

## Note on the evaluation of the value of iron ore covered by PR 1323, 1324 & 1325

The 1972 Sicaï Tractional surface prospecting report ( <http://www.thaurfin.com/SICAI.pdf> ) was carried out on the basis of a very large number of samples taken by trenches and by well.

Have the results been underestimated or overestimated?

1. The length of itabirites recognized over BRGM map is larger than the total length considered in the calculation of resources. The length of the itabirites on the map is around 45km (6.5 + 21 + 17.5) (appendix 1) The length considered of the Sicaï Tractional report is 21.25 km, i.e. half, (appendix 2 )
2. The density has always been considered at 3 kg / dm<sup>3</sup>, according <http://thaurfin.com/Annales-Mines-1975-Paul-Raucq.pdf> the density would rather be around 3.5.
3. The extrapolation depth of 70m is very conservative while the height of the hills exceeds 100m (appendix 2)
4. Despite these elements of underestimation, unjustified safety factors further reduced the assessment of resources.

According to the surface prospecting data extrapolated over 70m, we obtain **0.97bt @ 65.3% Fe** with an average density of 3 ; we get **1.6 bt bt @ 65.3% Fe** with an extrapolation depth of 120m (appendix 2).

In addition to these undervaluations, safety coefficients have been introduced without giving any reason.

It therefore seems established that the results underestimate the high-grade iron reserves, so it is only legitimate to mention a deposit greater than 1bt @ 63% Fe.

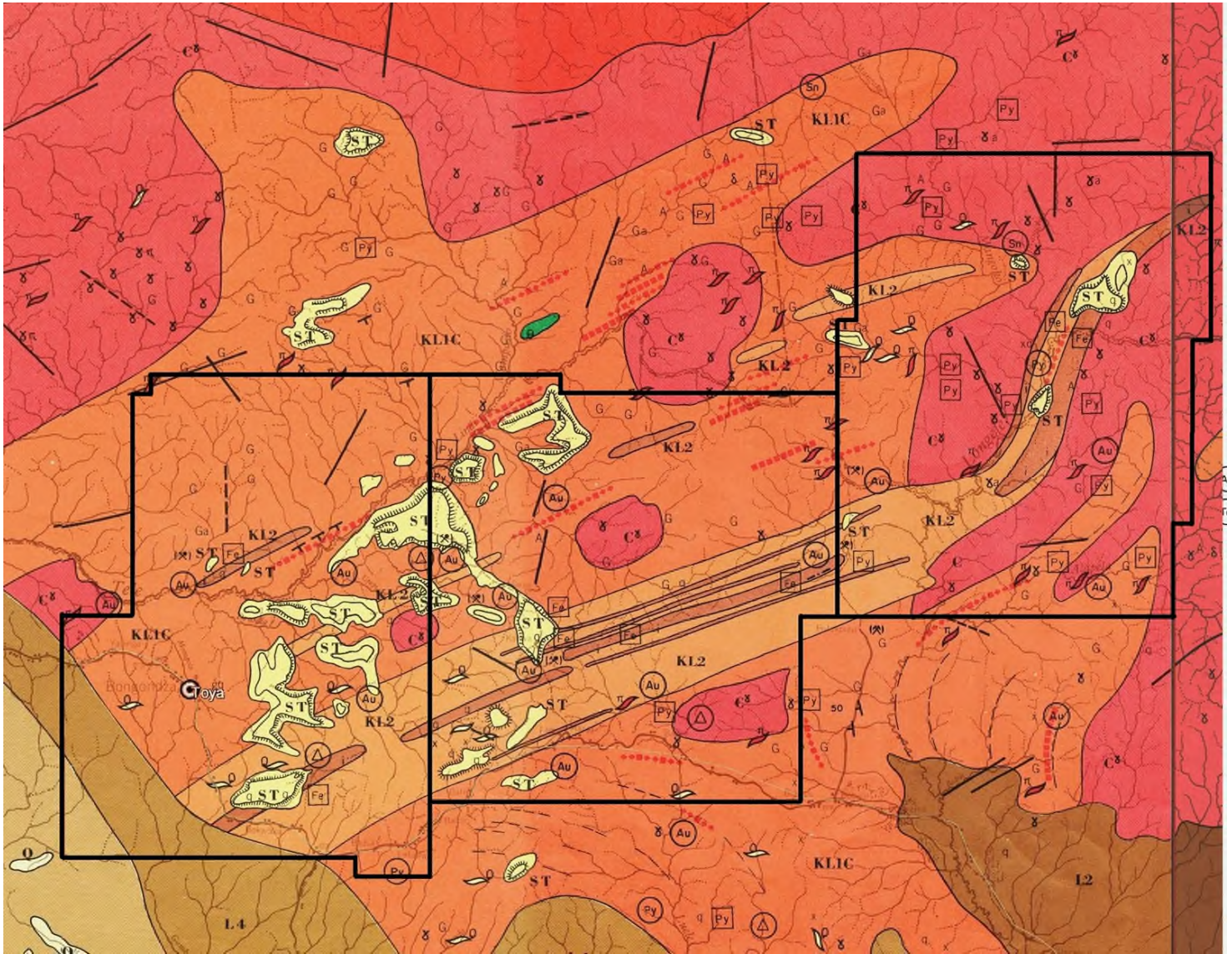
It would have been necessary to assess the risks of the extrapolation which motivated the choice of a depth of 70m.

- From a geometric point of view, the continuity of a deposit of sedimentary origin greatly limits the risk of extrapolation over such a small distance.
- From the point of view of the content, we know that the high contents are caused by the leaching of itabirites (responsible for the reduction of their density). These itabirites are located parallel to the granite massif and close to it in rocks that have been metamorphosed. The last phase of consolidation of a granite massif is known to be the hydrothermal phase responsible for the gold mineralization observed on the 3 polygons. The granite expels these hydrothermal materials which must cross the itabirites located parallel to the granite massif and causes the leaching responsible for the high iron contents observed. Being regional, so is leaching.

This thesis was verified. This work was carried out in 2007/2008 by MSA Group (Specialist Consultants to the Mining Industry), cf <https://msagroupservices.com/commodities/commodities-iron-ore> (appendix 3).

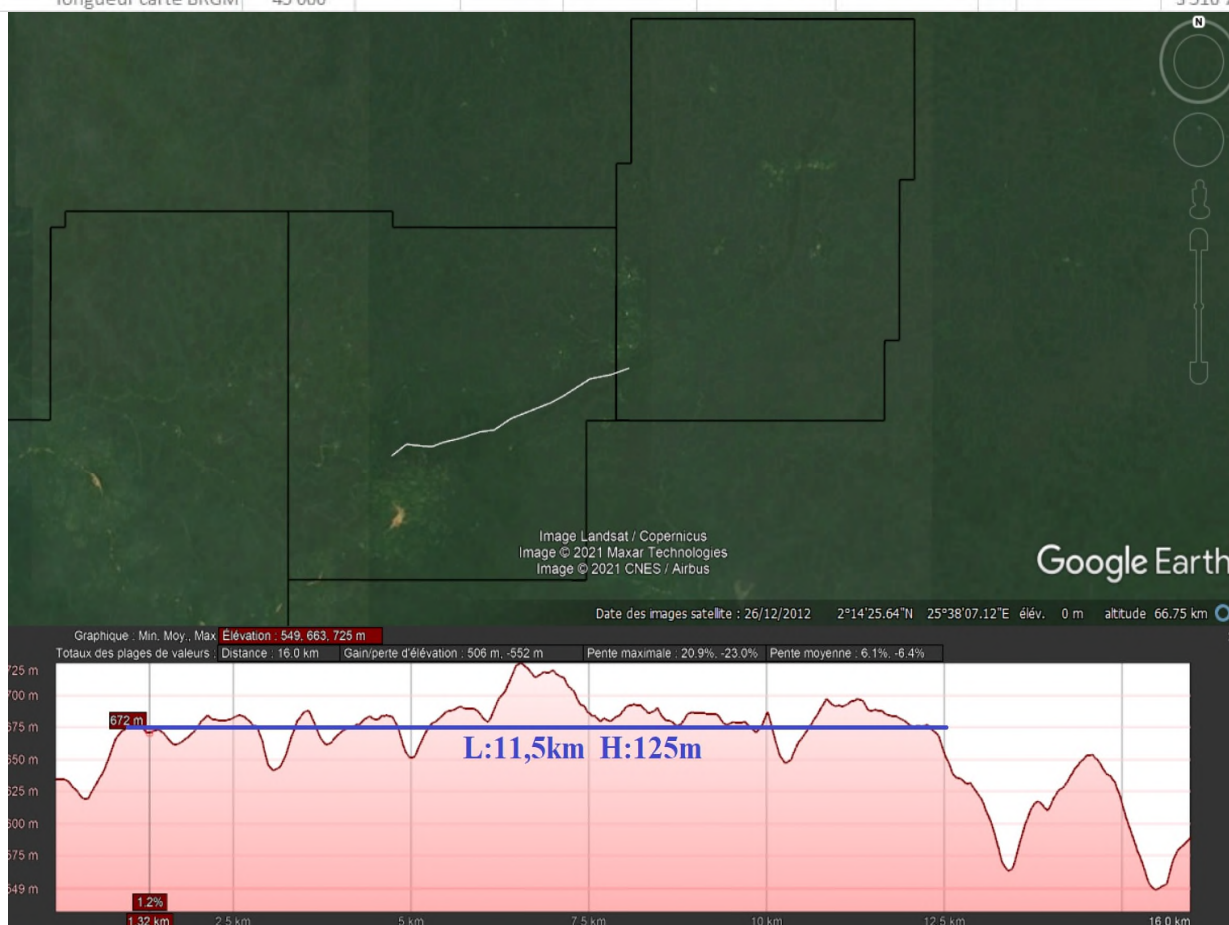
Following these surveys, Dan Gertler's Orico company was looking for \$ 7b to finance the export infrastructure of 65Mt per year. This article also certifies that the prospecting drilling has been carried out <https://www.radiookapi.net/sans-categorie/2008/03/20/banalia-orico-7-milliards-usd-pour-exploiter-le-fer> (appendix 4)

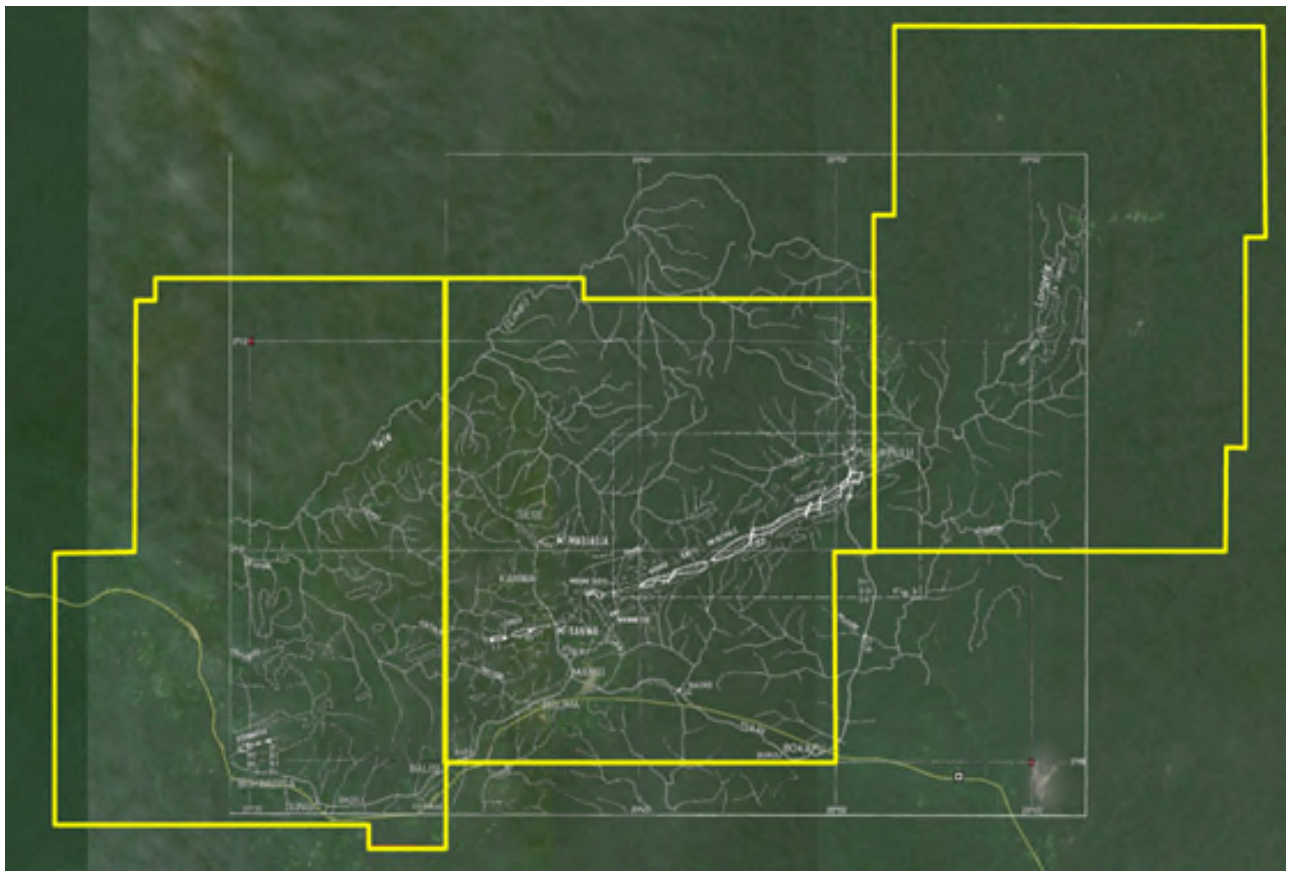
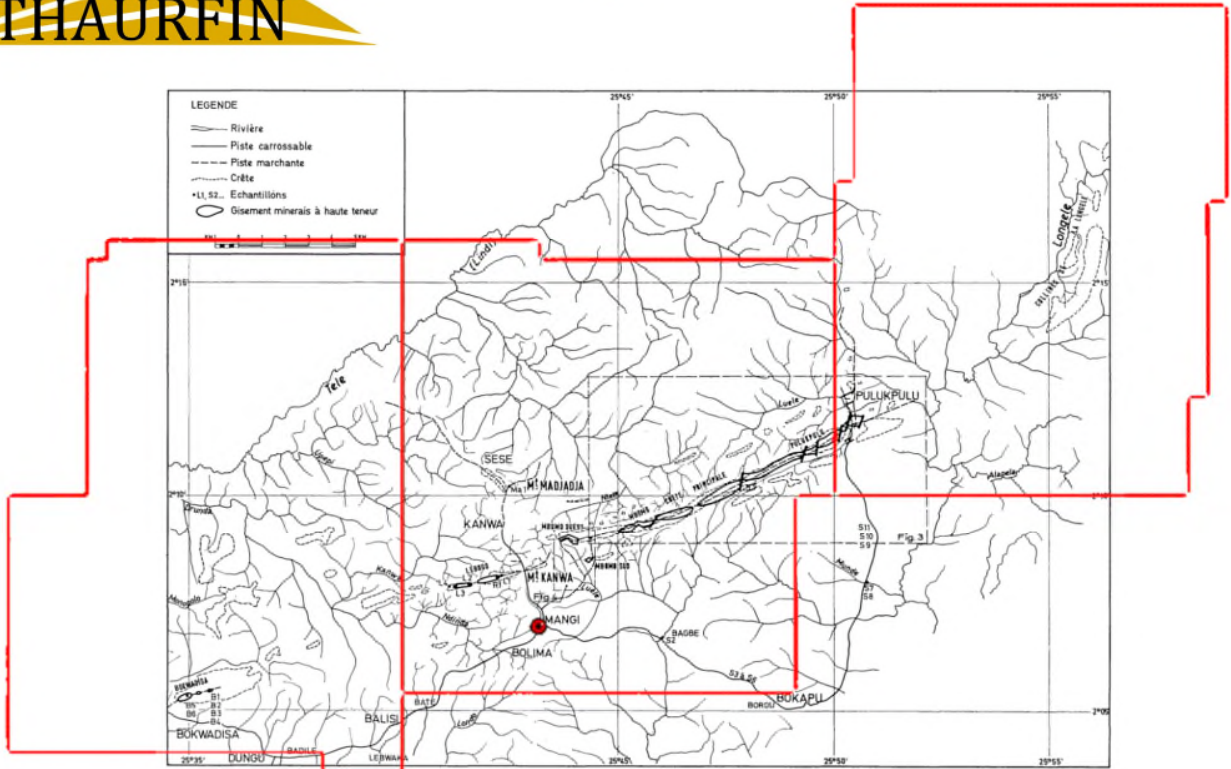
Appendix 01



### Appendix 02

		densité	3	kg/dm3					
	Profondeur extrapolation	70	m						
		length (m)	width (m)	S(m2)	height (m)	V(m3)	Fe content (%)	density (t/m3)	Weight (t)
1	Mbomo crête principale	2 600	170	430 000	70	30 100 000	62,80%	3,00	90 300 000
2	Mbomo-Ouest	700	200	144 000	70	10 080 000	62,40%	3,00	30 240 000
3	Mbomo-Sud	250	60	14 000	70	980 000	65,00%	3,00	2 940 000
4	Pulukpulu	8 200	250	2 125 000	70	148 750 000	67,40%	3,00	446 250 000
5	Bokwadisa	700	200	140 000	70	9 800 000	68,70%	3,00	29 400 000
6	Lebogo	1 800	200	360 000	70	25 200 000	67,00%	3,00	75 600 000
7	Pulukpulu Longele	2 000	200	400 000	70	28 000 000	62,40%	?	84 000 000
8	Colline Longele	5 000	200	1 000 000	70	70 000 000	62,40%	?	210 000 000
	longueur totale (km)	21 250	<b>TOTAL</b>				<b>65,30%</b>		<b>968 730 000</b>
	longueur carte BRGM	45 000							3 174 829 412
		densité	3,00	kg/dm3					
	Profondeur extrapolation	120	m						
		length (m)	width (m)	S(m2)	height (m)	V(m3)	Fe content (%)	density (t/m3)	Weight (t)
1	Mbomo crête principale	2 600	170	430 000	120	51 600 000	62,80%	3,00	154 800 000
2	Mbomo-Ouest	700	200	144 000	120	17 280 000	62,40%	3,00	51 840 000
3	Mbomo-Sud	250	60	14 000	120	1 680 000	65,00%	3,00	5 040 000
4	Pulukpulu	8 200	250	2 125 000	120	255 000 000	67,40%	3,00	765 000 000
5	Bokwadisa	700	200	140 000	120	16 800 000	68,70%	3,00	50 400 000
6	Lebogo	1 800	200	360 000	120	43 200 000	67,00%	3,00	129 600 000
7	Pulukpulu Longele	2 000	200	400 000	120	48 000 000	62,40%	?	144 000 000
8	Colline Longele	5 000	200	1 000 000	120	120 000 000	62,40%	?	360 000 000
	longueur totale (km)	21 250	<b>TOTAL</b>			553 560 000	<b>65,30%</b>		<b>1 660 680 000</b>
	longueur carte BRGM	45 000							3 516 734 118



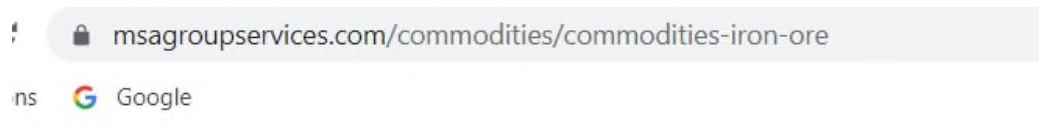


### Appendix 3

Teneur en fer d'une hématite

Fe	2	55,845	111,69	<b>69,94%</b>
O	3	15,999	47,997	30,06%
			159,687	100,00%

### Appendix 4



## Iron Ore

The MSA Group has a demonstrated track record of executing iron ore projects:

### CAMEROON

**2015-current:** Geological consulting, Mineral Resource estimation and Qualified Person Reporting (NI 43-101) on magnetite gneiss project.

**2011 – current:** Geological targeting and exploration project management of greenfields magnetite, itabirite and direct shipping ore (DSO) projects throughout southern and central Cameroon. Completion of NI 43-101 technical report and CPR for AIM admission document. Supervision and interpretation of geophysical surveys, Mineral Resource Estimation and conceptual financial modelling.

### CÔTE D'IVOIRE

**2010 – 2011:** Planning, project management and execution of an iron ore (magnetite and BIF) mapping programme in western Côte d'Ivoire. Geological, structural and mineralisation mapping, interpretation and reporting.

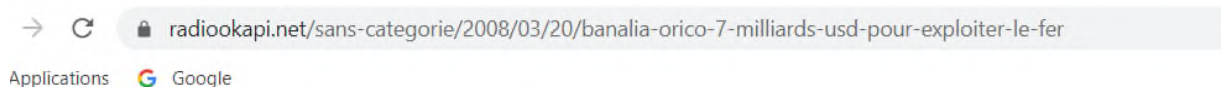
### DRC

**2007 – 2008:** Planning, project management and execution of iron ore exploration project in the Mbomo Mountains, Oriental Province. Remote sensing, geophysics, mapping, diamond core drilling, logging and sampling. Reporting.

**2007:** Planning, project management and execution of iron ore exploration on the Mont Ami Range, Oriental Province. Remote sensing, mapping, manual pitting and bulk sampling. Reporting.

## Appendix 5

<https://www.radiokapi.net/sans-categorie/2008/03/20/banalia-orico-7-milliards-usd-pour-exploiter-le-fer>



### Banalia : ORICO, 7 milliards USD pour exploiter le fer

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C'est le montant global qui sera investi dans un projet d'exploitation de fer dans le territoire de Banalia, situé à 125 km au nord de Kisangani en province orientale. L'annonce a été faite mardi dernier à Kisangani par le ministre des Mines, Martin Kabwelulu. Ce dernier était accompagné d'une délégation d'investisseurs étrangers de la compagnie Oriental Iron Company, ORICO, qui s'occupera de cette exploitation. Les députés de la Province Orientale accueillent avec satisfaction ce projet et espèrent qu'il sera le moteur de développement de la région, rapporte radiokapi.net

La société Oriental Iron Company, ORICO, est une multinationale constituée principalement de capitaux israéliens. Selon le ministre des Mines, ce projet consiste en l'exploitation de gisements de fer dans le territoire de Banalia et dans une partie de l'Ituri.

Martin Kabwelulu : « *les gisements de Banalia recèlent des minerais d'une grande valeur selon plusieurs experts. La société congolaise Bureau d'études et d'engineering, BEE, avait déjà effectué des études sur ce site il y a quelques temps.* »

Michel Liete, administrateur au BEE, évoque l'importance des gisements de Banalia et l'avantage qu'ils représentent : « *selon Dan GERTEL, le patron de ORICO, sa société a déjà commencé la phase d'exploration. Elle a notamment procédé aux forages de reconnaissance qui ont prouvé l'existence de minerais de fer. Dans trois ans, soit en 2011, ORICO passera à la phase d'exploitation. Elle espère acheminer de Banalia à Banana, dans le Bas Congo, 65 millions de tonnes de fer par an.* »