

# **GAMEPLAY KAMPALA LIMITED**

## P.O. BOX 36493, KAMPALA TECHNICAL REPORT ON GOLD EXPLORATION IN

## **EXPLORATION LICENCE EL00264 IN**



NOVEMBER 2021

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#### **1.0 INTRODUCTION.**

GamePlay Kampala Limited **(GPKL)** holds Exploration License No. **EL00264** measuring 185sqkms located in Kanungu district South Western Uganda.

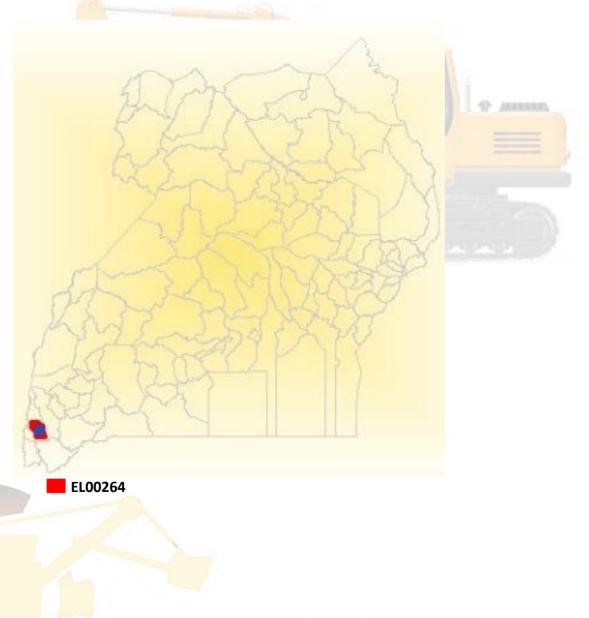
**GPKL** contracted a technical team conduct a detailed analysis of the gold economic potential in the mineral right area.

Accordingly, detailed field investigations involving geological, geochemical, and geophysical investigations have been done as reported in this technical report.

#### 2.0 LOCATION.

The Exploration license covers approximately 185km2 in the district of kanungu on topographic map sheet 58/2 and is bound by Coordinates as laid on the DGSM portal:

#### GAMEPLAY KAMPALA LTD LOCATION OF EL00264





#### Access

The area can be reached by taking the Kampala- Mbarara highway through Mbarara from Mbarara one turns to Rukungiri road for a distance of 114 kms from Rukungiri one proceeds to Kanungu for a distance of 58 kms to the NE of the project area.

The license project area is easy to access by all-weather roads and unpaved tracks.

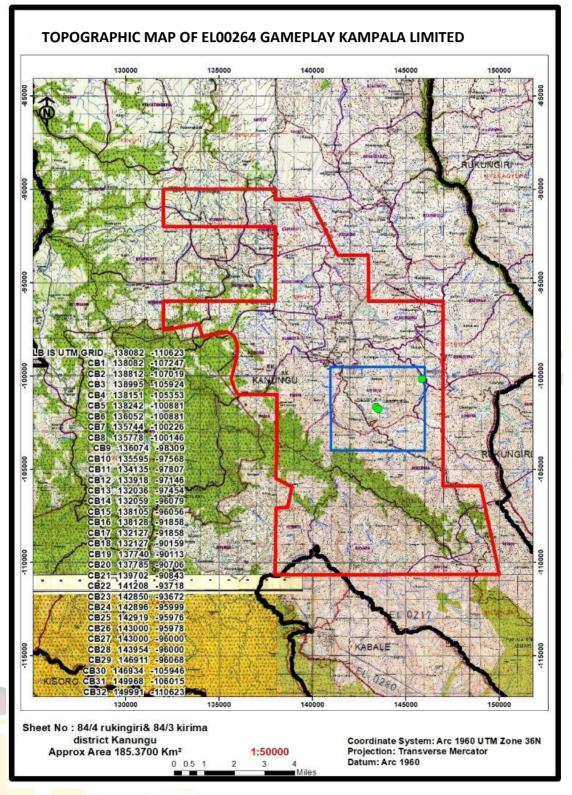


Fig 1. Map showing boundaries of the license area.PLDT 1D DIPLOMAT RDAD MUYENGAPHDNE: +256 (0)772 473959info@gameplaykla.comwww.gameplaykla.com



#### 3.0. Mineral Tenure

The Exploration license is held for a period of three years up to 2024 and is renewable in pursuant of the Mining Act 2003 and Mining Regulations 2019. *However, GPKL is working with potential partners to acquire a mining Lease for 21 years.* 

#### 4.0. CLIMATE, LOCAL RESOURCES, INFRASTUCTURE AND PHYSIOGRAPHY.

#### 4.1. Topography.

The general topography is relatively highlands, with few flat areas in the middle and northern. The area is hilly and climate of the area is of tropical type, with savannah kind of vegetation covering the surrounding grasslands, hilltops and valleys. The swamps bear very dense undergrowth that supports agriculture. The lower areas are extensively cultivated by subsistence farming.

The eastern part of map sheet area consists mostly of Proterozoic granitoids and metasediments with smooth hills and cultivated valleys. Some granite hills form inselbergs, generally rising less than 100 m above the flat to undulating plains.

#### 4.2 Climate

The area has the tropical savanna climate prevailing. The region has a favourable climate. It enjoys a bi-modal rainfall type, which varies between 1000 mm – 1500 mm per annum (moderate to high rainfall). Rainfall comes in two peaks, one from March to May and the second from September to December.

#### 4.3. Vegetation:

There are three broad categories of vegetation in the district namely; the modified equatorial type, the wooded savannah mosaic and savannah grassland.

#### 4.4. Work Force

The license lies in the covers most parts of Kanungu district. According to the population and household census the population around the Licenses area is estimate at 14,000 households with a population of about 90,000.

The population density varies greatly. The Southern part of the license is heavily populated compared to the other areas of the license. The main ethnic workforce are Bakiga and Bafumbira. Overall, the basic work force is sufficient with a high youthful population

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#### 4.5. Infrastructure

The EL lies in area with accessible roads that have been constructed to mainly aid the transportation of agricultural produce. All weather murram roads go through the EL connecting to the neighbouring districts of Kabale and Kisoro. Currently the government is building a highway connecting to Democratic Republic of Congo. The license area is very accessible.

#### **5.0. HISTORY**

#### **Historical Production**

There has not been documented historical production in the EL, although the artisanal (orpaillage) mining has probably occurred in the area for many decades.

A lot of geological work has been done in the area even before the establishment of the Geological survey of Uganda in 1921.

The first geological outlines of the area were reported by Combe, when describing metasediments of the Buganda systems as well as the Mubende and Singo granites (combe 1923).

Roe (Roee, 1944) carried out prospecting for columbite, beryl and amblygonite at the Mbale estate and found out that they were derived from one or more pegmatitic intrusions situated in the northern face of the hill.

In 1954, Taylor (Taylor,1954) reported a 50m long adit on Kyasampawo ridge/ and old artisanal workings within river valleys. Gold has been mined in this area since 1948. Taylor carried out sampling of the Adit. He cut the channel about 4cm wide and 2cm deep on the western side of the wall and took samples every after 1metre.

#### 5.1. Regional Geology

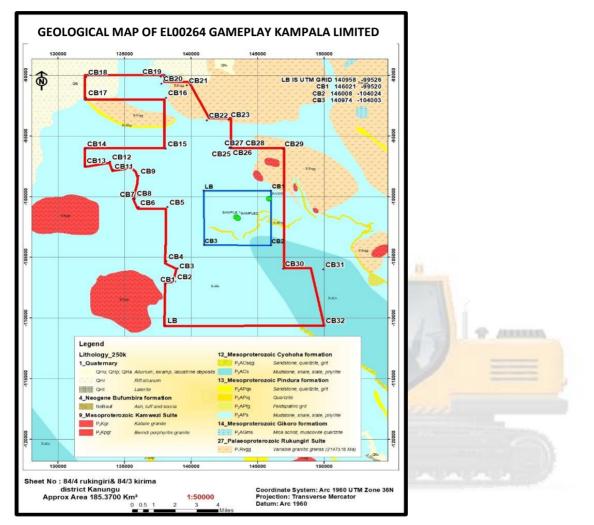
The geology of Kanungu goldfields is that of a much folded and faulted series of ancient sedimentary beds overlying more ancient complex of igneous and metamorphic rocks, the whole intruded upon by highly acidic reefs and veins, granite masses and off shoots and basic igneous injections.

Alluvial on the karagwe-Ankolean rocks formed in the stream courses, which deeply dissect the Kanungu hills Most streams are narrow, but broad swamps also occur. Gravels may be up to 2.13m thick but many are thinner and too deeply covered by overburden to be workable (Barnes 1961). The country rocks of the gold area are dominantly sandstone (the Lubare quartzite) of the Kigezi series, which have been estimated to be 1829m thick in some places. In general, the extent of the goldfield is confined within the limits of the quartzite (Barnes 1961)

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In general, mineralization across the region is largely attributed to intrusions that brought heat and fluids enriched with gold and other valuable mobile elements while deformations (folds, faults) provide essential conduits for mobilization.



### 5.2. Project Geology

Fig 2. Map showing the geological outlay of EL00264

### 6.1. Exploration

GPKL had started on ordinary consultations with all stake holders that include LC5 Chairpersons, Resident District Commissioners, Chief Administrative Officers and District Police Commanders in the Kanungu District. This will be continuous concurrently with the exploration activities. Prior community sensitization and geological reconnaissance has been done in certain areas. Geological mapping, and rock and soil geochemical sampling have been done partly and results have been taken for further analysis.

Digging of pits with a cumulative depth of 58m and collecting about 10 pit samples was done. Digging of trenches covering a total depth of 600 metres and collection of channel samples has been done.

Stream sediment sampling has been done and results are awaiting further laboratory analysis.



A few geophysical maps have been generated as derived during the airborne survey with the Sustainable Management for mineral resources project under the geological survey and mines department.

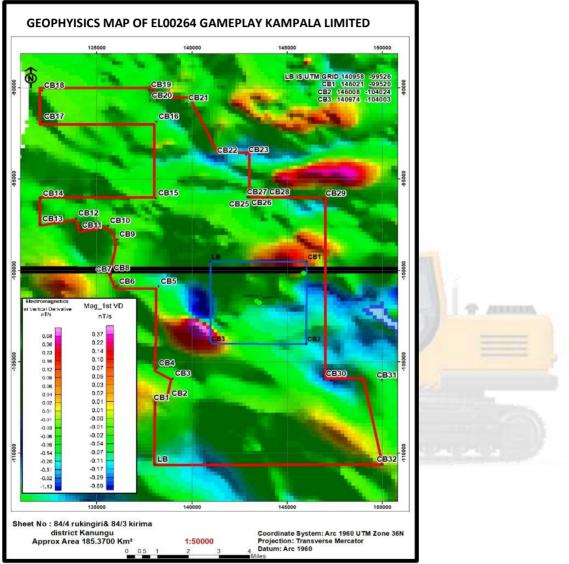


Fig 3. Map showing the geophysics of EL00264

## 6.1. Mineralisation.

Mineralisation of this area sampled is defined as 'epithermal gold mineralization' and from the scan materials there is one big reef of about 7.1 meters separated into reflates by phyllites of a diameter of about 4 meters.

It is also seen that in the area to the north of the reef, great shearing took place hence generating a lot of gold in shears that cut to SSE and a new trending structural feature; see table below that shows leading mineralized point and zones explained by the scan.

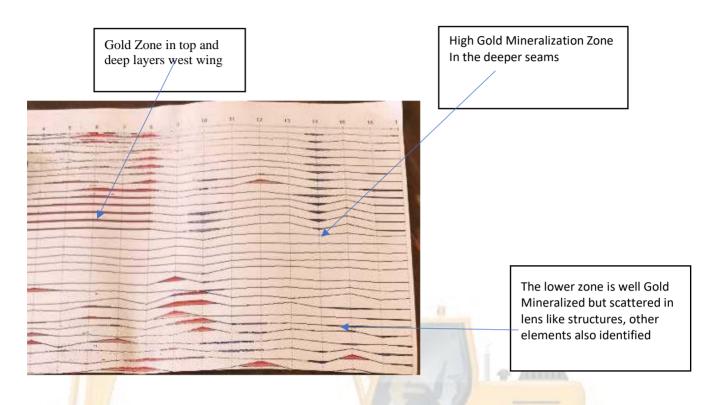


#### **SCANNED RESULTS**

	CO-ODINATES	STRUCTURE	DEPTH	MINERALIZATION
1.	Coordinates Recorded Bedding 110/290(degrees)EW Dipping 90(degrees) ML 21.8% MT 4.8g			
2.	Coordinates Recorded GPS 3M	Quartzite lens type	Dips 90% NE	94.9% in the soil concentration target gold per ton 4.9g
3.	Coordinates Recorded GPS 4M (ML 22.8%, MT 4.4g) 120M	Sheared zone	Altered structure heavily weathered	91.9 gold concentration target gold 3.1g/t
4.	Coordinates Recorded GPS 3M ML 21% MT 4.4g Mineralization zone 36/23(degrees) SE (sheer zone) Bedding 270/90 SE Dipping 60 Working (zone) 22ft D 3M	Quartzite reef separated by 4inche phyllites	Bedding SE Dipping 90(degrees)	91% gold concentration in the soil Giving 8.9g/t
5.	Coordinates Recorded GPS 3M MC 79 MT 372g 200M	Quartzite generating Phyllites highly metamorphosed	Dips at 90% SE with bedding 210(degrees)SE/NE 30(degrees)	99.2% of gold and soil (concentration) Which can generate 31g/t (degrees)

Table 1: The scanned area results around Katerampugu areas where the main vein (reef)was identified.





The gold grains also occur in river sediments washed from the quartz stringers originally embedded in granulites and amphibolites.

#### 7.1 LABORATORY RESULTS.

The samples collected from the field were properly bagged and labelled and dispatched to assay laboratory for analysis of gold. The analysis results obtained from the laboratory were as follows:

**Table 7.1.** Shows analytical results for gold for soil, panned and rock samples picked in the license area.

Sample Identification	Au/ppm
Pan/01	16.3
Pan/02	28.5
Pan/03	15.6
Pan/04	30.3
Soil/01	19.2
Soil/02	13.7
Soil/03	4.2
Soil/04	3.8
Soil/05	13.5



RCK1	12.3
RCK2	17.8
RCK3	10.6

#### Artisan Mining Activities.

EL00264 has a number of artisan mining activities that cut across the license. The gold recoveries estimated throughout the License are at 1300gms per week. Gameplay Kampala Ltd is in final arrangements help of Directorate of Geological Survey and mines of relocating all artisan and small-scale local miners to gazated location to pave way for large scale mining.

#### The pictures below show on of the artisan gold mining activities in the area.



The cumulative gold recovered by artisan miner's weekly is approximately 1300gms despite rudimentary processing methods.







The gold recovered from the rudimentary processing method is a significant pointer to the high potential of reserves in the area. This calls for detailed feasibility study.



#### **Conclusion and recommendations:**

The license area is highly prospective for commercial gold mining and this has proved by the sporadic panning by the local artisans. The geological setting within the license area is favourable for gold mineralisation as shown by high gold concentrations in rivers and gullies.

- An in-depth feasibility study of the area is highly recommended to determine the structure modelling of the area and the mineral reserve estimates.
- The license area has very high alluvial gold prospects along the river that cuts across the license.
- Improvement in the mining and processing technologies will significantly increase the gold recoveries in the area.
- 2 A scheme for gold mining lease development highly recommended.

