

Report on supply of Columbite (Niobium)

Belo Horizonte, September 24, 2018.

Dear Sirs,

According to your request, follows a brief description of our capacity to supply Niobium ore - Nb (columbite), minimum 50% Nb₂O₅ + 5% Tantalum Ta₂O₅ = Total 55%

Brief history:

Brazil, despite having the largest reserve of the Niobium ore planet, still lacks investment in exploration technology. With this, only three mining companies are industrially exploring the Niobium, however, these miners are already committed to long-term contracts production.

In this way, the other producers of Niobium in Brazil, legally work, but in an almost manual service way, garimpeira.

Project to meet the contract:

In order to produce a considerable volume to meet them, we have established partnerships with several Garimpeiras Cooperatives in four distinct states: Rondônia, Para, Amazonas and Roraima.

So we have an average of 150 cooperating producing.

Initially, because the Cooperatives already attend some contracts, we will be able to supply 100 Tons of Niobium per month and increase the volume and in 12 months to reach 300 tons.

In addition to the production of the Cooperative Partners, we are licensing two areas of 5,000 hectares each, which will allow us to considerably increase our supply capacity, reaching the second year with an estimated supply of around 500 Tons.

Investment:

As we mention in the brief history, Brazil has the largest reserve in the world, but there is a lack of investment for industrial-scale production of Niobium ore, as well as plants for ore enrichment and concentration.

We have excellent deposits, but lack the investment and technology to produce on a large scale.

Under the agreement, we will be able to gradually increase our supply until we can meet the demand in full in the future. If there is an investor partner to set up a large extraction and processing plant, we will be able to meet the total supply in a much shorter period.

Actual structure:

03 Cooperatives Garimpeiras, in four States, producing in partnership with us.

150 Cooperated producing garimpeira.

06 Excavators of 22 tons

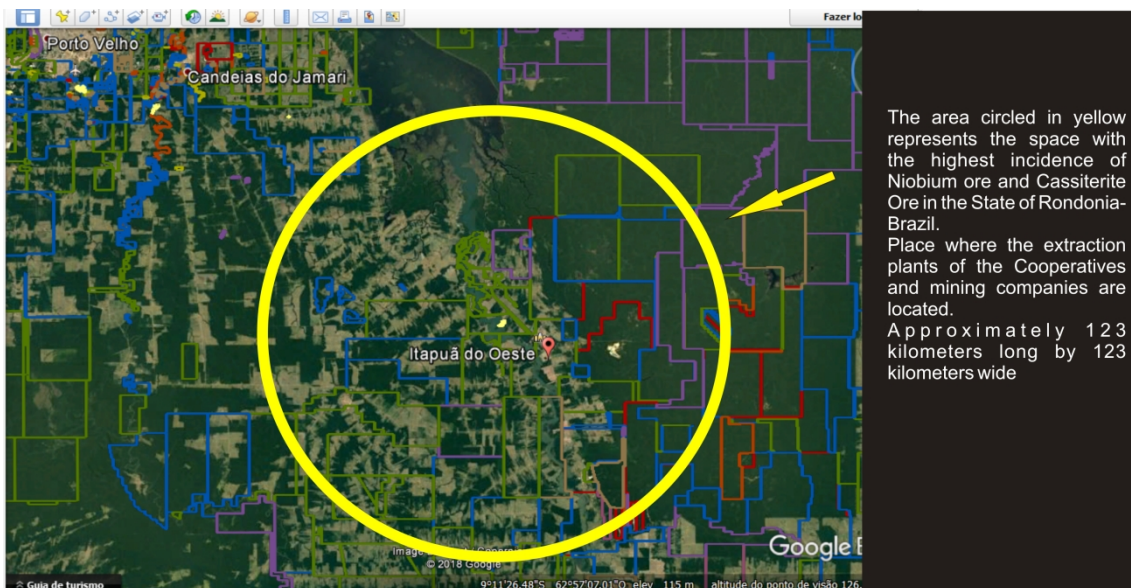
04 Shovel Loaders

04 processing plants

03 Power plants with magnetic separators

08 Trailed Bucket Trucks

Here are some photos for illustration and maps:























CERTIFICADO DE ANÁLISES
GQ1602110

Análises Método Unidade Limite Detecção	Al2O3	CaO	Cr2O3	Fe2O3	MnO	Nb2O5	P2O5	SiO2	SnO2
	XRF80B	XRF80B	XRF80B	XRF80B	XRF80B	XRF80B	XRF80B	XRF80B	XRF80B
	% 0,10	% 0,05	% 0,05	% 0,05	% 0,05	% 0,05	% 0,050	% 0,10	% 0,10
BRANCO_PREP	<0,1	<0,05	<0,05	1,45	<0,05	<0,05	<0,05	>99	<0,1
MINERAL 01	N.A.	N.A.	N.A.	N.A.	N.A.	53,7	N.A.	N.A.	N.A.
MINERAL 02	0,59	<0,05	0,09	28,7	2,23	53,6	<0,05	0,58	0,47
* REP MINERAL 01	N.A.	N.A.	N.A.	N.A.	N.A.	53,5	N.A.	N.A.	N.A.
* STD SX18-03	0,20	12,8	0,12	4,87	0,41	60,5	0,105	2,10	<0,1
Análises Método Unidade Limite Detecção	Ta2O5	ThO2	TiO2	U3O8	V2O5	W03	ZrO2		
	XRF80B	XRF80B	XRF80B	XRF80B	XRF80B	XRF80B	XRF80B		
	% 0,05	% 0,05	% 0,05	% 0,05	% 0,05	% 0,50	% 0,05		
BRANCO_PREP	<0,05	<0,05	<0,05	<0,05	<0,05	<0,5	<0,05		
MINERAL 01	5,03	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.		
MINERAL 02	5,07	<0,05	5,45	<0,05	<0,05	0,87	0,57		
* REP MINERAL 01	4,96	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.		
* STD SX18-03	0,28	0,79	4,25	0,18	0,07	<0,5	0,86		



