

Exclusive
Prospecting Licence
(EPL) 264, Embu
County, KENYA:



by Minex Ltd.

## Coltan discovered in Kenya - Mining Minister Salim Mvurya

25 January 2024

By Gloria Aradi, BBC News, Nairobi





Coltan is refined into tantalum, which is then used to manufacture smartphones and other electronic devices

Kenya has discovered its first deposits of the valuable mineral coltan, the mining minister has said.

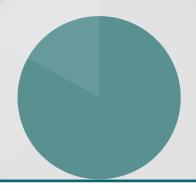
Members of Minex Ltd. made this discovery as early as 2005 through numerous geological expeditions based on academic knowledge and methodologies. This yielded six Mining Location licenses (all still valid) and eventually to the registration of EPL 264 with the Government.

Besides coltan the company has evidence of quartz, amazonite, beryl, rare earth elements (REE) amongst other industrial minerals. These minerals were identified using geochemical analyses employing AAS, XRF and XRD in local laboratories and subsequently confirmed at Actlabs, a certified laboratory in Canada.

Minex also purchased and holds title

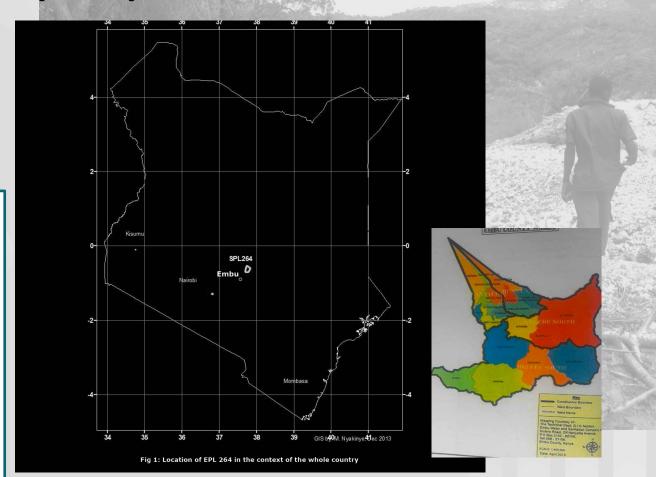
deeds on over 300 acres of the land holding the most significant deposits identified to date.

## EPL 264: Embu County, Kenya

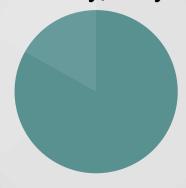


This EPL (Exclusive Prospecting License) covers an area of approx, 200 km² in Eastern Province, Kenya. It was successfully applied for and granted in 2012.

Prior to 2005, the identified minerals in these pegmatite formations were beryl-based gemstones (aquamarine and reportedly emerald, tourmalines, quartz, garnets and amazonite) and industrial minerals such as mica schists, feldspars, etc. In around 2005 evidence of columbite and tantalite (coltan) were identified. Note also that the area covers many mining operations, mostly artisanal, which have been (and continue to be) active for decades, mostly extracting beryl gems, mica and now small quantities of coltan.

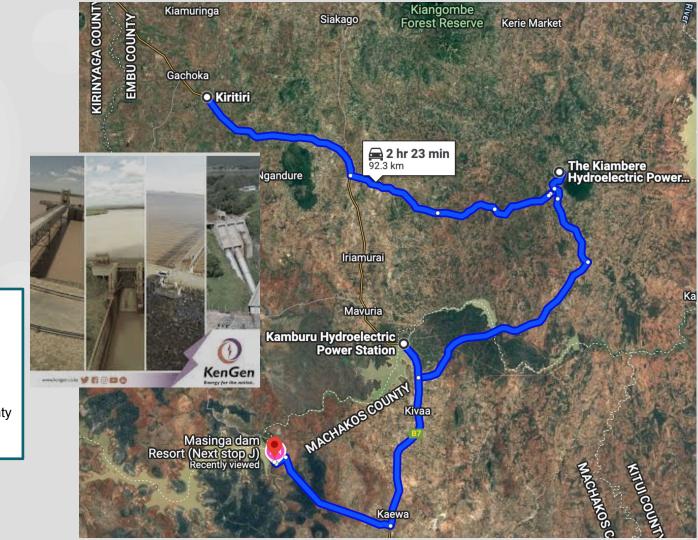


# EPL 264: "The Context" Embu County, Kenya

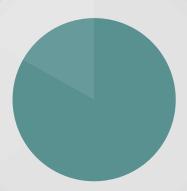


This area is close to 3 major hydroelectric power plants (Kamburu, Kiambere and Masinga Dams), the closest being only about 16 km, and is connected by all weather roads

According to the 2019 census Embu County has a population of 608,599 people. It includes a couple of busy metropolitan towns including a University, hospitals etc.



### EPL 264: Geological Report 1



Following securing the EPL, Minex commissioned the first geological study that employed geochemical analysis on samples taken from the areas shown (green dots) and ASTER image analysis to better understand the nature of the mineral content in the EPL.

Besides coltan the company has evidence of quartz, mica, amazonite, beryl, rare earth elements (REE) amongst many others. These minerals were measured using geochemical analyses in local laboratories using AAS, XRF and XRD, subsequently confirmed at a certified laboratory in Canada.

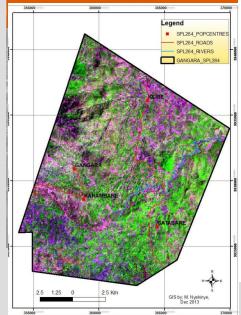
A REPORT ON GEOLOGICAL AND MINERAL POTENTIAL ASSESSMENT OF MBEERE EPL264

PHASE I

PREPARED FOR:

KOORO MUGWUKU/GRACELAND MINES LTD

DECEMBER, 2013



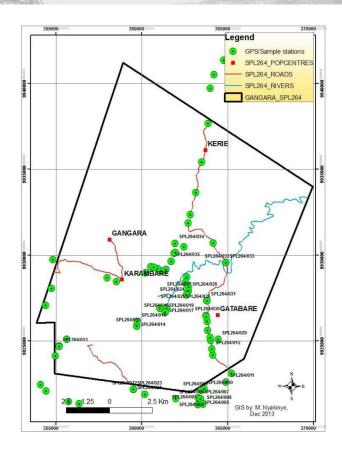


Fig 7 A map showing sample locations and GPS stations within EPL264

### EPL 264: Geological Report 1



The report concluded as follows:

#### **6.0 CONCLUSION AND RECOMMENDATIONS**

The current initial 10-day survey highlighted the geology and potential mineral resources occurring within the EPL 264 area. Areas with known mineralisation were mapped and catalogued. ASTER imagery was acquired, processed, analysed and interpreted to a for one of the foundation data for subsequent mineral exploration effort within the EPL. The ASTER interpretation map delineated areas showing both mica and hydrothermal alteration.

It is recommended that a more extended field season, possibly of 3 weeks be undertaken with the objectives of ground-truthing of the ASTER image interpretation anomalies, paying more close attention to quartz and/or pegmatites as well as more detailed geological mapping, especially of the areas identified as potential for priority economic minerals like columbite and mica. Potential for other economic minerals, note yet established to occur within the EPL, such as copper and other base metals will be evaluated in an effort to build a mineral potfolio that could warrant application

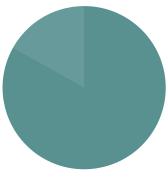
For KOORO MUGWUKU by M. Nyakinye

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#### EPL264 Geological and Mineral Potential assessment report I

for Mining Location Licenses of areas of the EPL to enable immediate commencement of mining operations.

EPL 264: Geological Report



Second more in-depth report

A second, far more detailed 459 page report was commissioned in Oct 2018 which revealed far greater detail in terms not only of geochemical analysis (XRF and AAS) but also x-ray diffractometry (XRD). The report also applied GIS software to represent the geology of the license region and summarises the academic geological literature on the area to provide sufficient context. Evidence of numerous instances of coltan were identified, as were numerous rare earths and other industrial minerals. The report also concludes that tungsten and molybdenum were also identified in the mafic and ultramafic intrusives, as were evidences of gold and platinum. The Executive Summary concludes...

"...the area has significant occurrences of mineralisation of great interest...."

## **Minex Directors**







- James Kooro Mugwuku Chairman Small-Scale Miners Association, Eastern Region, (our EPL was in his name)
- 2. Harrison Maina Land developer and businessman (Fund Raiser)
- Prof. Daniel Ichang'i (Ph.D. McGill Univ), Economic Geologist, Chairman of Minex JV partner company GMM, Former Chairman Geological Society of Kenya, Former Chairman Department of Geology, University of Nairobi, Former Chairman of the Assoc. of Professional Societies of East Africa
- 4. Arch. Muraya Kariuki, Director of Minex JV partner company Mantex Ltd.
- 5. Dr. Willie Nyambati (Ph.D.), Chief Admin Japan International Cooperation Agency, Financial Transaction Advisor
- Dr. Kamau Gachigi Materials Scientist (Ph.D. Penn State Univ, USA), Director Gearbox Europlacer (electronics SMT manufacturing firm), founder, Gearbox Pan African Network, former Chairman NITA





