TECHNICAL REVIEW OF THE IRON AND GOLD PROJECT OF THE TELE RIVER

Prepared for : Mbomo-Mountains sarl

Andre C. Lambert, EurGeol

TABLE OF CONTENTS

1. SUMMARY

Mbomo-Mountains sarl is the owner of three exploration permits (*Permis de Recherche:* "PR"s) covering 1200 km2 in the « Province Orientale » of the Democratic Republic of Congo (DRC). Mbomo-Mountains sarl is a company under registration process in Kinshasa, DRC.
The properties are located approximately 200 km to the NNE of the regional capital of Kisangani on the Congo River.
The project area is part of the granite-greenstones complex of DRC which drapes the whole north of the country; it includes an irregularly shaped greenstone patch, "the Tele belt", resting over a shield of granites and migmatic gneisses.
The name "Mbomo-Mountains" refers to a rosary of ENE hills , raised over the Tele river plain (Mbomo means "iron" in local Babua language).
The project shows definite potentials for gold and iron resources.

Gold: the colonial gold mining activity is recorded in the area since 1911. The early activity was mainly aiming at alluvials.
In the North DRC Complex, several other areas share the same greenstone belt context and are housing large primary accumulations of gold. Gold is associated either to shear zones or to disseminations near intrusives. In Mbomo area, the forest is very thick and combines with deep surficial weathering . Logistic cost for colonial exploration was likely heavier in Mbomo than in the other greenstones. The recorded production in the area, from 1911 to 1946, is about 2 tons of gold. 73 diamonds are also reported.
Exploration for primary deposits did occur in the beginning of World War 2, but only a few references to gold are associated with quartz veins, eluvial or disseminated deposits.
There are no historical Mineral Resource and Mineral Reserve gold estimates on these properties, except for alluvials; these do not exceed a few hundred kgs Au.
Since discovery, Gold has been mined consistently by artisanal diggers.
During the visit undertaken in 2006, the author has found numerous artisans digging sites revealing consistent gold presence and some episodic diamonds. At that time local production, recorded for the purpose of tax, was estimated at about 300 kgs Au per year.

Iron: a large exploration effort has been invested over Mbomo-Mountains, during the seventies. This was financed by the European Community and performed by SICAI, a group of Belgian and Italian consultants.
An historic iron resource was published for M'Bomo Hills.
In the records, the itabrites (metamorphosed banded iron formation) potentially extend over a 40 km strike length (as defined by geomorphological interpretation and field mapping). The initial assaying suggests that the mineralized material may be suitable as Direct Shipping Ore (DSO) . SICAI and related estimates, indicate between 500 and 900 Mt of mineralized material, grading over 63% Fe .
Although carried out according to USGS and USBM provisions of 1943, the potential quantity and grade remain to be ascertained in the frame of present resource definitions (e.g. compatible with 43 -101 Instrument).

There was no exploration progress in the property during the last decade as the project area was more or less frozen following legal actions.

A desk study was completed by Geopal3D, at the request of Mbomo, which included interpretation of public and restricted data (Royal Museum of Tervuren archives); study of satellite data including Goce, Landsat, Aster, ALOS and Sentinel plus a re-interpretation of observations collected in the field in 2006.

On that basis,Geopal3D has the opinion that the PRs referred to, in this report, are highly prospective and deserve further exploration work.
Respective iron and gold exploration programs are proposed at the end of the report .
With the ambition to reach pre-feasibility target, the costs amount to over four million usd for the iron theme and six million usd for the gold exploration.

2. INTRODUCTION

Mbomo-Mountains sarl (Mbomo) is a company in the process of being registered in Kinshasa, the capital city of the Democratic Republic of Congo (DRC). This report covers three properties owned by Mbomo in the Oriental province of the DRC which, based upon historical exploration and artisanal mining records, are considered prospective for primary gold deposits and iron.
Mbomo has employed Geopal3D to compile and review the historic data of the property and issue a technical report . Geopal3D is familiar with the area as having worked there at several occasions ; in particular the permits themselves were visited during a period of one week in June 2006 and geochemical surveys were undertaken in the immediate vicinity later in 2009-2010.

This Technical Report gives Geopal3d present understanding of the property geology and mineralizations potential and has been prepared in order to comply with the requirements for Mbomo-Mountains sarl to raise funds for further exploration.
The business of mining and mineral exploration, development and production by their very nature contain significant operational risks. The business depends, amongst other things, upon successful prospecting programs and competent management. Profitability and asset values can be affected by unforeseen changes in operating circumstances and technical issues.
Factors such as legal title, political and industrial disruption, currency fluctuation and interest rates could have an impact on Mbomo-Mountains sarl's future operations. The majority of these factors is, and will be, beyond the control of them or of any other operating entity.

2.1 Terms of Reference

Geopal3D was commissioned by Mbomo-Mountains sarl to prepare an updated Technical Report on three gold exploration properties held directly by Mbomo Mountains sarl.

2.2 Geopal3D

Geopal3D is an independent consulting practice. It has more than 30 years experience in the assessment and evaluation of mining projects and is member in good standing of appropriate professional institutions.
Andre Lambert, manager of Geopal3D, is presently retained as geologist for an undetermined period by Mbomo.
Lambert is a specialist in the fields of geology, exploration and Mineral Resource and Mineral Reserve estimation and classification. He has practiced as a geologist for 40 years. Lambert holds a B. Sc. Honours degree in Geology and Mineralogy and is a Member of the European Federation of Geologists with EurGeol accreditation.

2.3 Sources of Information

Geopal3D was provided with full disclosure of Mbomo-Mountains sarl exploration information on their properties. Geopal3D maintain a database of relevant geological and exploration data about DRC since more than 20 years.
Historic records on the projects, such as old reports and plans prepared by Forminiere or Société Minière de la Tele were consulted in DRC and in Museum for Central Africa in Tervuren. Other sources of data include public domain information.

2.4 Site Visit and Field Involvement

The author of this report visited the Exploration Permits from June 7 to June 13, 2006.
In preparing this Technical Report, reliance was made upon information on the exploration properties assembled by Geopal3D and by the Royal Museum of Central Africa, Tervuren, Belgium.

TABLE 1: List Of Abbreviations

The currency used in this report is USD, unless otherwise noted.
“M'Bomo” and ”Mbomo” naming are equivalent. “Baboa” and “Babwa” are equivalent.

a	annum	kWh	kilowatt-hour
amsl	above mean sea level		
A	ampere	L	litre
bbl	barrels	lb	pound
btu	British thermal units	L/s	litres per second
°C	degree Celsius	m	metre
C$	Canadian dollars	M	mega (million); molar
cal	calorie	m^2	square metre
cfm	cubic feet per minute	m^3	cubic metre
cm	centimetre	µ	micron
cm^2	square centimetre	MASL	metres above sea level
d	day	µg	microgram
dia	diameter	m^3/h	cubic metres per hour
dmt	dry metric tonne	mi	mile
dwt	dead-weight ton	min	minute
°F	degree Fahrenheit	µm	micrometre
ft	foot	mm	millimetre
ft^2	square foot	mph	miles per hour
ft^3	cubic foot	MVA	megavolt-amperes
ft/s	foot per second	MW	megawatt
g	gram	MWh	megawatt-hour
G	giga (billion)	oz	Troy ounce (31.1035g)
Gal	Imperial gallon	oz/st, opt	ounce per short ton
g/L	gram per litre	ppb	part per billion
Gpm	Imperial gallons per minute	ppm	part per million
g/t	gram per tonne	psia	pound per square inch absolute
gr/ft^3	grain per cubic foot	psig	pound per square inch gauge
gr/m^3	grain per cubic metre	RL	relative elevation
ha	hectare	s	second
hp	horsepower	st	short ton
hr	hour	stpa	short ton per year
Hz	hertz	stpd	short ton per day
in.	inch	t	metric tonne
in^2	square inch	tpa	metric tonne per year
J	joule	tpd	metric tonne per day
k	kilo (thousand)	US$	United States dollar
kcal	kilocalorie	USg	United States gallon
kg	kilogram	USgpm	US gallon per minute
km	kilometre	V	volt
km^2	square kilometre	W	watt
km/h	kilometre per hour	wmt	wet metric tonne
kPa	kilopascal	wt%	weight percent
kVA	kilovolt-amperes	yd^3	cubic yard
kW	kilowatt	yr	year

3. RELIANCE ON OTHER EXPERTS

This Technical Report has been prepared by Geopal3D using information gathered by various sources on the project area. In the preparation of this report, Geopal3D has utilized updated information relating mainly to the latest legal tenure issues and past and future exploration expenditure provided to them by Mbomo sarl.
Where possible, Geopal3D has verified this information from independent sources after making due inquiry of all material issues that are required in order to comply with the various reporting codes.
Mbomo sarl has warranted that they have openly provided all material information to GEOPAL3D, which, to the best of their knowledge and understanding, is complete, accurate and true, having made due inquiry.

Numerous references herein are given to the SICAI consortium report, in the case for iron. The relevant SICAI reports were written under supervision of Paul Raucq.
Late P. Raucq was a director of Cometaux/NRC, a consulting firm where the author started his professional career . At that time the author had frequent contacts with P.Raucq but did not discuss the iron project specifically. The opinion is however that P.Raucq did a relevant job.

4. PROPERTY DESCRIPTION AND LOCATION

The group of three leases discussed in this report cover a surface of about 1200 km2. The leases are located a little less than 200 km to the NNE of Kisangani town. Administratively they belong to the « Province Orientale » and straddle the « Tshopo » district to the south and the « Bas Uele » district to the north. The territories it covers are Bambesa and Buta to the north and Banalia to the south.

TABLE 2: Permit 1323 coordinates

Titre			Coordonnées des sommets					
			Longitude			Latitude		
N°	N° Carte	Sommets	Degré	Minute	Seconde	Degré	Minute	Seconde
1323	N2/25	A	25	30	00	02	03	30
		B	25	30	00	02	10	00
		C	25	32	00	02	10	00
		D	25	32	00	02	16	00
		E	25	32	30	02	16	00
		F	25	32	30	02	16	30
		G	25	40	00	02	16	30
		H	25	40	00	02	03	00
		I	25	38	00	02	03	00
		J	25	38	00	02	03	30

TABLE 3: Permit 1324 coordinates

Titre			Coordonnées des sommets					
			Longitude			Latitude		
N°	N° Carte	Sommets	Degré	Minute	Seconde	Degré	Minute	Seconde
1324	N2/25	A	25	51	00	02	10	00
		B	25	51	00	02	18	00
		C	25	51	30	02	18	00
		D	25	51	30	02	22	30
		E	26	01	00	02	22	30
		F	26	01	00	02	17	30
		G	26	00	30	02	17	30
		H	26	00	30	02	12	30
		I	26	00	00	02	12	30
		J	26	00	00	02	10	00

TABLE 4: Permit 1325 coordinates

Titre			Coordonnées des sommets					
			Longitude			Latitude		
N°	N° Carte	Sommets	Degré	Minute	Seconde	Degré	Minute	Seconde
1325	N2/25	A	25	40	00	02	05	00
		B	25	40	00	02	16	30
		C	25	43	30	02	16	30
		D	25	43	30	02	16	00
		E	25	51	00	02	16	00
		E	25	51	00	02	10	00
		E	25	50	00	02	10	00
		F	25	50	00	02	05	00

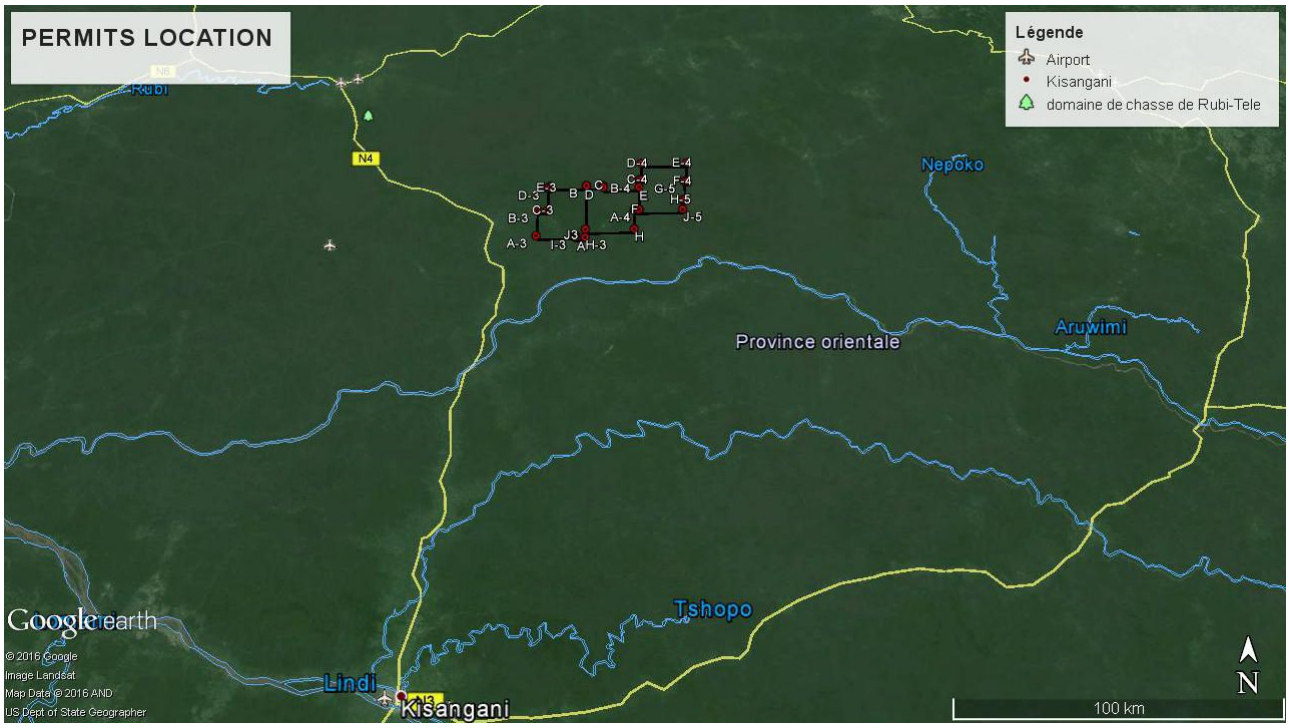


FIGURE 1: Permits Location
The properties boundaries are not pegged yet (this is mandatory following art 482 of the règlement minier).

<u>Geopal3d has carried out no due diligence in DRC on the title holding.</u>

Legal problems have hampered progress in this permit since more than a decade.
The permits were held initially by Ruby River sarl.
The first legal suit was between Iron Mountain company (Dan Gertler) and Ruby River. A decade ago, Iron Mountain convinced the local authorities to dismiss the rights of Ruby. Ruby reacted and lodged a civil action. On August 29 2016, a court decree was published , favourable to Ruby, and was immediately transmitted to the Cadastre for the return and regularization of their titles.
A second conflict was also brewing between Ruby directors, about their respective compensations, and was brought to court shortly after the first verdict.
This second case has been running until September 2017 and is now settled at the advantage of a group of shareholders led by Eng. Pol Huart.
The relevant legal documentation is available on P. Huart's website: http://mbomo-mountains.com/.
As the legal ownership question is presently settled it is clear that real work may and will be undertaken on the permit.

In DRC, the mineral rights are issued as Permis de Recherche (PRs) or Exploration Permits by the Cadastre Minier (CAMI), a department of the Ministry of Mines of the Government of the DRC. A new Mining Code, Reglement Minier (Mining Regulations) financed by the World Bank, was approved in July 2002 (Law 007/2002) and released in March 2003.

Research permit (Permis de recherche PR)

A research permit provides the exclusive rights to its holder, inside its mining perimeter, to conduct exploration activities for the minerals for which the permit is awarded.
The maximum mining area that can be granted for a research or exploitation permit is 403.7 km², while the maximum mining area that can be held by one person and his or her affiliated companies is 20,000 km².

- It can be obtained in a maximum of 47 calendar days from the date of filing the request, while the approval of the environmental mitigation plan can be obtained in a maximum of 24 calendar days from its filing.
- It is granted for four years for precious stones and for five years for other minerals, at each renewal, half of the surface must be relinquished.
- The holder of the research permit must commence the exploration activity within six months from the date of issue of the permit.
- Each permit is divided in " carrés miniers", the maximum number of "carrés" in a PR is 471. The length of a " carré" side is about 926m and the maximum authorized surface for a PR is thus of 403.7 km2.

Exploitation permit (PE)

An exploitation permit provides the exclusive right to its holder to conduct exploration, development, construction and mining activities for those minerals for which the permit is given. It also allows its holder to build the installations and infrastructure required for the mining exploitation, use the water and forestry resources inside the mining perimeter, and process, transport and market the minerals extracted from the mining perimeter.

- An exploitation permit can be obtained in a maximum of 252 calendar days, including the time required for the environmental review.
- To obtain an exploitation permit, the party is required to transfer 5 percent carried interest to the government.
- There are three types of exploitation permits:

– Exploitation permit: It is a standard, large-scale operation permit that is granted for 30 years. It can be renewed for 15 years for as long as the deposit can be mined.
– Tailings exploitation permit: It is similar to the exploitation permit and is granted for fie years. It can be renewed for fie years for as long as the tailings can be mined.
– Small-scale exploitation permit: It is given for investments requiring $100,000 – $2,000,000 for exploitable reserves having a mine life of less than 10 years and the operations of which can be mechanized. It is granted for a maximum of 10 years and cannot be renewed beyond 10 years from its date of issuance, but extension can be obtained.

The holding costs calculated for the group of the three permits are:

TABLE 5: annual payments for the various types of permits calculated for the effective surfaces

nbre de carrés	1413	
Types de permis	Frais à payer	annual cost
PR (Permis de recherche)	3,06$/carré pour les 2 premières années	$4 324
	31,69 USD/carré pour les deux autres années	$44 778
	52,10 USD/Carré pour les 2 ans du premier renouvellement	$73 617
	149,22 USD/Carré pour les 2 ans du deuxième renouvellement	$210 848
PE (Permis d'exploitation)	511,09 USD/Carré et par an	$722 170

No environmental liabilities are known.

5. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The area is covered by a dense tropical forest with a few clearings of savanna, climate is tropical wet.
At the time of the visits the regional war was just terminated and the local resources were very poor. Agriculture was only for subsistance and cattle was almost absent.
The conditions have now improved substantially. In addition to agriculture, the local Babwa people live from small game hunting and gold mining. With peace, new roads and better communications facilities, the prosperity should increase. Timber exploitation should also develop.

Topography is relatively flat, except for the Mbomo Hills, made of banded ironstones formations (BIF) which dominate the landcape with up to 200m altitude difference (FIG 24): the large rivers flow at about 500m altitude while the Mbomo mountain peaks over 700m.
The leases are located 200 km to the NNE of Kisangani town.

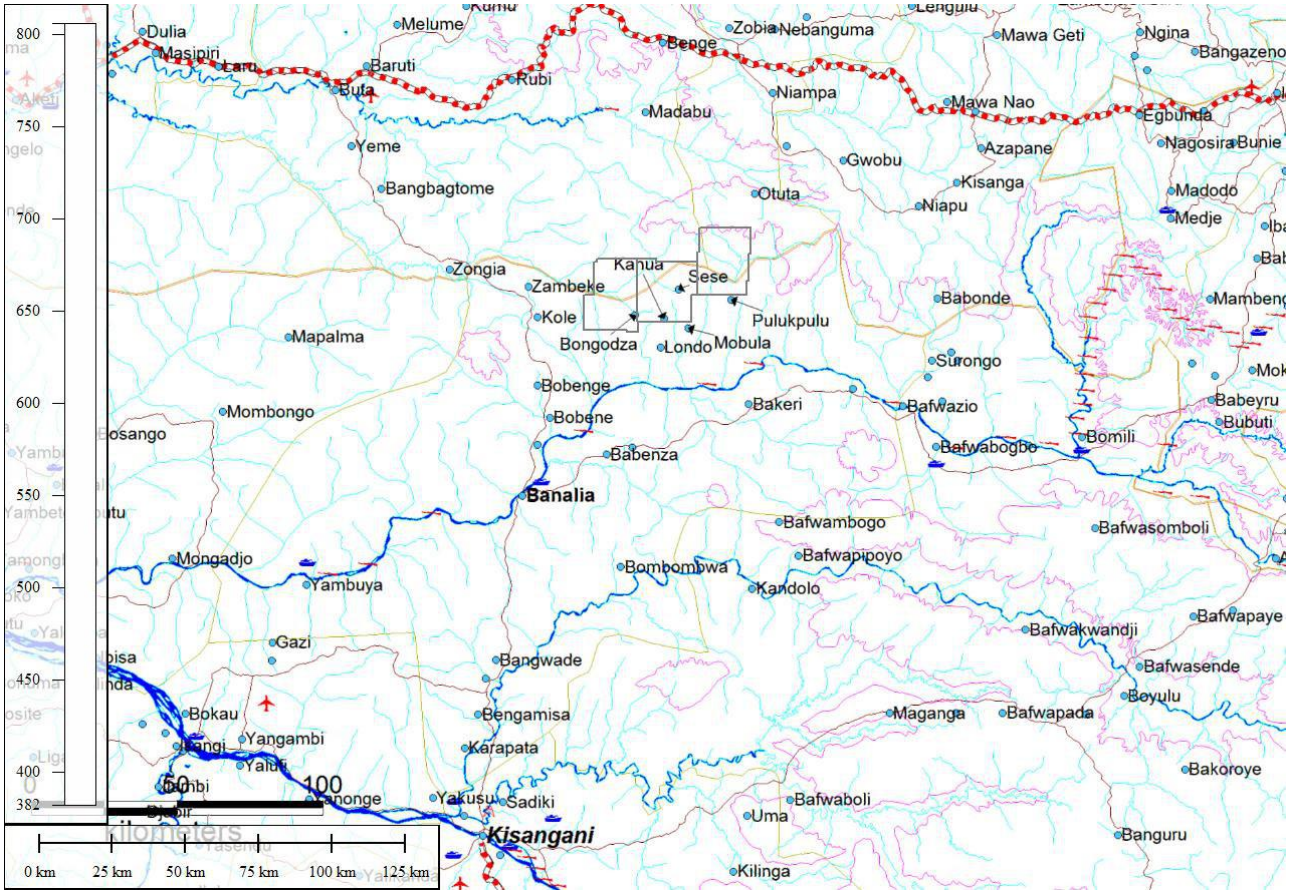


FIGURE 2: Site map with locations of Buta, Banalia and Kisangani. Railway in red to the north.

Access was extremely difficult when visited ten years ago and progression was done with motor bikes. Now a tarred road goes between Kisangani, Buta and Bunduki, passing at a

distance of18 km from the west corners of the lease (since 2012).

A narrow gage railway is traced at 80km to the North of the permits, through Buta. It is disused but plans are the on way to rehabilitate it. The general infrastructures development plans for Africa are sketched hereunder : there is a link (corridor) planned between Kisangani, Kampala, Nairobi and Mombasa harbor.
For the railways, (Pozzo di Borgho 2013) Uganda, Kenya and Rwanda are in discussions with China about a regional upgrade to standard gage (Completion 2018?). Further east, other colonial era rail lines are being re-established (red), including Tororo to Packwatch and Kasese to Kampala (cement & iron ore).
New lines are agreed in principal or proposed (purple) including Gulu to Juba (oil and gas) , Kasese to Rwanda and Goma, Kasese to Kisangani
There is a small airstrip at Buta, 100 km to the NW of the leases and an international airport at Kisangani.

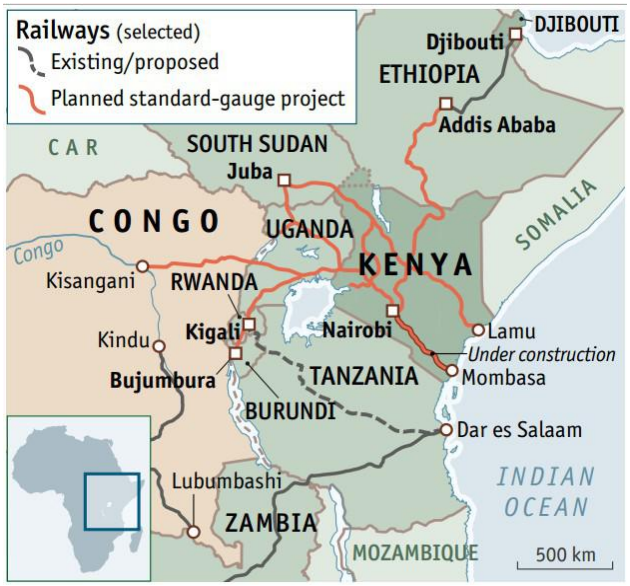


FIGURE 3: E. Africa infrastructures development plan.

A700 MW hydro power plant, Wannnie Rukula, is being developed on the way to Lake Kivu +- 100 km east of Kisangani.
(http://www.radiookapi.net/actualite/2015/01/17/province-orientale-la-route-kisangani-buta-bunduki-exploitee-10-selon-loffice-des-routes) .

Operations can take place all the year round in the permit. Water, timber and space are abundant.
The population in nearby towns is abundant and friendly. Mining trained personnel can be hired from other places in DRC.

6. HISTORY

6.1 Prior Ownership

There were four colonial exploitation centers; two belonging to Forminiere: Kanwa , Sese; one ,Londo, one belonging to Societe Minière de l'Aruwimi Ituri plus the last one for Societe Miniere de Surongo: Pulukpulu[1] .

Kanwa and Sese site are distant of approx 5 km, the old reports shows that Forminiere wanted to move its administration center to Sese.
There was a small airstrip at Sese but apart from excavations all other traces are not recognizable: the site was closed in 1942 due to the war.
There are several adits, dating from colonial time, at the foot of the hill near Pulukpulu. Those are partly collapsed and no old report describing the works have been found yet.

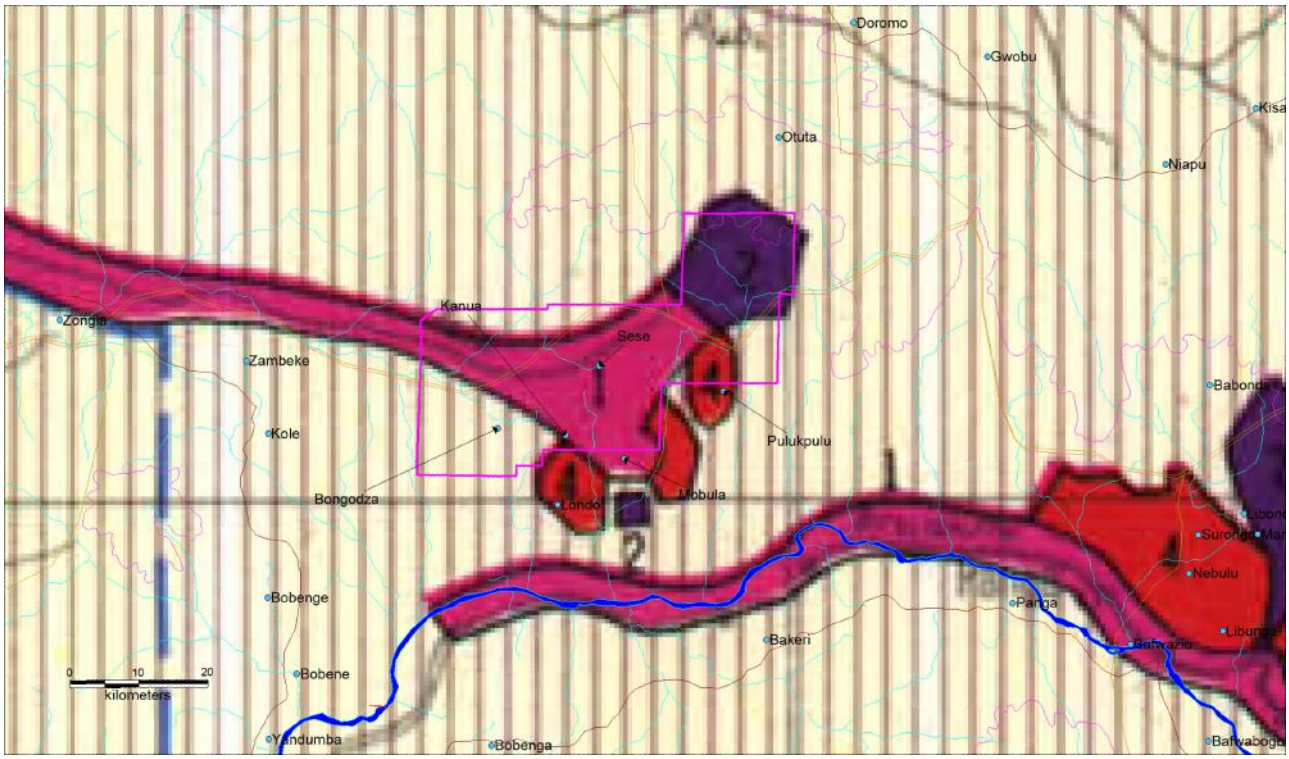


FIGURE 4: Lease in 1950
Key : purple : Forminiere company ; blue : Societe Miniere de Surongo and red for Societe Miniere de l'Aruwimi Ituri.

By 1960 only Forminiere and the Compagnie du Kivu were the only ones left.

1 Pulukpulu means « diarrhoea » a typical colonial disease at the time the place was named…

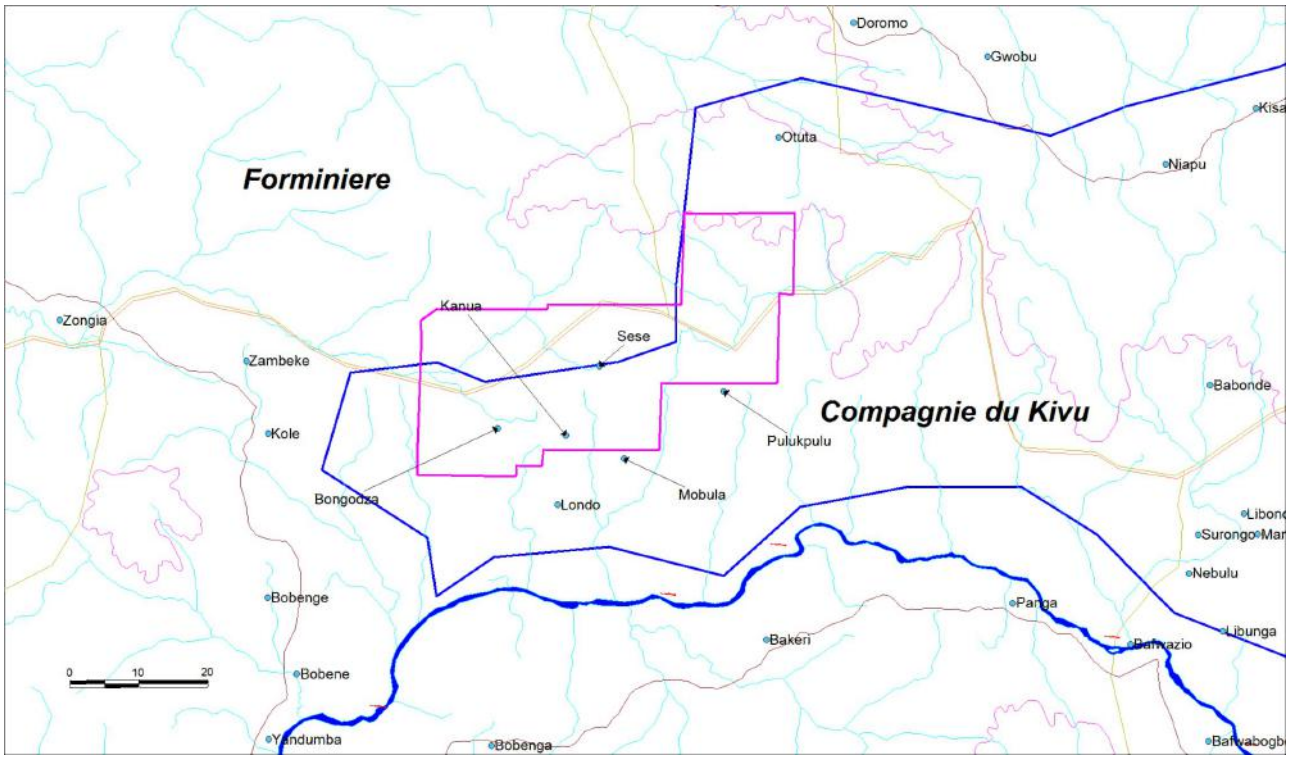


FIGURE 5: Leases by 1960. Boundary in blue.
In the seventies there were attempts by the government to evaluate the potential for the iron, several studies were released (see annex 3).

By 2008 most of the permits were “captured” by Iron Mountain (Gertler) but the ownership was challenged on court by Ruby River who won the case in 2016.

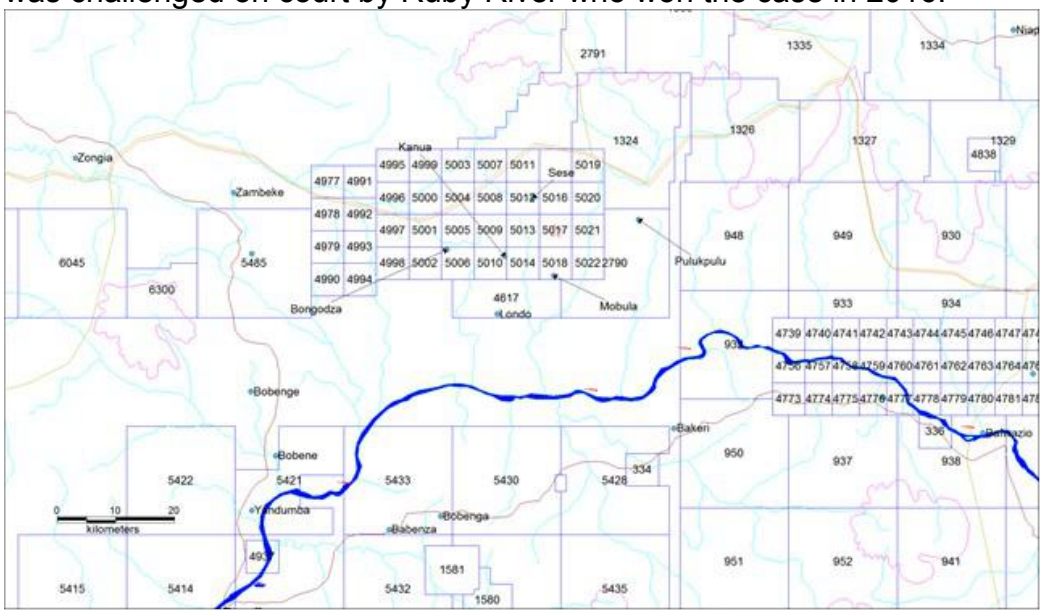


FIGURE 6 : Cadastre 2008

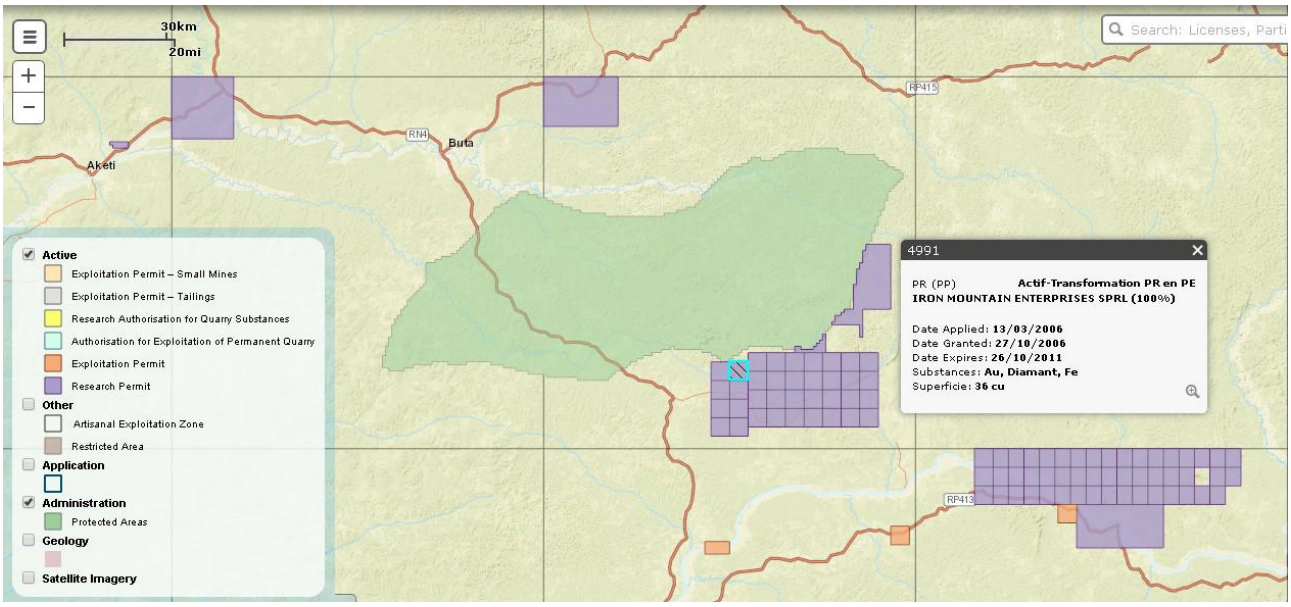


FIGURE 7: extract from Flexicadastre (portals.**flexicadastre**.com/**drc**/en/)

Iron Mountain is still shown as the owner on the 8th of Feb 2017 Flexicadastre, the transfer from PR (exploration) to PE (exploitation) is being requested but the permits are expired since 2011. Flexicadastre is reported “under repairs”.

6.2 Exploration and Development works carried out

Gold mining artisans are very active in the area, several sites were visited in the permit. The zones of artisanal activity concentration are plotted in green in the picture below (see the discussion of the geological map below).
The largest activity is immediately north of Pulukpulu.

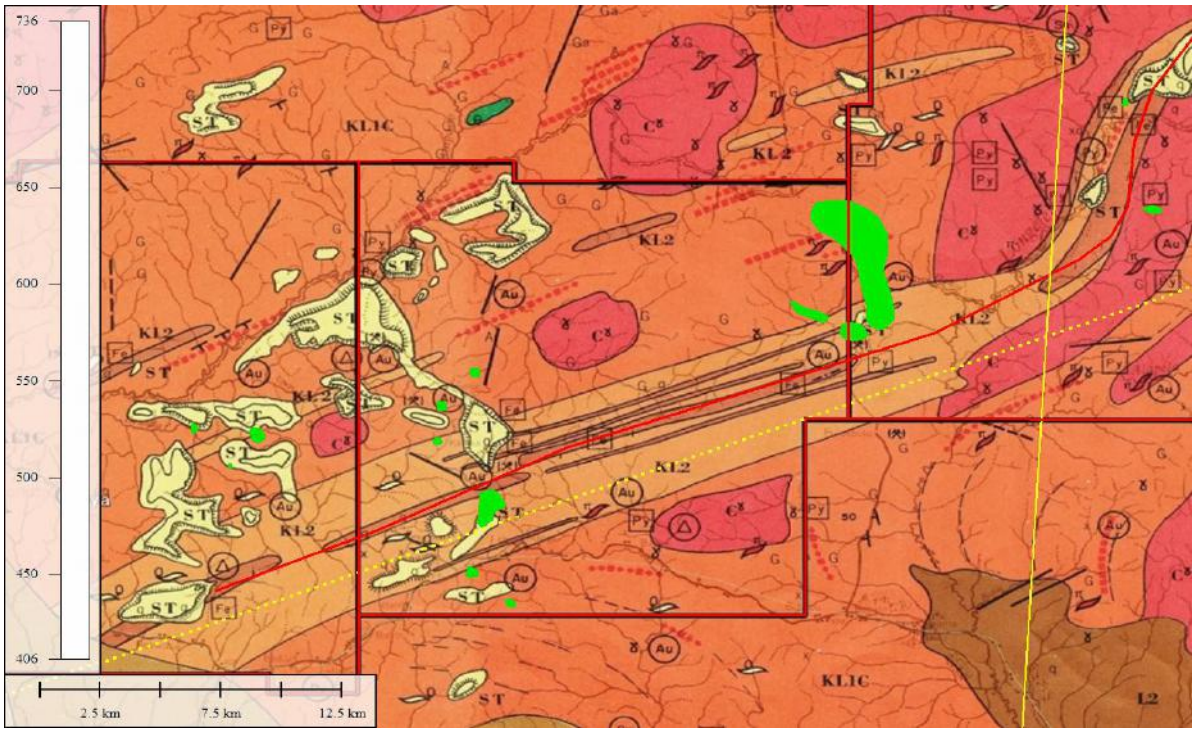


FIGURE 8: Artisanal activity clusters shown in green over geological map (lithology description is below Figure 12). The colonial findings are shown as "Au" symbol circled. A square around Py indicates pyrite in outcrops or pits. A square around "Fe" indicates hematite ore. Dotted red lines are auriferous. quartz veins. The plain red and yellow lines and the dotted yellow lines are superposed for comparison purposes between the figures in this report. Until the sixties, prospectors knew only quartz veins as the primary source for gold, they ignored that disseminated pyrite, in albite alteration aureoles, could be auriferous and could lead to the buildup of substantial occurrences like in Moto area.

FIGURE 9 and 10 : Gold artisans near Pulukpulu, on top of the hill.

During our visit, we did not find significant outcrops, except quartzites and a few quartz

veins, due to the heavy surficial weathering. A large number of former excavations, dumps and drifts from the colonial times were visible but most were re-invaded by thick vegetation. Collapsed adits were dug at the foot of the hill, to the south under Pulukpulu site.
The colonial activity archives are held in Tervuren Museum for Central Africa, the list of archives relevant to the area is compiled in Annex 2.

Gold was found in the North of former Congo by Australian J.Henry in 1895. The gold activity in the permits dates back from 1911.

The recorded production in the area, from 1911 until 1946, is about 2 tons of gold. Also reported are 73 diamonds, but there is no indications about their sizes or quality.

Plage de la haute Tete

Kanwa	a	F	893 (1)
Sese	a	F	231 (1)
Buka	a	Al	115
Londo-Zodi	a	Al	419
Nebula	a	Al	
Pulukpulu			225

(kgs gold)
TABLE 6: Gold Production plage de la Haute-Tele

Most of the official gold production is from alluvials, the archives in Tervuren Musem relate almost exclusively to alluvials, but a more “in depth” review of the old archives remains to be executed .
Many narrow quartz veins are exploited by the locals. Most of those shown above or on figure 12, hold at least traces of gold.

On behalf of European Communities, the Research consortium SICAI(composed of italian consultants and belgian TRACTIONEL) studied the possible ways to develop iron related industries in Africa and prospected the region for iron. After a regional search they focused on the M’Bomo hill range which corresponds to the banded ironstones in the geological map Figure 12.

In 2007-2008 South African consultancy MSA Group undertook an exploration campaign on behalf of Iron Mountain: this comprised remote sensing, mapping, diamond core drilling , sampling and reporting. But no detailed information is presently available about those works.

7. GEOLOGICAL SETTING

7.1 Regional Geological Setting

The geology of North DRC results, schematically, of the collision by two domains;

- The Congo craton to the South .
- The Sahara/Nile (pseudo?)craton to the North-East .

These ill-defined cratonic domains have collided during a tectonic episode referred to as Pan-African (1.1 to 0.8 By).

The main region of interest is the « Massif granitoïde du Haut-Zaïre » composed of high grade migmatitic series, amoeboïdal granite patches and epimetamorphic greenstone belts named Ganguen in the Lower-Uele (CAHEN et LEPERSONNE, 1967), Groupe du Kibali (Commission de Géologie, 1933), Kibalien (DUHOUX, 1950), or metasedimentary/volcanic complex of Kibali-Ituri (LAVREAU et LEDENT, 1975) in the other part of the Province Orientale and Southern Kivu, (fig. 11 below). The « Massif » extends from the Lower Uele to Tanzania.

The "Tele Belt", covered by the M'Bomo permits, belongs to a NNW rosary of similar "greenstone" terranes running from Tanzania to C.A.R; all fertile in gold .

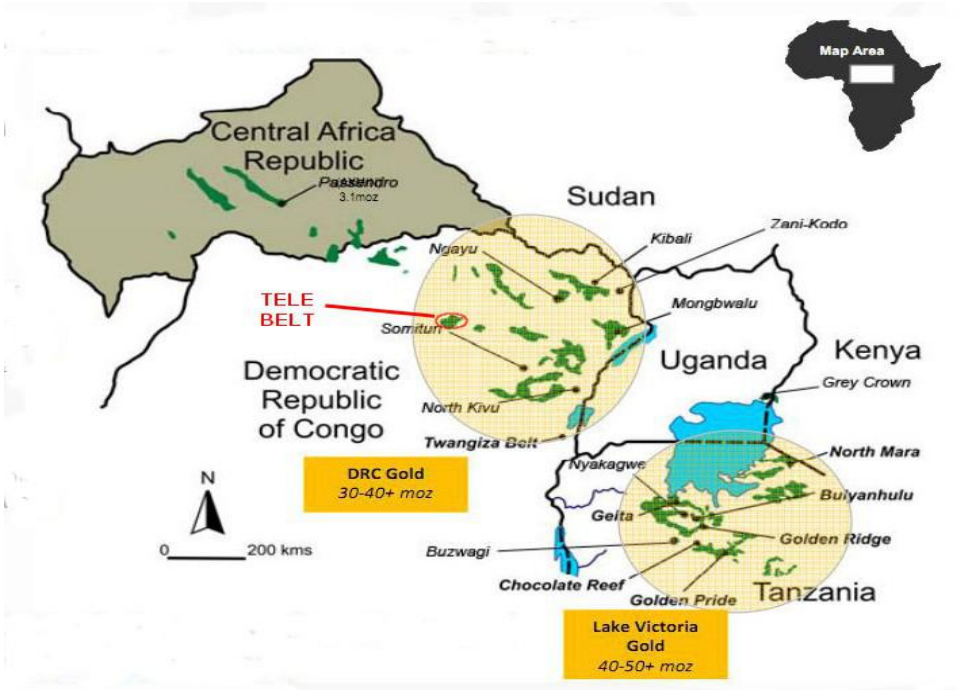


FIG 11 Regional context of the "Tele Belt"
(image from KGL)

The epimetamorphic greenstones extend over several cycles, some older than 2.9 b.y. And some as late as 2.0 b.y.

The West Nilian gneissic complex fringe to the north bears the largest thermal and tectonic traces of the collision.
Lindian sediments rest on the north and south flanks of the « Massif ». Southwards the sediments dip into the large Congo Basin.

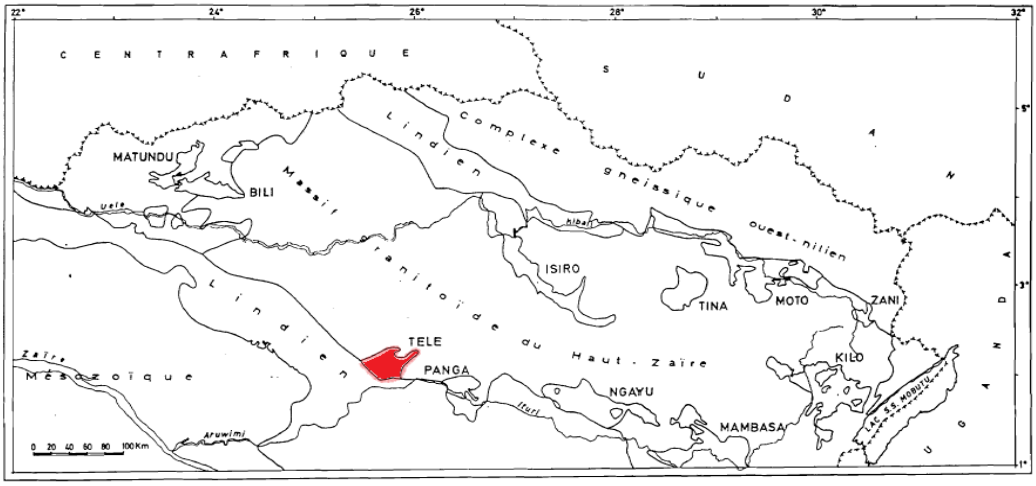
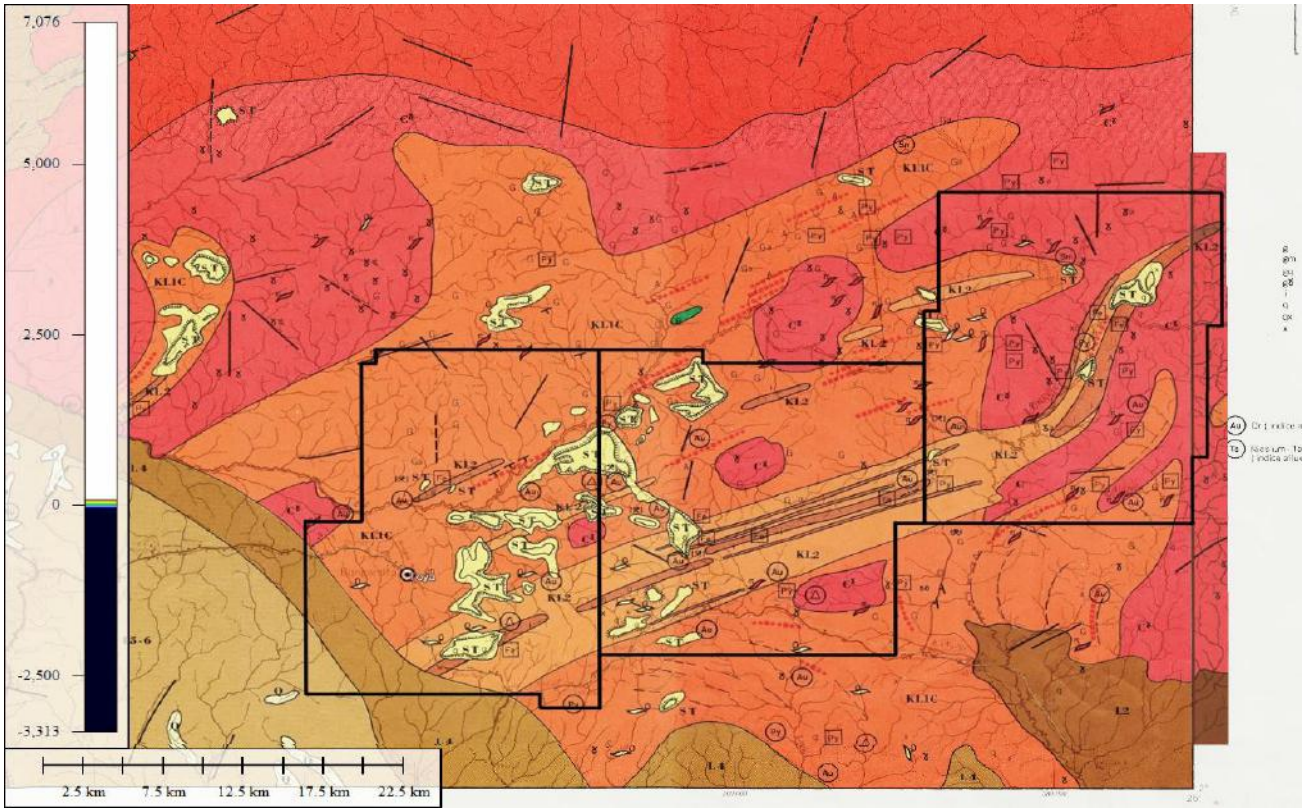


FIGURE 12: *Northern DRC geological sketch(simplified after* LEPERSONNE, 1974. *The main greenstone belts are outlined, with their identification.*

7.2 Local geological setting

FIGURE 13: Geological/Prospection map of the permits (see key/description below)
The figure shows the geology of the area, as per the Zobia 2/25 reconnaissance map at scale 1/200,000. From BRGM 1975



The two brown lithologies outcropping in the SW and SE corners of the leases, belong to

the Lindian cover formations, dating from Upper Precambrian and made of arkoses, sandstones and claystones becoming carbonaceous at the bottom of the sequence (L2, L4 and L5).
The Lindian cover rests over the granite/greenstone complex (massif) . The red and purple features granite (G) and gneisses(ɣ) ; the contorted orange features the lower Kibalian (KI1) and the two brown tints the upper Kibalian(KI2), darker brown features the banded ironstones (BIF). The typical circumscribed granites crop out inside the belt, these late, tarditectonic, granites with two micas , are shown in red.

Recent residual sandy formations rest on lower grounds (ST).

The interpretation of the internal belt structure is complicated by the presence of a thick forest and the permanent cloud cover, which prevent acquisition of useful satellite images . The interpretation of ALOS and SRTM DEMs, Sentinel1 radar images and recent GECO gravimetric synthesis gives indications that a major shear zone follows part of the BIFs ENE outcrop.

The image below shows the XX gradients(scale in Eotvos *10) ; the red line outlines the main BIF trend and the yellow dots the shear zone; the lines are also plotted on fig.8.

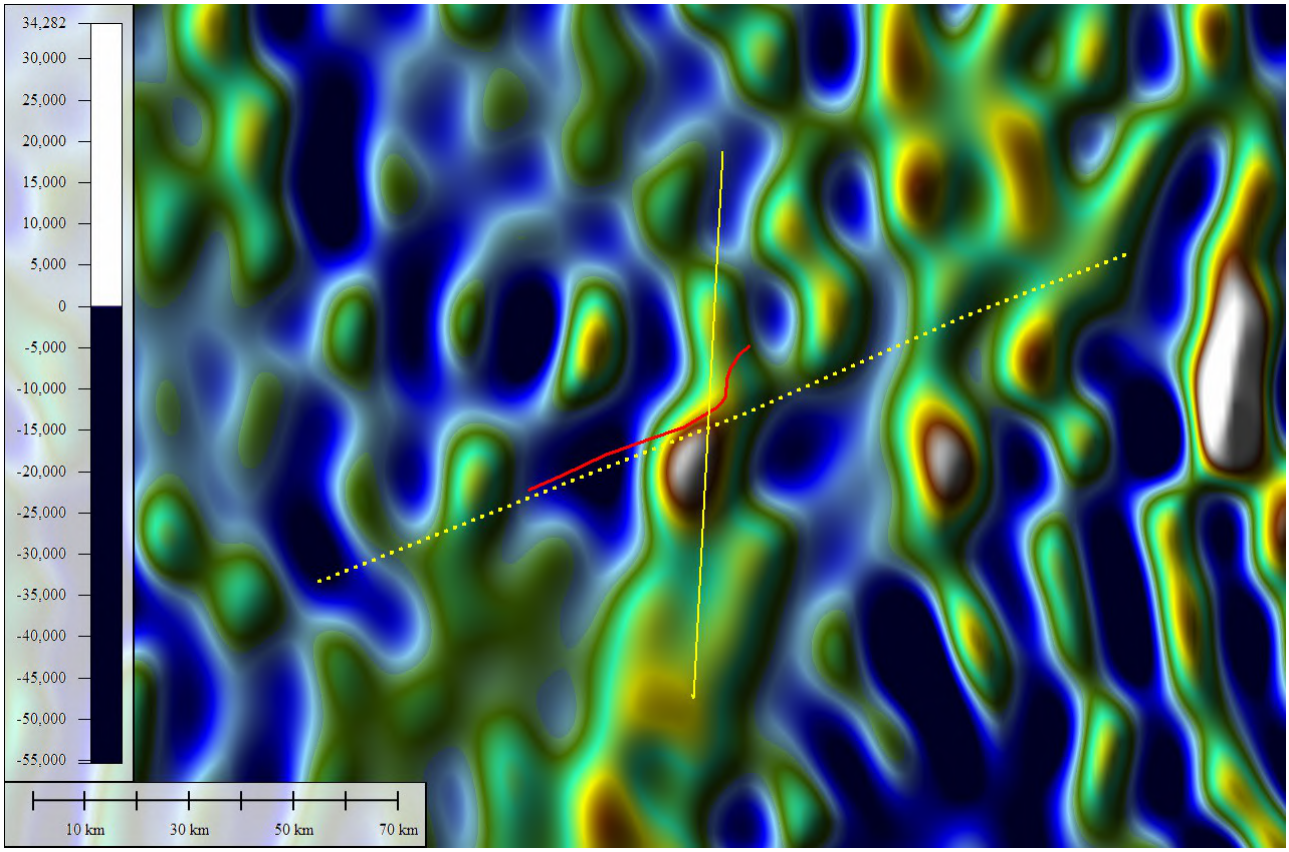


FIGURE 14 GECO Gravimetric data from GOCE satellite, XX gradient
The shear zone is evidenced as well by the aligned gullets in the DTM (this will be discussed further in the mineralization zones).
The shear zone can be traced to the SW across the Lindian, over another 100 km..

8. DEPOSIT TYPES

Iron and gold are the two commodities of interest , relevant to the permits. The potential for diamond exists but is not documented enough to be discussed here.

8.1 Gold

Gold deposits of the region are mined in four environments :
- alluvials,
- discrete quartz veins,
- stockworks,
- disseminations.

Alluvials are no longer attractive in the industrial scope as they are small, complex and heavily burdened by their environmental fragility. The thick forest environment doesn't seem propitious either for development of large placers.
Although stockworks may gather into substantial resources like in Kilo (Anglo Gold), the most attractive deposits in the region are disseminations like those of Moto belt (Randgold, Amani >30M oz).
Disseminations occur in chemically responsive rocks : typically carbonates and pyritic or graphitic facies.
Gold reacts in BIFs at a combination of chemical barrier (iron oxides) and the tectonic competence of the rocks.

8.2 Iron

Banded ironstone formations are thought to be generated by chemical precipitation, in particular when the earth atmosphere changed to oxydant at the transition between Archean and Proterozoïc times.
The plain, undisturbed and unaltered facies grade at best between 45% up to 50% iron; which does not meet generally the present economic constraints. A combination of tectonic shearing and surficial alteration is needed to provide better grades ; the best ore is directly shipped when it reaches about 63 - 65% Fe (Direct Shipping Ore, “DSO”, see discussion in 21.1).

9. Mineralization zones

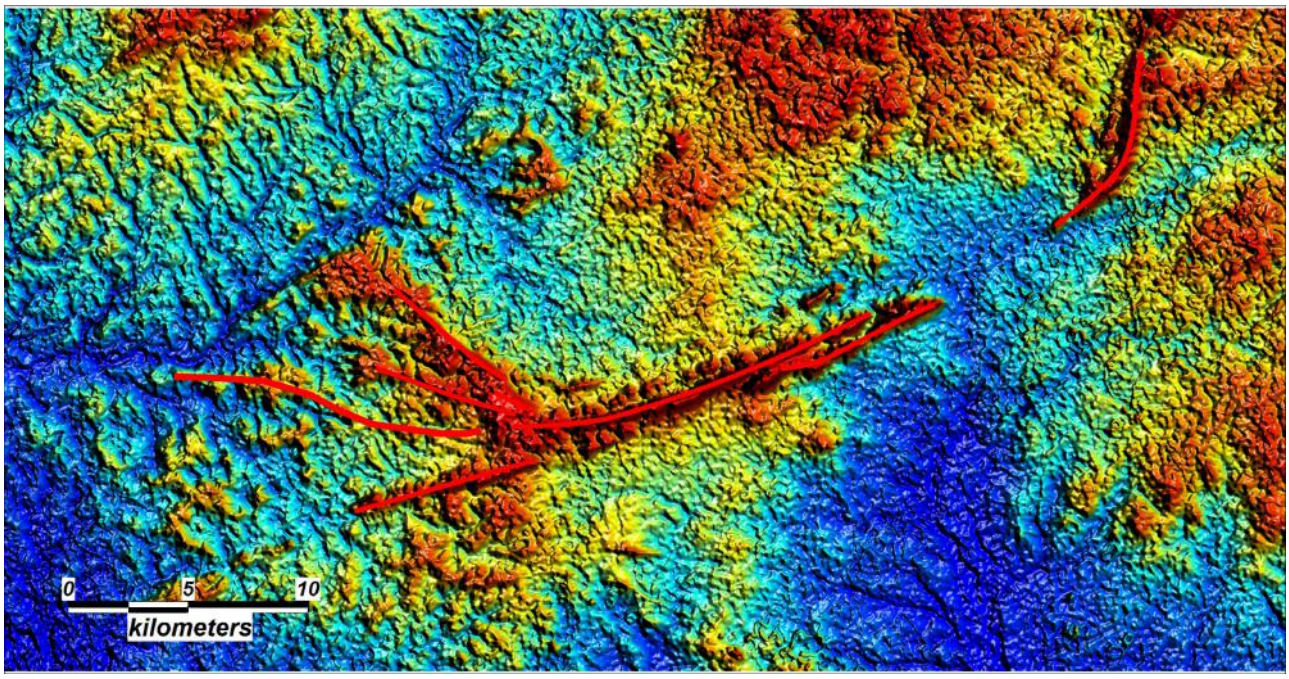
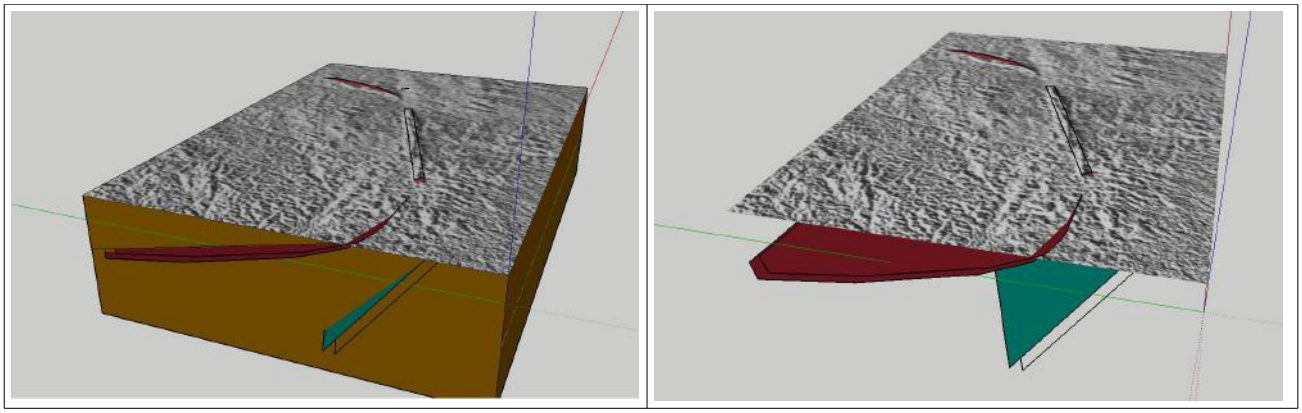


FIGURE 15: aster dem topography of the area (altitude span =+-250m)

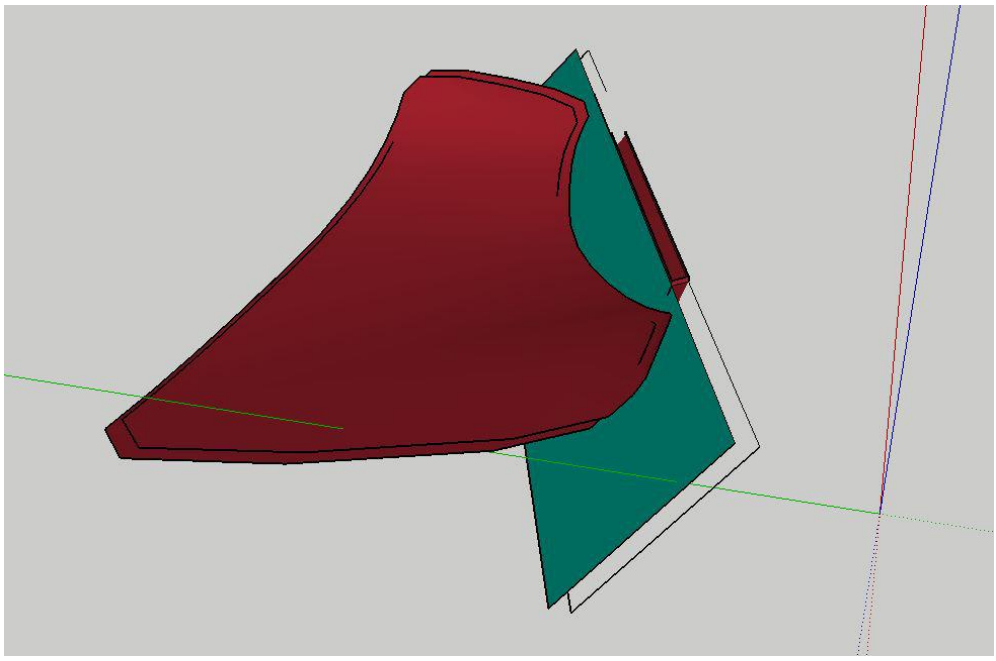
The aster dem picture of the area shows a remarkable NE/SW shear zone extending over 100 km, and discussed earlier in the gravity mapping.

The tectonic features of interest for the mineralizing processes are the shear zones and the later intrusives.
Understanding the shear zone geometry is capital to get a good approach for estimating the gold and the iron potentials.

At this stage data suggests that the NE/SW shear cuts across a synclinorial gutter dipping slightly northwards. This would be in agreement with the regional tectonics advocating a collision and southwards thrusts .



FIGURES 16,17,18 Block model for the M'Bomo hills area. Brown: BIFs, blue: shear zone. North is on the left of the block.



9.1 Iron

Part of the BIF package is pinched into the the shear zone (shown as the two parallel planes in the above figure). The cataclasis and the vertical attitude has exposed the iron-rich layers to strong surficial alteration and has been a major contribution to produce the large DSO amount (direct shipping ore).

FIGURE 19: the hematite sample was collected on top of the hill near Sese, in artisanal diggings.

FIGURE 20: The southwest, flatter laying side, of the structure shows also good quality samples with shiny specular hematite:

Interestingly this SW part, illustrated by fig 19, is flat lying and shows a strong vertical gravimetric gradient (GECO data) that could suggest a piling-up of BIFs (see the SW tip of the red line in figure below).

FIGURE 21: GECO gravimetry RR gradient. (in eotvös *10)

Magnetite doesn't look very abundant : at the most a few percents in some quartzites bands . So far we have not been able to consult any airborne data over the area.

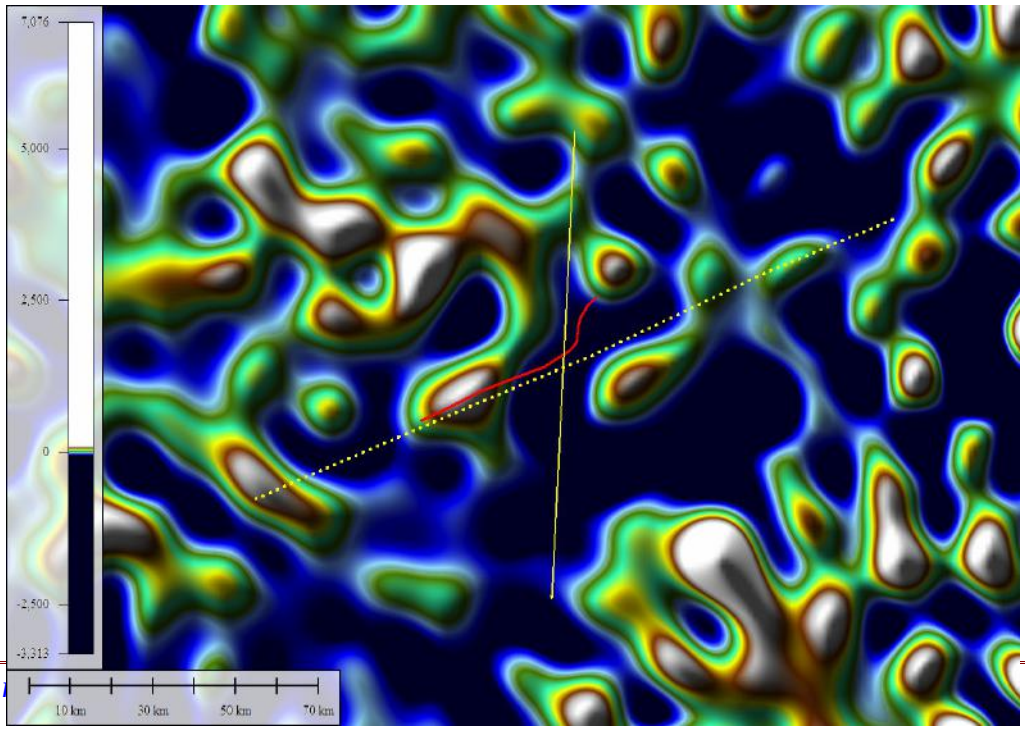


FIGURE 22: hematite/magnetite bearing quartzite. Pulukpulu.

A few pyritic facies are reported, one of them at the SW corner of the easternmost permit. We did not find it but it is doubtful whether pyrite will be easy to spot in this acid and oxydant environment. Pyrite has been found abundantly in prospectors panning dishes, as shown on the Zobia reconnaissance map (FIG 12).

9.2 Gold

Artisanal activity was sustained at the time of the visit. The observation of satellite data indicates this continues presently. In a day walking distance radius, there were more than 40 artisanal quarries officially registered and worked all over the year, according to the local Mining Inspector. In addition, a multitude of small pits and quarries were worked by the local population intermittently as a complement to the agricultural works. Gold production was estimated at about 300 kgs annually by the local mine inspector.

The colonial gold indications (recorded in pan prospection) appear as a rosary along the shear zone and are supporting its fertility.

Pyrite and gold occurrences in the SE corner of the median permit are encouraging since they appear at the fringe of a rounded intrusive. Pyrite is a good tracer to disseminated gold occurrences.

10. EXPLORATION

10.1 Gold Exploration

The colonial prospection archives were progressively collected and sorted at the Museum for Central Africa in Tervuren (see annex 2). Those documents refer mostly to geological mapping and alluvial prospection. For Mbomo permits, the most relevant indications are plotted on the Zobia reconnaissance map (see FIG 13). However the sorting was a quick job and a few days additional efforts in the huge archives of the Museum Tervuren would be effective. The plans are referenced mostly on the rivers network; to be effective their relocations should be validated on recent remote sensing data.

So far the exploration work undertaken by Mbomo-Mountains sarl consists mainly in desk studies of archives combined with satellite images compilation and interpretation(Landsat 7 and 8, Sentinel 1 and 2, Aster, ALOS).

The high trees canopy and permanent cloud cover hamper usual satellite images compilation; the best avenue is in the study of radar data : ALOS, SRTM and the Sentinel1 radar images plus the Aster DEMs interpretation.

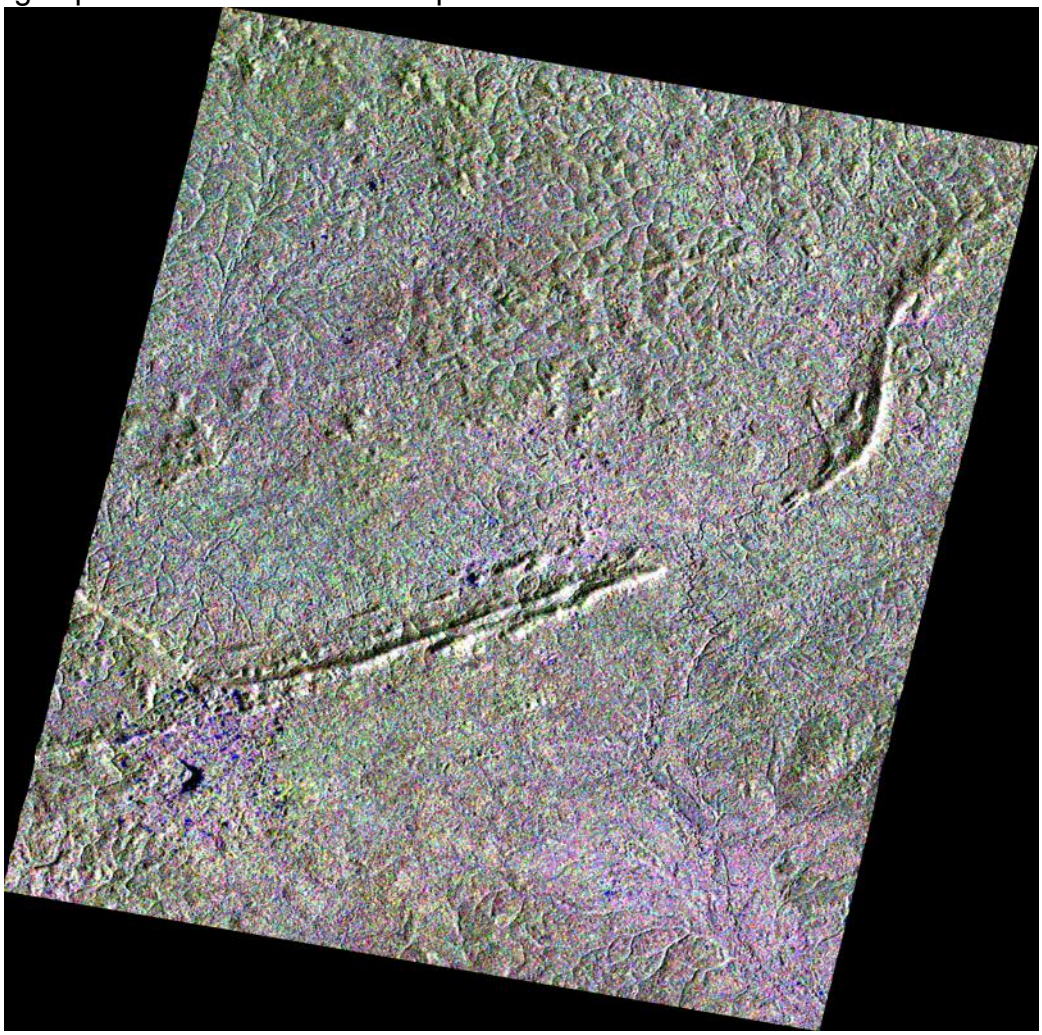


FIGURE 23 sentinel 1 , combination of several images (Geopal3D)

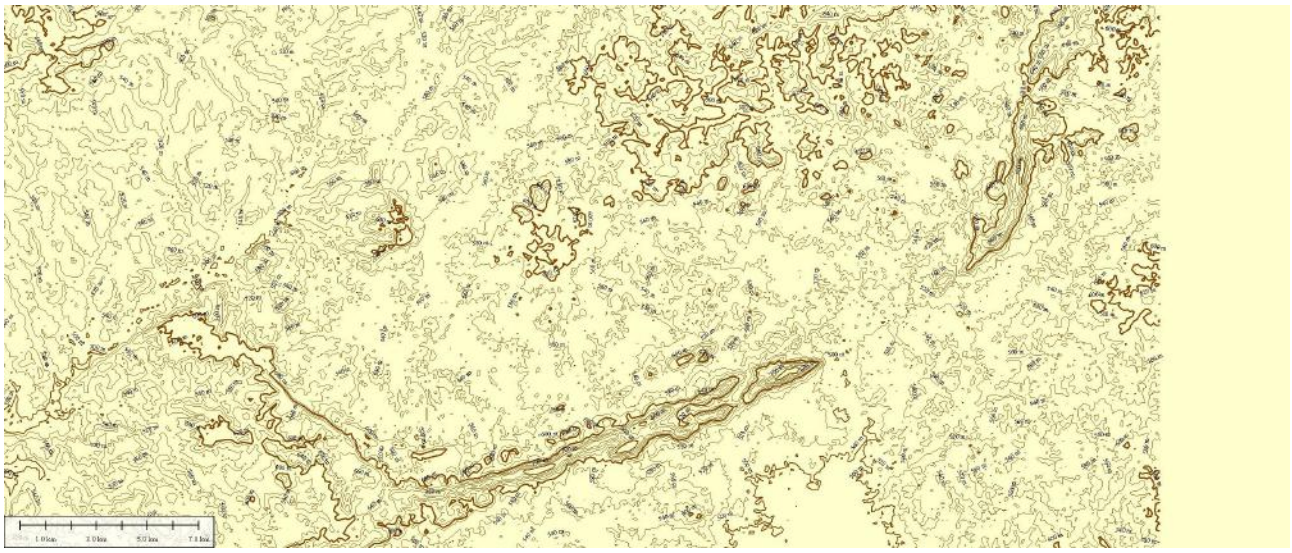


FIG 24 Topography of Mbomo central area (mapped from ALOS by Geopal3D)

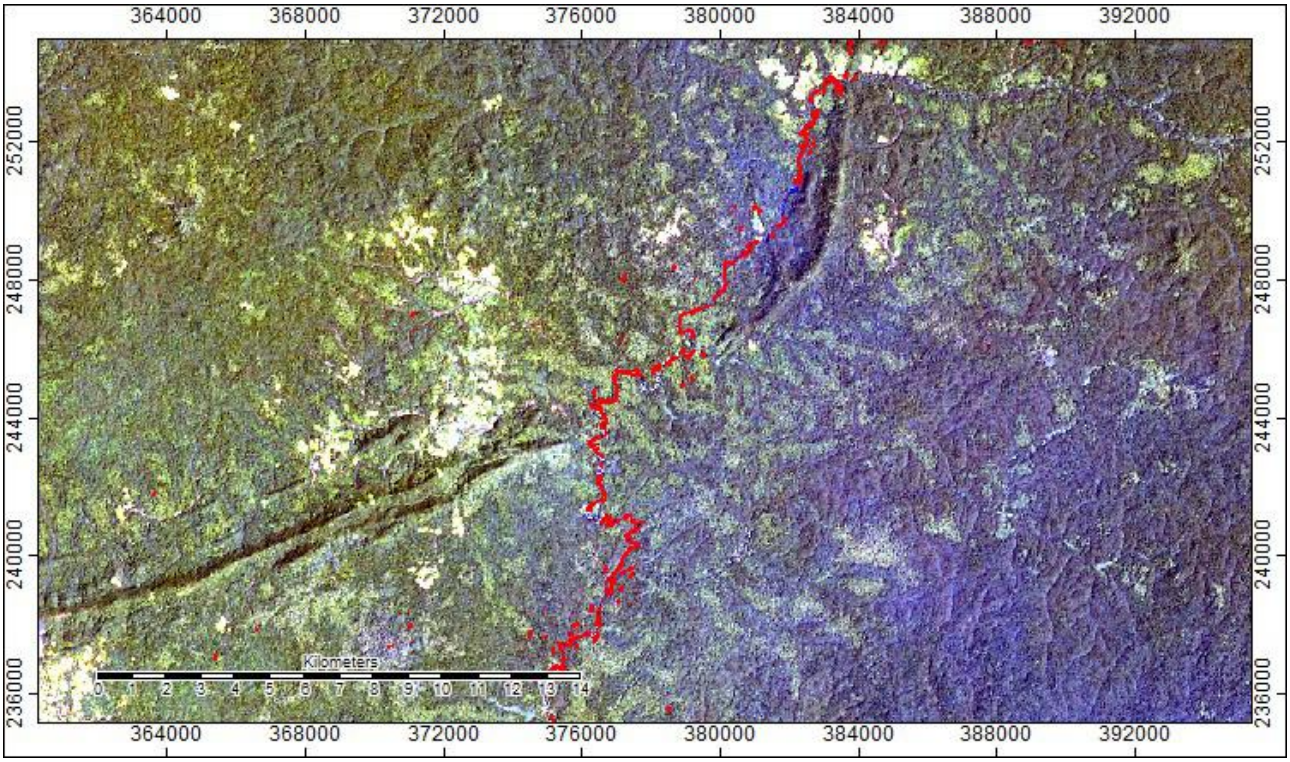


FIG 25 Recent Landsat8 image (3,6,7 bands) showing vegetation differences and clearings.
In the figure above, the red river segment (initially in blue and outlined in red) indicates a much denser clay load in the stream, which is typical for artisanal gold works feeding the main stream, in the vicinity.

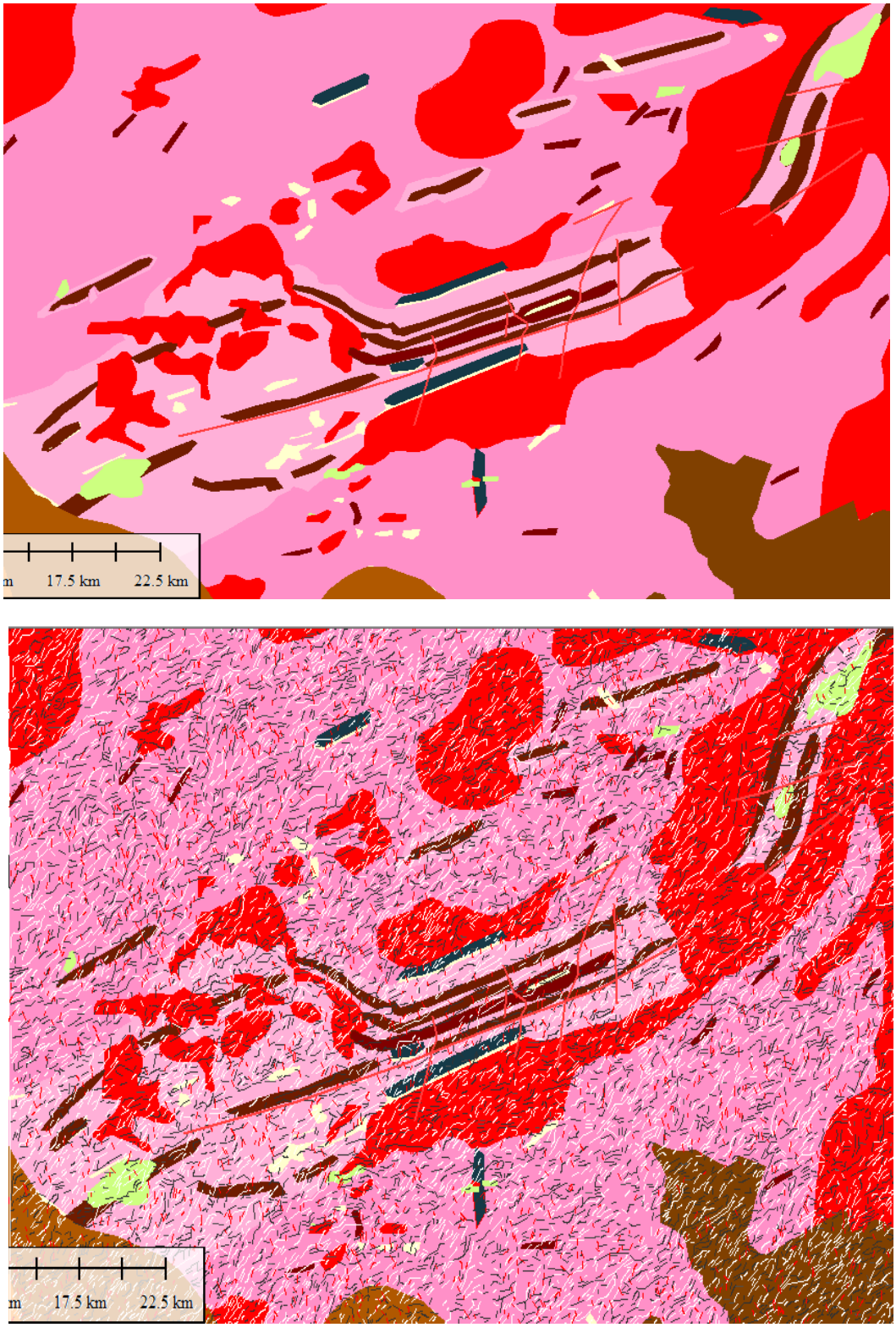


FIG 26 Geological map, updated by Geopal3D, with lineaments study. Compare with FIG 13 - EW scale = 50 km.
KEY: the two brown lithologies outcropping in the SW and SE corners of the leases,

belong to the Lindian . Red color shows the late granite intrusions; purple is granito-gneissic basement; dark brown are the BIFs and blue: possible volcanics. Green are relatively recent terraces. Larger faults are plain red lines.
Lineaments: black = NS lighting ; red = WNW/ESE lighting; white = NW/SE lighting

The new Sentinel 1 data is also rich with structural information.
The gap in the BIFs track results most probably from the granitic intrusions. In terms of differential rock competences and chemical barriers the apical position of many BIF segments is clearly favourable to gold mineralization. On the west side the BIFs have a flatter attitude which explains their divergence.
The later granites are shown by low density drainage,in low ground.
The lineament study indicate a strong NNE conjugate to the ENE shear zone.

Large circular features indicate magmatic overhead stoping; these features are worth of detailed examination, especially where they come close to the large ENE shear zone: outlining again the interest of Pulukpulu area (see below).

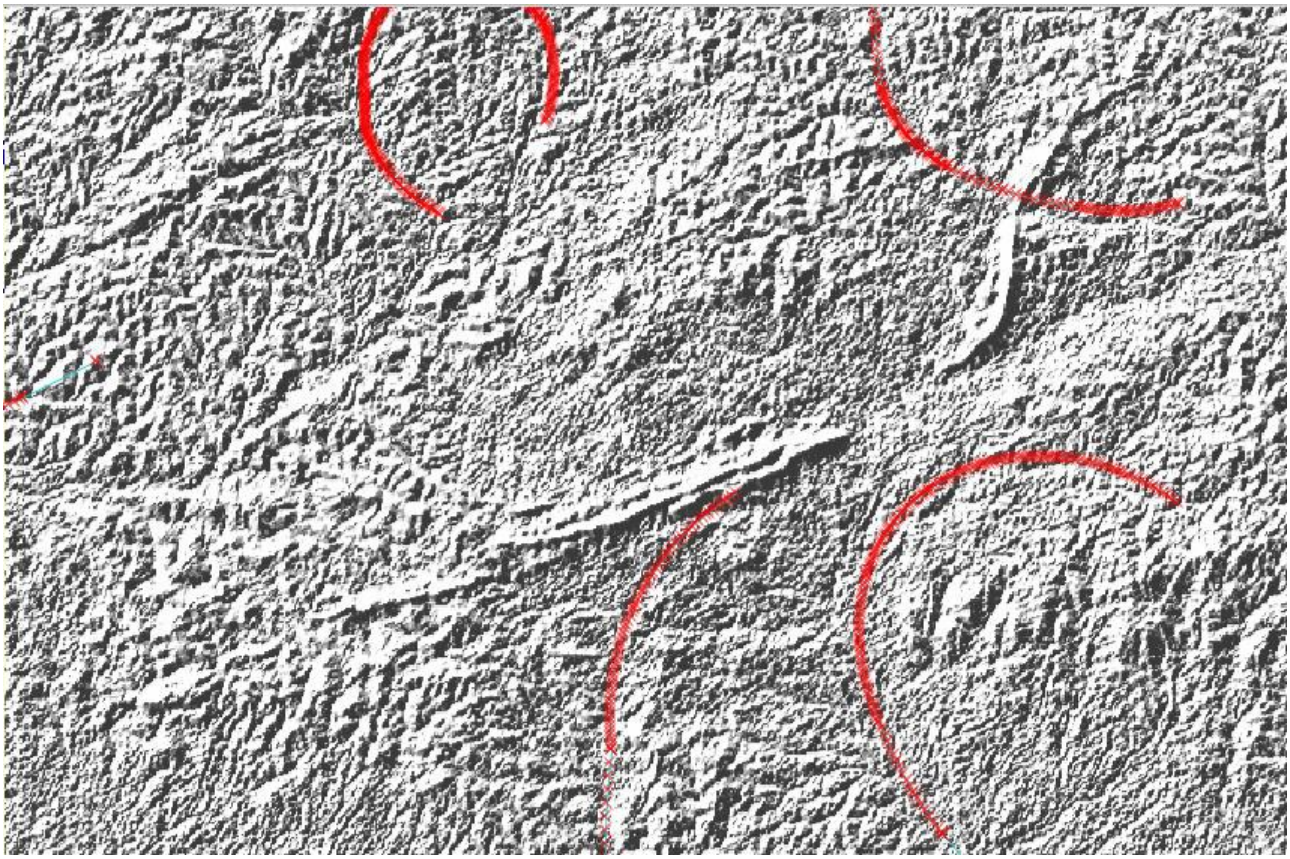


FIGURE 27 Mbomo hills circular features.

10.2 Iron Exploration

An historical resource exists for iron over the M'Bomo hills, which was prospected in the early seventies. On behalf of European Communities and Zaïre Government , the SICAI Research consortium (composed of italian consultants and belgian TRACTIONEL) studied the possible ways to develop iron related industries in the country. A regional research for iron was executed first in the colonial archives, lithotheques were studied and resampled and general field visits were undertaken .The best target deposit for DRC at that time was identified on M'Bomo mountains near Kisangani.
The +- 10 km segment on M'Bomo hill itself was prospected by 400m apart pitted crosscuts and more or less kilometer spaced, 2 m deep trenches.
A few crosscuts with pits were covered on other segments of the hills.
SICAI used the USGS/USBM classification system of 1943.

FIGURE 28: M'Bomo Hills segment prospected by SICAI

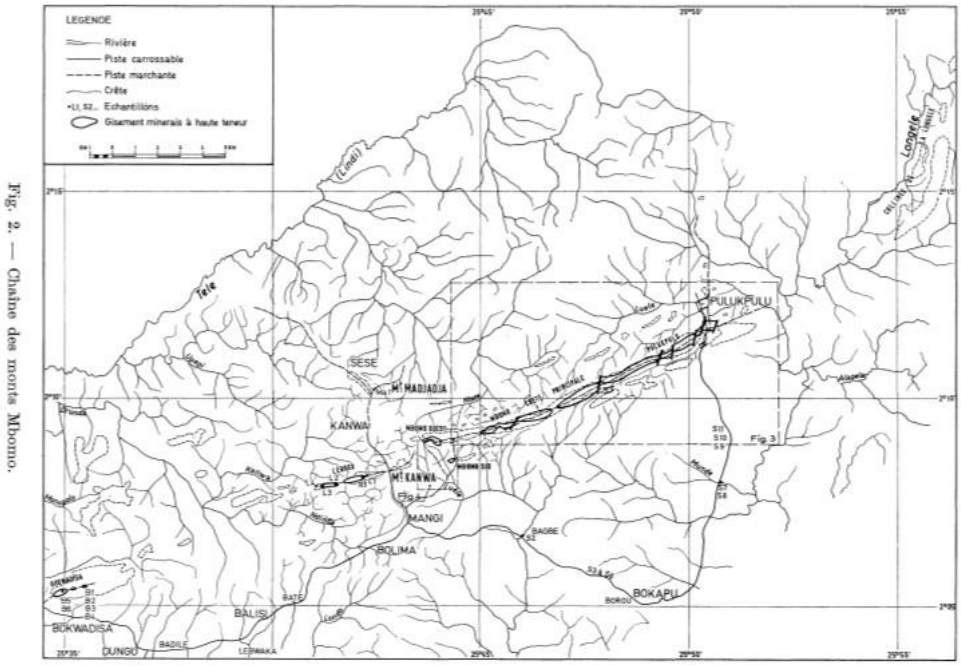


Fig. 2. — Chaîne des monts Mbomo.

LES FORMATIONS FERRUGINEUSES DE LA TELE (HAUT-ZAIRE) 127

The central segment of the BIFs is where the "probable" resource was calculated.

Réserves probables

gisements	réserves	teneur en Fe
(1) Mbomo-Crête principale	64,5 M.T.	62,8 %
(2) Mbomo-Ouest	21,6 M.T.	62,4 %
(3) Mbomo-Sud	2,1 M.T.	65,0 %
Total	88,2 M.T.	

Réserves possibles (additionnelles)

	Réserves calculées	Réserves adoptées
(1) Mbomo-Crête principale	25,8 M.T.	12,9 M.T.
(2) Mbomo-Ouest	8,6 M.T.	4,32 M.T.
(3) Mbomo-Sud	0,8 M.T.	0,42 M.T.
(4) Pulukpulu	446,2 M.T.	223,1 M.T.
(5) Bokwadisa	29,4 M.T.	14,7 M.T.
(6) Lebogo	75,6 M.T.	37,8 M.T.
(7) Pulukpulu-Longele	84,0 M.T.	42,0 M.T.
(8) Crête Longele	210,0 M.T.	105,0 M.T.
Total	880,4 M.T.	440,2 M.T.

II. Réserves à basse teneur (Catégorie B)

Itabirite et minerais siliceux	907,0 M.T.	45%

TABLE 7 SICAI historical resource (categories “A” and “B” USBM)

The “Réserves possibles” are calculated to 880.4 Mt . P.Raucq has applied a conservative 50% (Réserves adoptées) cut while another evaluator (Misra 1976) has kept them without discount.
Altogether these “historic resources” point to close to a billion tons of BIFs with DSO grade, and another billion low grade.
Although backed-up by USBM classification the use of the term “reserve” in these historical resources is not appropriate as they do not comply with the provisions of NI 43-101 or equivalent. They cannot be referred as a s.s. “resource” nor be used for supporting any present day economic estimate, although the lower figures were used in a scoping study by EU (Commission of the European Communities 1974).

Technically the SICAI investigation work is only of superficial nature. The depth invoked for extending downwards the resource (70m) is reasonable when the altitude of the hill is considered, the water table is probably much lower on the high hills. But whether the quality will continue downwards is still un-demonstrated.

Nowadays for backing-up an inferred resource in large strata-bound cases the practice is to drill minimum by a grid of 1000*1000m.
With half a century distance it is not materially possible to verify those references, for instance trenches and pits sampling locations and produce from them a current mineral resource estimate.

A large energetic potential was identified in neighbour areas including hydro-electricity from the Congo river, methane from Lake Kivu, and bituminous schists near Kisangani.
The conceptual economic study referred above was made on the basis of producing either steel bloom or ferro-alloys: ferro-silicon and possibly ferro-nickel with Nickel from Katanga (Kananya).
The most prospective target product identified for Zaïre was ferrosilicon but the economics were heavily dependent on the availability of cheap electrical power.
Geopal3D thus notes that those historical estimates do not comply with NI 43-101 or other PERC classification and are quoted for historical purpose only. However it must also be acknowledged that, at their time, the studies were made by reputable and trusted sources.

Since SICAI study, M'Bomo has always been part of the portfolio of "Key" projects advertised by DRC Government.

11. DRILLING

This section is not applicable to this report

12. SAMPLING METHOD AND APPROACH

This section is not applicable to this report

13. SAMPLE PREPARATION , ANALYSES AND SECURITY

This section is not applicable to this report

14. DATA VERIFICATION

This section is not applicable to this report

15. ADJACENT PROPERTIES

This section is not applicable to this report

16. MINERAL PROCESSING AND METALLURGICAL TESTING

This section is not applicable to this report

17. MINERAL RESOURCES AND MINERAL RESERVE ESTIMATES

The properties under review are all at early stages of exploration and no Mineral Resources, NI 43-101 compliant, have been determined.

18. OTHER RELEVANT DATA AND INFORMATION

This section is not applicable to this report

19. INTERPRETATION AND CONCLUSIONS

19.1 IRON PERSPECTIVE

: Equatorial Resources, Zanaga Iron Ore Company

FIGURE 29: Global iron province
(image borrowed from Equatorial Resources)

Giant iron deposits cluster in a global province spreading over Africa and South America, the above figure shows their distribution before Atlantic ocean opening (source Equatorial Resources).

There are broadly two main groups of iron ore, high grade hematite and low grade hematite-magnetite ore. High grade hematite iron ore is more commonly known as Direct Shipping Ore (DSO). DSO generally contains >60% Fe and requires very simple preparation where the ore is typically mined from the ground and processed via crushing and screening facilities before being shipped to steel producers and used in blast furnaces as fine ores or lump ores depending on the sizing of the ore. Prior to being used in the blast furnace fines are agglomerated in a sinter plant before being charged into the blast furnace. DSO is commonly found in the Pilbara region of Western Australia and Brazil. The two countries, by supplying predominately a fines product, have enjoyed the majority of the worlds seaborne trade of high grade hematite fueling the economic growth of China and India with their increased demand for steel.

A few years ago, when iron concentrates were valued largely over 100 usd/ton, it was thought that the lower grade deposits could pass the economic barrier but, following the glut, this business idea has collapsed completely and the motto is more than ever : grade and quality...
After falling below 40 usd/ton (fines) the price is picking up and the current mood is now optimistic.

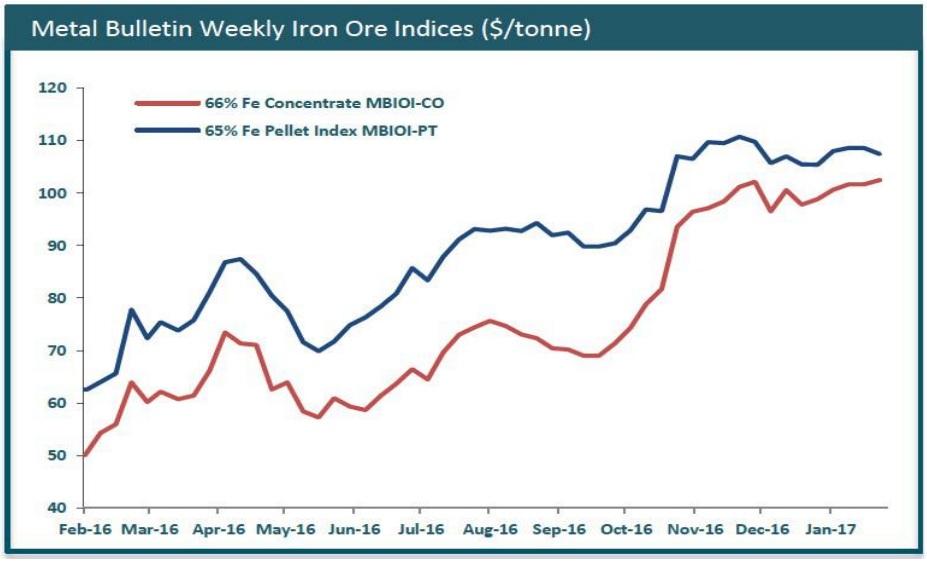


FIGURE 30 : Evolution of iron concentrates prices since Jan 2016, USD

19.1.1 Ranking of the Tele occurrence versus other African iron projects in neighboring countries.

The strongest regional competition to DRC iron ores rests around the triple border area between Cameroon, Gabon and Congo, especially the most advanced projects of Nkout (best ore quality) and Avima (largest resource). And , within Africa, with the huge Simandou deposit in Guinea.
Low prices and high supplies were driving iron ore prices down in 2015. Analysts said large companies would survive the crunch but many smaller producers and explorers have been faced with tough decisions, many among those along the triple border were in dire straits :
Sundance, Aferro/IMIC, Core, Equatorial resources...
The situation is no better for the small producers elsewhere in Africa : African Minerals, London Mining and Bellzone are having difficult times in West Africa.
Rio Tinto had shelved the huge Simandou project (Jul 16: http://www.ibtimes.com.au/huge-iron-ore-overcapacity-leads-rio-tinto-shelving-20-billion-simandou-project-guinea-1520721) but they seem willing to revive it with Chinalco since.
If the good prices for iron had prevailed a few more years then the « triple border » play would have worked, the railway would be built and the mines would have started production.

Location, Access

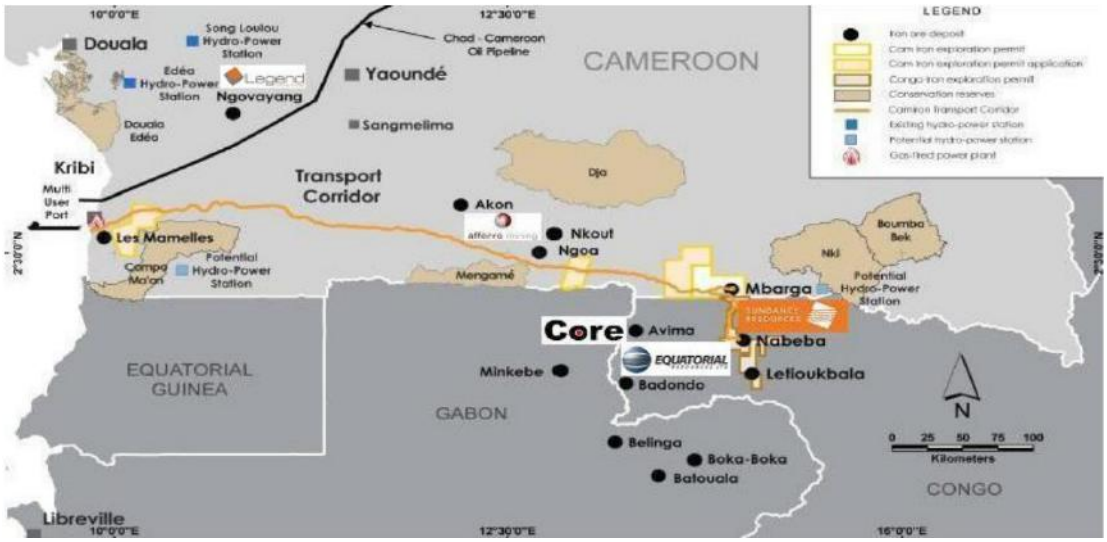


FIGURE 31: locations of iron projects in development in the “triple border” area

The « triple-border » iron deposits were distant of 400 to 700 km from the sea. The Tele project is in the range of 2000 km distant to the sea : in terms of project management and financing the difficulty and costs should, however, not be directly proportional to distance.

Resource Volume

If we compare the ground extension of the BIFs of Avima, the largest occurrence in the group of countries assessed, we can see that the Tele belt is twice as long . The DRC hills overlook their surroundings by 200-250m while Avima is only 100-150m higher ; the volume « at sight » is obviously much larger in the case of the M'Bomu Hills.

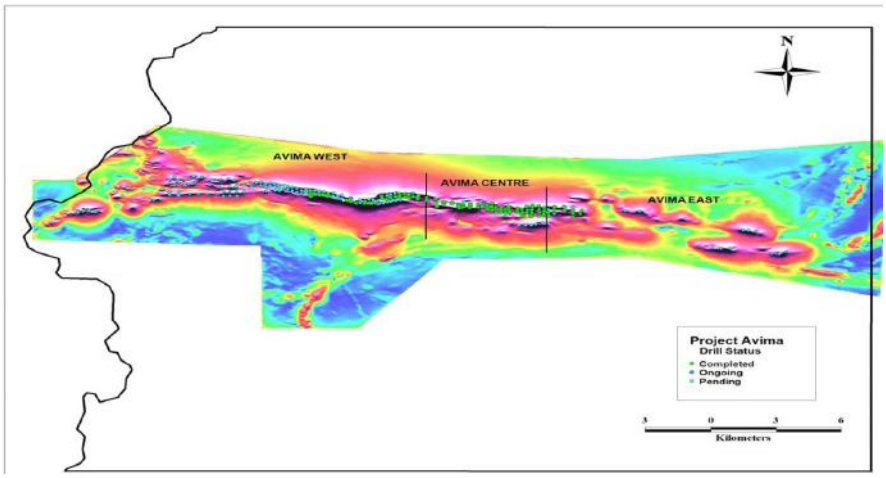


FIGURE 32: airborne magnetics imprint of AVIMA project.
In the case of Nkout the ground extension is 4 to 5 times smaller than for the Tele.

Resource Grade

The quantity of DSO in the « triple-border » area is relatively limited. For instance Nkout oxides represent only +-250 M tons @35%Fe, ; the DSO is only about 20 Mt, this looks pale compared to the SICAI estimates in the Tele project.

Resource Quality

The main impurities that are found in naturally occurring magnetite and hematite resources are silica (SiO2), alumina (Al2O3), Sulfur (S) and phosphorus (P). The level of these impurities is one of the main determinants of whether an iron ore resource has the potential to form a commercially viable product and determines the level of any discount or premium to benchmark prices due to product characteristics being outside of standard parameters.
A product's physical properties are as important in steel-making as its chemical properties. The various deleterious impurities and their effect on the steel making process are detailed below:
- Silica (SiO2): - The main component of slag in the Blast furnace. High silica levels can results in increased operating costs due to a higher fuel requirement and handling cost.
- Aluminium (Al2O3): - Influences the viscosity of the slag. ~15% in slag is an operating maximum to prevent slag flow issues and ~2% appears to be desired cutoff for steelmakers but this will depend on other product factors.
- Sulfur : - Like phosphorous , Sulfur makes steel brittle.
- Phosphorus (P): - Has the impact of making steel brittle. Phosphorus enters the blast furnace via both the coke and iron ore, reports to the hot metal and is very difficult to remove. In the absence of external dephosphorization, the iron makers only control is to limit input loads via raw material selection. As a rule of thumb the most African iron ore companies will produce a concentrate or pellet feed product at max phosphorus level in the BF is ~0.08%.

For comparison Nkout DSO ore has an average of 6.5 to 7% SiO2, 3.3 to 3.5% Al2O3, S 0.01 to 0.02%, and 0.12-0.13% P.
The indications for the Tele project (reported by Raucq 1974) compare favourably : in average Si02 2.6 to 4.9% , Al2O3 0.36%,S 0.02% and P 0.05%.

Energy

The hydro-electrical potential in DRC (40,000 MW after Sicai/Tractionel) is at least an order of magnitude larger than the competitors.

Mbomo Mountains website analyzes the potentials of hydropower and gaz from Kivu Lake and the impacts they could have on the mode of iron reduction. This is also discussed in the frame of low carbon strategies prevailing at present.

19.1.2 Ranking of the Tele occurrence versus other possible iron projects in DRC.

DRC is gifted with a large number of iron occurrences, especially in the northern provinces .

Location, Access
The Tele site was selected in the frame of the SICAI/TRACTIONEL continental-scale study financed by EEC. The primary selection of the Tele project was based on the vicinity of the regional capital of Kisangani, the navigable reach of the Congo river, the EW railway across Buta and the presence of bituminous schists around Kisangani.
Other considerations were taken on the basis of regional archives, lithoteques compilations and field visits, which are recapitulated in a review study bySICAI.
The M'Bomo -Tele site is the most occidental occurrence.

Resource Volume
In term of volumes, other massive resources exist in the region, in DRC. While they might project a competitive shade on the Tele prospect, they could also influence positively a regional decision about engaging the finances for substantial infrastructures (and they do in fact, see FIG 3 and Pozzo di Borgho 2013).

Woodtli (1961) quoted individual deposits such as Mt. Tina as being a 4 km long and 500 m high ridge with a 200 m wide mineralized, upgraded band accounting for around 1 Gt of >68% Fe ore, while Mt. Ami is a 5 km long ridge which protrudes 700 m above the countryside, with a 100 m wide mineralized and enriched BIF accounting for 770 Mt of > 45% Fe ore.

Resource estimates are not well established, although Marelle and Abdulla in their review of iron ore in Africa (1970) quoted 4.95 Gt @ 45 to 65% Fe within the region in a series of deposits. Woodtli (1961) estimated a resource of 900 Mt @ >45% Fe in the Upper Ituri Basin and 1350 Mt @ >68% Fe in the Upper Uele basin.

It is useful to track the activities of the three iron majors in DRC.
Rio Tinto was in JV with Kilo Gold , Delrand and also somewhat with Mbomo Mountains.
a)In 2011 deal with Kilo Kilo in the Isiro and Ngayu belts.. Kilo owns 75% of the Mt Asonga property, while Rio Tinto had the right to earn 51% in the venture by spending $23-million by 2013. But Rio pulled out of the JV in 2012. (Electrician Suez Holdings Ltd were also part of the JV but were bought out by Kilo)
Roscoe Postle estimates that Mt Asonga may contain between 750 to 1500 Mt of mineralized material, grading 59 - 65% Fe focused on a 19 km2 area on Mt Asonga.(Note that the potential quantity and grade is conceptual in nature). Furthermore: 12 diamond drill holes totalling 1198 m were drilled by RTME minimal overburden and intercepts up to 127 m with an average overall seam thickness of 70 m
b) After drilling about 1200m (?) Rio has also pulled out of the Delrand JV . From the available data the DSO thicknesses are inferior generally 100m. Delrand was in the Panga belt east of Kisangani.

BHP seems to be having problems with DRC and the world bank in the orbit of the new

Inga3 hydroelectric dam project, no present involvement in DRC iron is apparent on the net.
Vale is in partnership with Teal Exploration and Mining (African Rainbow rsa) but mainly busy in copper for the time being.

If we compare the extensions, grades, intercepts and tonnages of DSO listed from the above prospects with those of Mbomo, we can deduct that Mbomo compares very favorably.

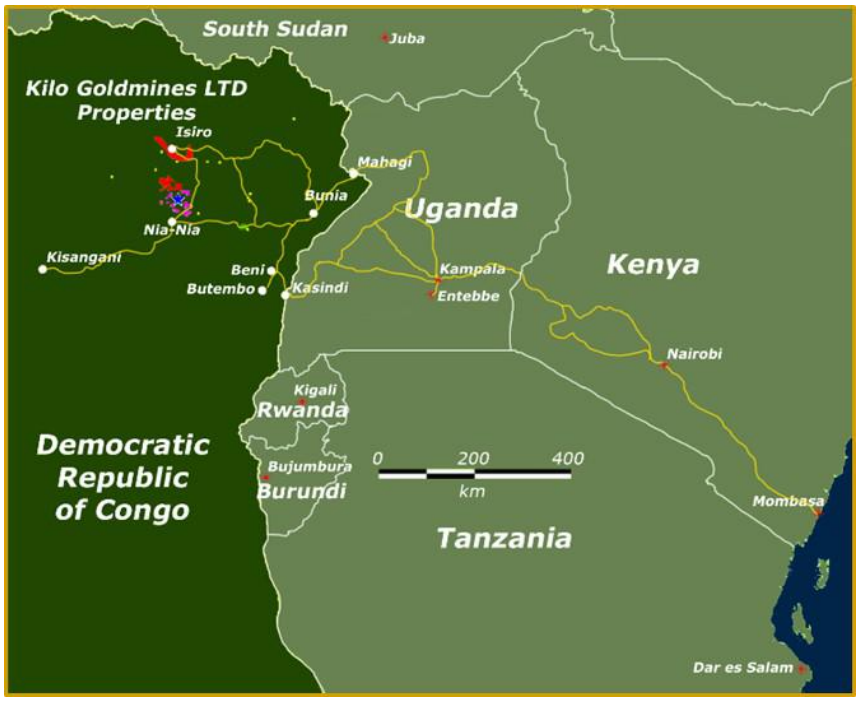


FIG 33:Easter access ways to Kilo properties.

19.1.3 Valuation of iron properties

It is difficult to make a valuation of iron properties from scratch. At the boom time (2011), Ocean Resources broker have published the following record (table 7) which addresses deposits , evaluated along JORC and with infrastructures; they end up with a median value of 2 usd per ton iron ore in situ.

Table 4: Iron Ore Transactions Comparables

Transactions	Date	Current Resources (Mt)	Capex required (US$M)	Full Cost (EV+Capex) (US$M)	Equity Value (EV) (US$M)	EV/ Current Resources
Hancock-Hope Downs to RIO	Jul 05	423	1330	1930	600	1.4
Cape Lambert Sth to MCC	Aug 08	487	2000	2368	368	0.8
Mid West to Sinosteel	Seo 08	243	2956	4152	1196	4.9
Portman to Cliffs	Nov 08	94	Na	465	465	4.9
UMC to BHP	Oct 09	92	123	311	188	2.0
Warwick to Atlas	Dec 09	15	Na	na	75	5.0
Polaris to Mineral Resources	Feb 10	25	115	247	132	5.3
RIO to Chinalco	Mar 10	1487	6600	9624	3024	2.0
Aurox to Atlas	Mar 10	205	1178	1321	143	0.7
Average						3
Median						2

Source: Ocean Equities Ltd, Ferrous Resources Limited, p. 38

TABLE 8 : Valuation of iron properties , Ocean Equities 2010

The Simandou project at this stage is valued at about 2.5 billion usd.If the deal to sell its 46.6 percent stake in Simandou to Chinalco went ahead, Rio Tinto would receive payments of between $1.1-billion and $1.3-billion based on the timing of the project's development, it said in October (Reuters Feb 8 2017). Simandou holds about 2.4 billion tonnes of ore grading 65% iron i.e. The valuation is thus at about 1 usd/ton at present.

19.2 GOLD

Reports of presently active operators in DRC show that five of the greenstone belts in the North (see FIG 11) have delivered at least one multi-million ounces occurrence, a few of them reaching giant deposits class : the recently published cumulated resources are about : Moto:>25Moz ; Mongbwalu >5Moz, Ngayu : >5Moz ; Zani Kodo > 3Moz.

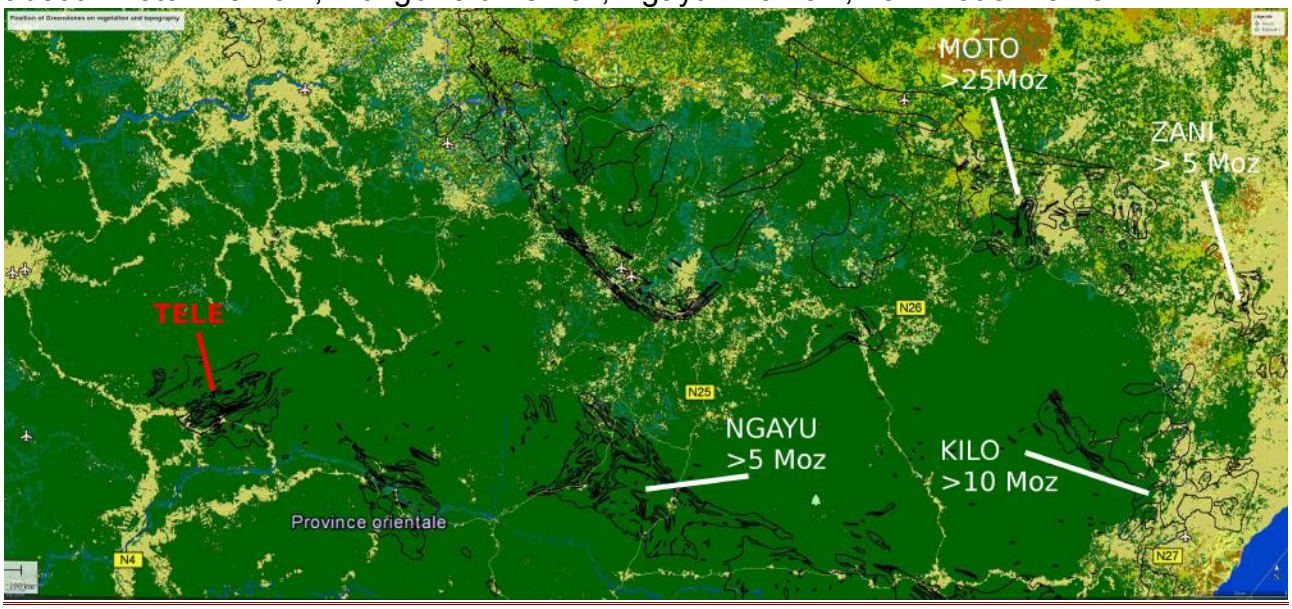


FIG 34 Productivity of the various greenstone belts of North DRC, million ounces gold resources. Vegetation cover type from ESA MODIS.

The Tele, Panga, Isiro and Tina belts belt have remained somewhat at the queue of the discoveries and production, from colonial times up to recent days. It is believed that the main cause of the dis-affection is the density of the forested areas. The more developed Kilo, Moto and Zani belts are mainly in a savannah environment, as shown in the above figure.
The Ngayu vegetation is a little less dense than the Tele but the belt is better deserved by national crossing roads.
The exploration work in the heavy forest is more expensive and, the superficial alteration regime is different and the alluvials develop less favorably; all other parameters being equal.

For the particular case of the Tele belt, during the last decade, the development of Mbomo-Mountains permits has been paralyzed by legal actions concerning the titles.

Based on a geology identical to the other belts, colonial production records and heavy artisanal activity, the conclusion is that the Mbomo properties represent over 1200 km2 of prime exploration ground for gold.

Elsewhere in the Northern greenstones Anglo and Randgold have acquired control of most of the juniors with significant " greenstones" holdings.
Recent financial informations indicate that the valuation of gold properties in DRC is raising noticeably.

Total cost of the jointly purchase of the Moto tenements by Randgold and Anglo was reported at about 600 millions usd. Now brokers evalue the total worth between 1.5 to 2 billion usd.

Gold price was depressed during the last few years. For similar tenements as those of Mbomo, Randgold was offering farm-in agreements to finance the exploration and development up to a bankable feasibility study in exchange of 60 - 65 % control (Kilo Gold deals, Loncor deal, Deveron Resources) . However for the recent deal with Moku Goldmines AG (D.Gertler) the price tag was raised with Randgold getting only 51%. The foot bill for reaching a bankable feasibility in this environment can be estimated at over 25 Musd.
(http://www.ann7.com/randgold-gets-boost-in-joint-venture-deal-in-congo)

In March 10,2016, the shareholders of Kilo Mines "did not approve by the required majority the previously announced proposed joint venture with Randgold Resources (DRC) Limited in respect of the Company's Somituri gold project in northeast Democratic Republic of Congo ; following that their share price rised immediately by 15%[2].

2...Incorporated within these licences is: - the Somituri project (71.25% owned by KGL), comprising six contiguous licences (361km2) held by KGL-Somituri sarl- the KGL Isiro sarlJoint Venture (JV) with Randgold Resources Ltd (2056 km2), for gold and associated minerals only. The JV is managed by Randgold and financed by it to a pre-feasibility (PFS) for a 51% participation interest. Upon completion of the PFS, KGL can participate in

Other elements that may help support a valuation exercise are:

- the acquisition of 85% of Amani properties by Burey Gold in Sept 2014 for the equivalent of 3.9 MA$; the market value of Burey is now of about 37.5 MA$ (Hartleys broker estimate), the Giro project is Burey' sole asset after the Guinea properties were relinquished (Burey name is changed to Amani).
- Armadale have reserves of 678,000 oz in SW Katanga (ex Kisenge manganese mine property)[3]The market cap is only about 2M£.

Generally in the South East, the general situation is more volatile. Banro market capitalization is around 125 million usd. Share price has risen by 50% since the beginning of 2016. Randgold shares have also risen substantially and fallen end 2016 but the respective influences of Mali and DRC theaters must be assessed separately.
A better picture is probably given by Kilo Gold share, which have also fallen during last quarter.

- Auris, in the Pangoy ore belt has properties covering 3247 km2, no JORC resources and a valuation estimated at 42 mio usd;
- There was an option on Casa Mining in 2013 (Leda/ subsidiary of Anvil :Misisi project) by MMG (Zijin)to acquire the full share capital for an amount of 5 Mio usd provided that evaluation of Misis would deliver JORC resources over 1.2 milion ounces; additional ounces would be paid 5 usd each.
- In 2016 Monument Mining was offered Afrimines resources properties (1970 km2) including 120koz in Ngoy prospect 200000 usd and a promise to perform 1 Mio usd work against 50% of the property; in a second step 4 Musd additional work would grant 70% of the shares. But the deal was cancelled four monhts after signature in february.

20. RECOMMENDATIONS

The proposed strategy is that, after securing the mining title for iron for a decade, ***the main effort must address gold to generate a tradable value more rapidly***, then separate the iron asset and develop it in parallel.
Kilo Gold strategies and track record are exemplary in this case.

funding or Randgold will increase its participation to 65% by completing a Feasibility Study. Areas which may be deemed of no interest to Randgold will be returned to KGL. KGL has retained the rights to explore for and develop iron ore resources and other minerals associated with the licences held by KGL Isiro SARL.
(http://www.kilogoldmines.com/?did=0B_UQZws6zSd_cjRFWElDVHJHaWc)

3 http://www.miningweekly.com/article/armadales-drc-gold-project-faces-delay-2016-05-20)

20.1 IRON

The various tasks to undertake while the PR lasts include :
- Compile and relocate all the available data in Tervuren Museum and DRC (see annex 1);
- Re-map the area and collect grab samples to focus the interest ;
- Look for a suitable JV partner ;
- Look at different business models
  Direct Shipping Ore (DSO)
  Steel manufacture
  Combination of the aforementioned options
- Define a Resource*
  . An inferred resource estimate will require (NI 43-101)
  And a set of -1000 x 1000 m drill holes spacing, RC drilling
  density measurements on chips.
  . An indicated resource estimate will require (NI 43-101)
  And a set of drill holes with -500 x 500 m spacing, RC and 10% Diamond with density logging.
- Develop a Preliminary Economic Assessment (PEA)
  - Secure conversion to a PL licence.(which is what Iron Mountain/Gertler was trying to achieve).

Cost (minimum): (do not include lease costs)

Detail	Time	Cost $
Phase 1	3 months	
Inventory of data Resources		$ 1 000,00
Study of geology maps		$ 2 000,00
Study of airborne geophysics: mag & radiometry		$ 3 000,00
Study of airborne and satellite gravimetry		$ 5 000,00
Special processing of Aster images for iron minerals & study identification of regional target areas		$ 8 000,00
Phase 2 – Preliminary field work	6 months	
Collection of grab samples (1 x geo + 1 x support)		$ 45 000,00
Assay and study of the ore including chemistry & Mineralogy 150 samples		$ 18 000,00
Local airborne survey US$17 / line km: 12,000 km lines + mob/demob + reporting		$ 360 000,00
option airborne gravimetry gravimetry in same flight		$ 120 000,00
sampling 500 to 1,000 samples		$ 100 000,00
Phase 3 – First pass drilling	1 year	
First Phase about 3,000 m DD for outlining Drilling normal cost 120 usd/m here *200%(?)		$ 810 000,00
Logistics: Camp		$ 50 000,00
Infrastructure: roads and pads		$ 70 000,00
Assays 1 3000 @ 22 usd and shipping		52 000,00 $
Local salaries		$ 225 000,00
Local Supervision 1		$ 30 000,00
Scoping study		$ 150 000,00
Phase 4 – Second pass drilling:	1 year	
		$
Evaluating 0.5 Bt Fe resource, inferred, another 5,000m		1 350 000,00
Logistics: Camp		$ 50 000,00
Local Supervision 2		$ 40 000,00
Local salaries		$ 375 000,00
Infrastructure: roads and pads		$ 160 000,00
Assays 2 5000 @ 22 usd and shipping		$ 110 000,00
Scoping study		$ 250 000,00
TOTAL		**4 384 000,00 $**

20.2 *GOLD*

Prospection will entail the following tasks :
- compile all the archives in Belgium and DRC and relocate all prospection maps (see annex1) ;
- re-interpret all satellite and airborne geophysical data available (including the survey budgeted above for iron)
- visit and remap the most interesting places found in archives ;
- inventory and map the artisanal worksites ;
- visit and map new airborne generated targets.
- geochemical survey for gold on all targets, first pass : 500 m lines
- geochemical survey on selected targets second and third passes
- optional helicopter borne VTEM, 100 m spaced lines,
- scout drilling
- delineation drilling
- evaluation drilling with a target > 2Mozpre-feasibility.

Belgian and DRC archives compilation	**2 months**	**60000**	**60000**
Interpretation of sat and geophysical data		30000	30000
All targets visit and mapping	**6 months**		**640000**
Geologists * 2		270000	
Local Personnel*12		135000	
Logistics, vehiclesVehicules *3		165000	
Logistics, camp		45000	
logistics, travel		18000	
logistics, hotel		4500	
geochemistry first pass	**4months**		580000
geologists * 2		180000	
Personnel Local*12		90000	
Logistics Vehicules *3		110000	
Logistics camp		30000	
Logistics voyages		12000	
Logistics Hotels		3000	
Gold + ICP Assays	4000	156000	
geochemistry second pass	4 months		580000
geologists * 2			
Personnel Local*12			
Logistics Vehicules *3			
Logistics camp			
Logistics voyages			
Logistics Hotels			
Gold + ICP Assays			
Vtem	1 month		
2000 km@300 usd			600000
scout drilling	2 months		
3000m RAB	210		630000
supervision			212500
delineation drilling	3 months		
10000 m RC with 10%DD			2200000
supervision			318750
Total including delineation			**5851250**
evaluation drilling	2 years		
100,000 m DD			26700000
supervision			1700000
Pre-feasability			**150000**

21. REFERENCES

21.1 Bibliography

CAHEN, L. et LEPERSONNE, J. (1967) The Precambrian of the Congo, Rwanda and Burundi, pp. 143-290, in :
K. RANKAMA., ed., The Precambrian, III, J. Wiley, London.

Commission of the European Communities – Directorate for Development and Cooperation – Directorate for Trade and Development (1974) Possibilities of establishing export industries in the associated African and Malagasy states Iron and Steel production.

DUHOUX, P. V. (1950) La. Pétrogénèse et la Métallogenese du domaine minier de Kilo-Moto.
Ann. Soc. geol. Belg., 73, M 171-243.

LAVREAU, J. et LEDENT, D. (1975) Etablissement du cadre géochronologique du Kibalien.
Ann. Soc. Géol. Belg., 98, 197-212.

LEPERSONNE, J. (1974) Carte géologique du zaire à l'échelle du 1/2.000.000. Dept. Mines, Kinshasa.

MARELLE et ABDULLA Iron ore deposits in Africa in Africa (1970)
Survey of world iron ore resources; Dep. of Economic and Social Affairs ; Occurrence and appraisal. Report of a panel of experts. - New York : United Nations. - 1970, p. 62-101

POZZO DI BORGHO P. (2013) Railways in Sub-Saharan Africa An effective regional integration tool? IFC power point presentation

RAUCQ P. 1973 Les Formations ferrugineuses de la Tele (Haut Zaïre)
Annales de la Societe Geologique de Belgique. Vol. 98(1975); Fascicule 1, Pages 123-139. 1976.
WOODTLI R .A . 1961 Iron ore resources of the North Eastern Congo
Economic Geology Vol. 56, pp. 1385-1391

21.2 *Colonial archives about the permit*

REFID	Extend	NumArchive	InternalLocation	RefTitle	Ancillary	NameCompany	NameAuthor
2618	1	Tele	63/B/2	1	Rapports mensuels. Productions, exploitations, prospections. M. O. E. M. O. I. Alluvions, filons, éluvions.	SURONGO	
2619	1	Tele	63/B/3	1	Rapports mensuels. M. O. E. M. O. I. Productions. Alluvions, filons, éluvions.	SURONGO	Alexandre
2619	1	Tele	63/B/3	1	Rapports mensuels. M. O. E. M. O. I. Productions. Alluvions, filons, éluvions.	SURONGO	Josis
2623	1	Tele	63/C/1	1	Notes et études sur les prospections et exploitations. Filons, éluvions, alluvions. Colorimétrie (Notes et rapports).	SURONGO	Lancsweert
2623	1	Tele	63/C/1	1	Notes et études sur les prospections et exploitations. Filons, éluvions, alluvions. Colorimétrie (Notes et rapports).	SURONGO	Groslambert
2623	1	Tele	63/C/1	1	Notes et études sur les prospections et exploitations. Filons, éluvions, alluvions. Colorimétrie (Notes et rapports).	SURONGO	Alexandre
2623	1	Tele	63/C/1	1	Notes et études sur les prospections et exploitations. Filons, éluvions, alluvions. Colorimétrie (Notes et rapports).	SURONGO	Brosius
2635	11	Tele	64/C/1	1	Tele et S. M. A. I. - Réserves minerais. Eluvions, filons, alluvions.	SURONGO	Brosius
3388	1	Tele	64C/6	1	Rapports annuels. Exploitations, prospections, productions, MOI, labo, réserves, alluvions, filons, éluvions.	SURONGO	Sosis
3388	1	Tele	64C/6	1	Rapports annuels. Exploitations, prospections, productions, MOI, labo, réserves, alluvions, filons, éluvions.	SURONGO	Brosius
3388	1	Tele	64C/6	1	Rapports annuels. Exploitations, prospections, productions, MOI, labo, réserves, alluvions, filons, éluvions.	SURONGO	Alexandre
2107	2	Sociétés Kivu	33/E/8	1	Havaux, G. Rapports de prospection.	FORMINIERE	Havaux
2109	4	Sociétés Kivu	34/E/2	1	de Hults, M. 1. Rapports techniques, mensuels, de prospection.	FORMINIERE	Hults
2114	1	Sociétés Kivu	34/E/7	1	Lengele 3. Rapports et feuilles de prospection. Eluvions, alluvions, filons.	FORMINIERE	Lengélé
2114	5	Sociétés Kivu	34/E/7	1	Laurent, F. Feuilles de prospection. Résultats des essais au laboratoires.	FORMINIERE	Laurent
2123	3	Sociétés Kivu	35/D/8	1	Cassalette, R. Feuilles de prospection.	FORMINIERE	Cassalette
2123	1	Sociétés Kivu	35/D/8	1	Busschaert, J. M. Rapports mensuels. Prospection éluvionnaire, alluvionnaire, filonienne.	FORMINIERE	Busschaert
2132	8	Sociétés Kivu	35/E/9	1	Martin, L. 2. Rapports mensuels, techniques, de prospection. Tableau de réserves.	FORMINIERE	Martin

2132	4 Sociétés Kivu	35/E/9	1	Maillard. Rapports mensuels, techniques. Résultats des fouilles.	FORMINIERE	Maillard
1707	4 Belgikaor	36/A/9	1	Feuilles des fouilles. Estimation du gisement et des réserves. Cartes de développement, de prospection, éluvions.	FORMINIERE	Havaux
1707	4 Belgikaor	36/A/9	1	Feuilles des fouilles. Estimation du gisement et des réserves. Cartes de développement, de prospection, éluvions.	FORMINIERE	Gals
1707	4 Belgikaor	36/A/9	1	Feuilles des fouilles. Estimation du gisement et des réserves. Cartes de développement, de prospection, éluvions.	FORMINIERE	De Munck
1707	4 Belgikaor	36/A/9	1	Feuilles des fouilles. Estimation du gisement et des réserves. Cartes de développement, de prospection, éluvions.	FORMINIERE	Waltzing
1711	6 Belgikaor	37/A/3	1	Rapports techniques, mensuels. Mine Mukukutshi.	FORMINIERE	
1711	4 Belgikaor	37/A/3	1	Rapports de l'exploitation, mensuels, généraux. Mine Imonga.	FORMINIERE	Gonze
2151	2 Sociétés Kivu	37/D/1	1	De Groote, D. 2. Rapports techniques, mensuels, de prospection.	FORMINIERE	De Groote
2153	3 Sociétés Kivu	37/D/3	1	De Ryckel, B. Rapports techniques, mensuels, de prospection.	FORMINIERE	De Ryckel
2154	6 Sociétés Kivu	37/D/4	1	Dion, L. Feuilles de prospection. Compte-rendu.	FORMINIERE	Dion
2161	4 Sociétés Kivu	37/E/3	1	Schaack, Ch. H. Correspondance. Résultats des fouilles. Rapports de prospection.	FORMINIERE	Schaack
2165	5 Sociétés Kivu	37/E/7	1	Sortet, J. 1. Rapports de prospection.	FORMINIERE	Sortet
2167	4 Sociétés Kivu	37/E/9	1	Stassen, M. 2. Rapports de prospection.	FORMINIERE	Stassen
2169	3 Sociétés Kivu	38/E/2	1	Ullens, P. 2. Rapports techniques et administratifs, de mensuels, de prospection. Estimation des réserves.	FORMINIERE	Ullens
3516	1 Raucq	48C/3	1	Rapports sur le potentiel minier (en l'occurrence le minerai de Fer) du NE du Congo : Pétrographie, cartes d'indices, etc.	SICAI	Raucq,P.
3513	1 Raucq	48C/6	1	- Cartes topographiques et cartes des indices. - Notes sur les travaux de recherches des indices de Fer dans les monts Mbomo.	SICAI	Raucq,P.
3513	1 Raucq	48C/6	1	- Cartes topographiques et cartes des indices. - Notes sur les travaux de recherches des indices de Fer dans les monts Mbomo.	SICAI	Solomoni
3511	1 Raucq	48C/8	1	Courriers et Rapports de Missions : minéralogie, analyses chimiques, recherches minières, etc.	SICAI	Misra,A.
3511	1 Raucq	48C/8	1	Courriers et Rapports de Missions : minéralogie, analyses chimiques, recherches minières, etc.	SICAI	Raucq,P.
3505	1 Raucq	48D/6	1	Courriers, Rapports, Publications sur les minerais de Fer de Kasai : Photos minéralogie, cartes d'anomalies magnétiques.	SICAI	Raucq,P.
3503	2 Raucq	48D/7	1	Rapports du Sicai-Tractionel sur les potentialités minières dans le Nord-Est du Zaïre : collections, descriptions des échantillons, analyses chimiques, cartes géologiques et des indices, etc.	SICAI	
3504	1 Raucq	48D/7	1	Rapports du Sicai - Tractionel : Reconnaissance, évaluation des réserves, pétrographie, analyses chimiques et transports des minerais de Fer de la Tele, Enquête sur les possibilités de créer une fonderie de Cassitérite, Histoire du Régime minier au Zaïre, etc.	SICAI	
4789	1 Dossiers G	G775	1	Rapport de synthèse sur la province orientale.	SICAI	
4790	1 Dossiers G	G776	1	Rapport de synthèse sur la province orientale.	SICAI	

22. DATE AND SIGNATURE

Dated this day September14 2017

23. ADDITIONAL REQUIREMENTS FOR TECHNICAL REPORTS ON DEVELOPMENT PROPERTIES AND PRODUCTION PROPERTIES

This section is not applicable to this report

24. ILLUSTRATIONS

Relevant Extracts from SICAI REPORTS