds, *ibid*). The termitaria vegetation and bush groups include *Miombotermitaria*, *Kalahari termitaria*, *Mopanetermitaria*, *Mungatermitaria*, *Riparian termitaria* and bush groups.

The soils are Ferralsols; well drained, deep to very deep, strong brown to yellowish red, friable, gravelly clayey soils with a high slit, clay ratio; fairly uniform texture throughout (chromi-haplic FERRALSOLS, petroferric and skeletal phase).

## Regional Geology

The Lufilian Arc extends from the Kibaran massif in central Congo, through the north-western province of Zambia to the Zambian Copperbelt and the Congo pedicle. The Solwezi area is about midway along this Arc, where the dominant trend is east-west or east-south-east. One of the most conspicuous features of the Lufilian Arc in Zambia is a line of large structural domes in which the basement complex is exposed beneath the Katanga metasedimentary cover. The greater part of the Solwezi dome, which is the most symmetrical of the domes, and the eastern salient of the Mwombezi dome, are included in the area.

## Previous Work

The geology of the area consists of one major lithostratigraphic unit, namely the Katanga Supergroup. The geology of the area has been documented by Arthurs (1974).

## **Katanga Supergroup**

The Katanga Supergroup metasedimentary rocks overlie the Basement Complex. The Katanga Supergroup is the host for copper mineralisation.

### **Copper Ore and Gold Potential**

Chalcopyrite has been recovered from the main open pit. The presence of Chalcopyrite indicates that the plot is suitable for copper-bearing minerals. Other minerals present are tennantite, bornite, and malachite. Gold can be recovered from streams in the area.

### **Gravel Ore**

The gravel ore is poorly cemented with a clayey matrix. The fragments are mainly of quartz (72%) with the remainder being argillite, goethite, haematite, and limonite.

### **Vein Ore**

The vein ore is found in hard quartz, hard quartz-malachite veins, chalcocite, chalcopyrite and bornite. The malachite is embedded in the quartz rocks and has variable size.

### **Local Geology**

The rock of Basement Complex are exposed in the cores of Solwezi dome which occupies most of the south –eastern part of Mwombezhi dome. The eastern part of which is in the North - West of the area. Elsewhere the basement rocks are overlain uncomfortably by the Katanga system.

The Basement Complex is divided into the gneiss group, which includes biotite gneisses, schisted gneisses and minor amphibolites and granite group, comprising potash granite, gneissic granites, pegmatites and migmatites. the gneiss group is older than the granite group. The best exposures are in stream beds. Particularly in the Chifubwa river valley

## Geological Map Solwezi District

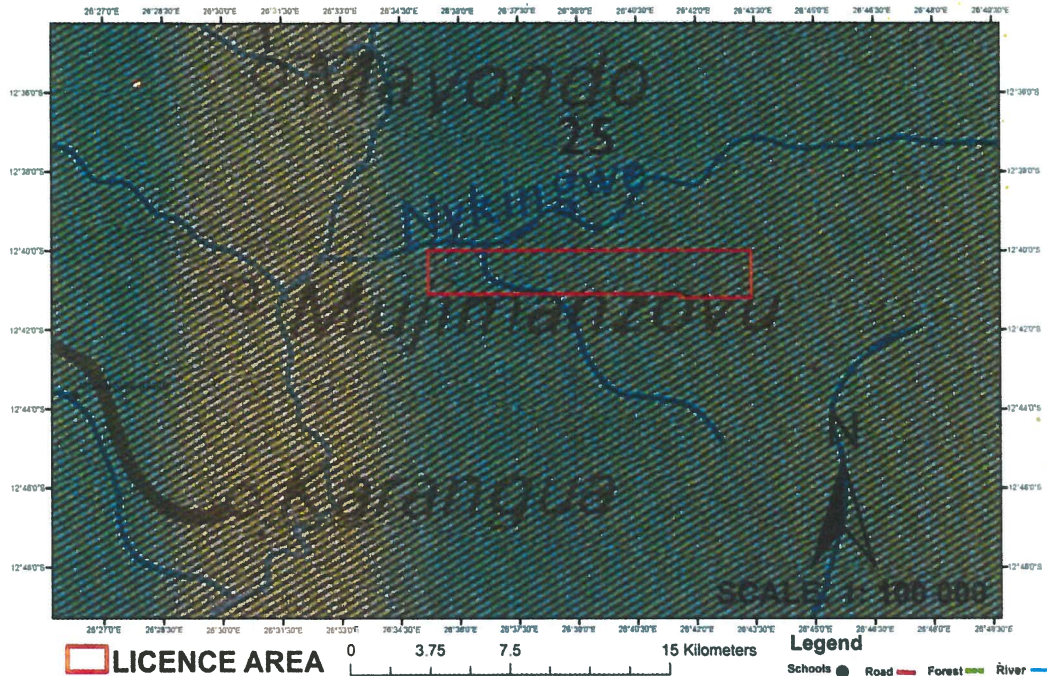


Fig. 2. 23493-HQ-LEL Geological map.

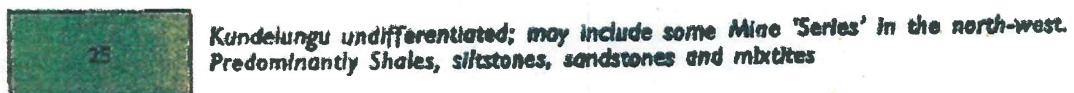


Fig. 2. 23493-HQ-LEL Geological Legend.

### Current Work

During the quarter to March 2019, work completed by Blaze Metals Limited included:

- Review of regional geological mapping, exploration activities and data sets of the licence and surrounding areas
- Desktop structural and geological interpretation leading to generation of exploration target areas.
- Preparation to conduct Environmental Project Brief (EPB) to identify impacts that would be associated with exploration activities in the area.
- Field traversing and pitting for sample collection
- Collection of 20kq rock samples
- Collection of 80 soil samples in 500ml polythene plastic bags
- Submission of samples to Geological Survey department for analysis.
- Quarterly reports to the Ministry of Mines and Minerals development.

### **Future Work**

The future work in 2019 will involve:

- Conduct an Environmental Project Brief study
- Conduct geological exploration works involving traverses, sampling, trenching.
- Data compilation and interpretation and target generation
- Reporting and planning

### **Business with Zambian Companies**

Blaze Metals Limited will stick to conducting business with Zambian companies.

### **Staff**

Blaze Metals Limited has embarked on employing many Zambian nationals as possible emphasizing local recruitment to assist in exploration.

One geologist has been employed to write quarterly reports

### **Expenditure**

<b>Details</b>	<b>Total US\$</b>
Administration	5. 320
Government Fees	1,320
Salaries/Wages	
Vehicles	
Geochemistry	2, 000
Geophysics	
Geological consultant	10,000
Consumables	310
Analyses	420
Other	210
<b>Total</b>	<b>20,580</b>

### **Conclusions**

For the quarter December 2018 to March 2019 the quarterly report has been written.

The erratic nature of the veins and the copper mineralisation implies that reserves cannot be precisely determined. The reserves can be estimated with better certainty

through detailed drilling, for example on a 5 by 5m grid covering the copper-bearing strata.

#### **Licence Coordinates**

<b>Order</b>	<b>Latitude Degrees</b>	<b>Latitude Minutes</b>	<b>Latitude Seconds</b>	<b>Longitude Degrees</b>	<b>Longitude Minutes</b>	<b>Longitude Seconds</b>
1	12	41	12	26	41	36
2	12	41	6	26	41	36
3	12	41	6	26	35	12
4	12	40	0	26	35	12
5	12	40	0	26	43	24
6	12	41	12	26	43	24

#### **Future Work**

Available data collection and desktop study of available data to know the potentiality of the area, type of deposit & Mineralisation. Follow up for pegging certificate and Environmental Project Brief (EPB). After getting pegging certificate & Environmental Project Brief EPB, Regional geological traverses and complete Exploration survey will be planned. Collection of random samples to know the trend of deposit.

#### **Sampled Results for Solwezi**

Malachite has been found in the plot. The samples were verified and valued by Geological Survey Department, Lusaka. The quality of copper ore cannot be determined by inferences. The quality of the copper ore sampled is clarity in the malachite, especially copper ore content.

#### **Work in Progress**

Collection of data and desktop study of available data to know the potentiality of the area, type of deposit & Mineralisation. Follow up for pegging certificate and EPB. After getting pegging certificate & EPB, Regional geological traverses and complete Exploration survey will be planned. Samples collection to know the trend of mineral deposit.