

EXECUTIVE SUMMARY FOR MULTI-SITE QUAD MINING MODEL FOR GOLD

THE OPPORTUNITY

Brazil has tremendous gold reserve spread throughout its territory. Some major gold deposits were discovered in Tapajos region, others at different states such as Rondonia, Mato Grosso e Minas Gerais etc. When a reserve with 43-101 (in the rock) is discovered, it is usually sold to major exploration companies who use the property as an asset and launch it in the stock market.

In the following paragraphs, you will see a profitable alternative to the way gold is mined throughout Brazil. This concept does not refer to 1 particular area but to many sites that could be administrated and monitored simultaneously.

In the past few years Brazil has been attracting many companies that wanted to invest in gold mining. Public companies normal mode of operation is to find a probable site with excellent surface indicators for gold, then negotiate with its owner an option agreement, then pledge the site into the company's assets base.

Next, the company will raise funds and use them to conduct a geophysical research which will determine the size of the gold reserve at hand. Then they will issue a press release and announce the results. If the site met their minimum requirement (**0,5 - 1 million ounces of gold or 15-30 ton deposit**), the public company's share prices will rise. Further exploration will take place with the public's money and then after several years (7-9 years) if all goes well, the site is monetized with a full NI-43-101 report of proven reserve status. This entire process is:

- Costly- at least \$ 10M to get NI-43-101 proven reserve report + Millions in administrative and legal costs.
- The process takes several years to reach maturity.
- The outcome of the project is a fully monetized asset with X ounces @ \$Y.

Evidently, hundreds of excellent mining claims with small reserve that could be operated on a small scale using the open pit model were left untouched and unexplored by the public companies. These sites are of little interest to them (junior and major mining companies) simply because they do not meet their minimum reserve requirements and do not merit a geophysical research on them. (which cost US\$ 3 -6 million to produce and take years to complete).

As a result, many mining sites with small deposits each (2-10 tons) 50,000-200,000 are left untouched since their reserve is too small to be considered a good asset.

The occurrences of tailings sites that were mined by artisan miners is quite common. If we add them all up jointly, there are hundreds if not thousands of tons of gold, ready for mining.

Although the tailings have little in volume in ounces, the flexibility of the QMM permits the deployment of 4 plants in One region, the overall sum of the 4 sites can have a respectable volume in ounces. (4 sites x 50,000 ounces = 200,000 ounces which

is not bad if we mine it all. This is why Lion Gold Brazil is committed to develop this gold mining project and doing so with a viable plan that utilizes the QMM or the Quad Mining Model which was developed for LGBI and will be used exclusively in Brazil by Lion Gold Brazil.

FLAGSHIP UNIT



GENERAL CONCEPT OF THE QUAD MINING MODEL

The QMM is a unique approach for gold mining which was developed for open pit type mining. The general concept resembles a franchise which in this case applies to gold mining. The project is comprised of 4 plant units, 1 Flagship Unit and 3 other secondary units, (hence the name Quad) that can be expanded indefinitely and produce an average of 1 ton of gold per year per Quad or US\$ 50,000,000 in annual revenues per Quad.

As stated earlier, there are many mining sites with small alluvium or tailings deposits that can be explored and then abandoned when the resource was exhausted. Lion Gold Brazil has no interest in owning these sites, because they are too small to generate any interest in the financial market.

Yet, these sites have several tons each in gold reserve that could be explored on a large scale using the QMM

Lion Gold Brazil has currently targeted several mining sites as prime candidates which are standing-by for gold mining operation. One such site has over 200,000 hectares of mining claims. Other site claims are also ready for exploration and their owners are aware of the process. Lion Gold Brazil's approach is summarized by the following principles:

As stated before, this mining project takes advantage of the hundreds of alluvium sites located throughout Brazil, especially in the Amazon and Mato Grosso region. This model requires a dry creek bed or river-bed (even ones that were already explored in the past) or properties with alluvium disseminated ore with PPM as low as 1-1,5 gr/tn and as high as 4-5 grams per ton..

Instead of going through the whole arduous and costly process of prepping a site for exploration, LGB will act immediately and deploy a MOBILE plant capable of processing 500-600 tons a day x 25 days a month. At 1-1,5 gram per ton (at 80% recovery rate), such a plant can fetch 15 kilos per month. Less 15% operating cost, less + 10%-20% in royalties, = 12 kilos month per plant.

In Phase 2 of the project, (6-12 months later) 3 other similar plants will be deployed near the main plant, thus multiplying production to 55 kilos month.

Profits do not stop here. This project is adaptable and will parlay itself through continuous expansion **WITHOUT** an additional investment from outside sources because the expansion itself is financed and bootstrapped from own resources.

It will be using the same Quad model (1 plant + 3 plants) and will be deployed at many other sites. The reason we use 1 flagship plant + 3 secondary plants, is because it is an efficient mode of administrating several field projects under one logistics umbrella. To add one more plant will strain the system. To reduce one, will underutilize its potential.

Each Quad will be deployed in other areas and be centrally administrated. 10 Quads will fetch 10 x 50 kilos = 500 kilos month. Our objective will be to deploy as many as 10 Quads in 3 years and 30 Quads in 5 years. This expansion will bring the production level of the project to several tons per year.

Let's compare the 2 approaches for mining:

Factors to consider	Normal Modus Operandi for Gold Mining projects with 43-101	Quad Mining Model for alluvium gold claims
Initiation time	Require 8-12 years of preparation	No time at all, only few months. Just lease an existing site. (sites must be fully licensed)
Cost	Cost Millions to prep the site over a long period of time.	Monthly royalty of 10-20% or monthly lease agreement (the royalty fee is decreased since the owner is diluted in the process). Money comes from production. All that is needed is seed capital of \$5 M.
Cost of surface rights	There is a need to buy surface rights or pay royalties to owner	All included in the Royalties
Asset ownership	The company must own at least 51% of the asset	No ownership (apparent major drawback for an asset base public company, which is offset by immediate cash generation).
Cash generation	No cash generation until the mine plant is operative. The company starts owing money since its inception.	Immediate cash generation. Plant produces gold as of the first month after plant deployment. It takes about 12 months to deploy the first Quad.
Flexibility	Non, (chosed between two evils) which projects to dump and cut losses.	Flexible, can move operation elsewhere
Operating cost (initial)	Expensive to operate due to drilling cost	No drilling cost since project deals with alluvium only, operation cost run at about 15% -20%
Time span	Long! It takes anywhere from 7 to 12 years to prove a project with 43-101	Short time span! It takes 3-6 months to prove the reserve of the alluvial tailings by an independent company.
Risk	High risk because of its initial cost	Low risk because the entire QMM is SELF CORRECTING . If we invest in the wrong site, we dump it and cut our losses in no more than 30 days. If we start and all goes well, then we practically hit the jackpot. Cash generation takes little time and errors could be corrected immediately by simply moving the plant.
Option to buy	Option agreement is negotiated and the site is pledged.	Option agreement could be negotiated later when and IF we consider the site an under valued asset with possible underground reserve . Site could be purchased later (as part of an option to buy agreement) if there is a mutual interest and potential.

LET'S LOOK AT THE CURRENT WAY OF PREPING A GOLD MINING SITE IN BRAZIL

Here are the general steps and the long and arduous process for prepping a gold mining site

- Claiming the site after evaluation
- Preliminary research,
- Research results communicated to DNPM (Brazilian National Department of Mineral Production)

- Research license (“alvara de pesquisa” or reserch license 3 years + 3 additional years)
- Sending exploration plan to DNPM and filing for mining application
- Environmental license
- PLG or mining concession (Licença Operacional – Operating License).
- User license guide of X tons of ore is issued for the miner
- Entire process cost \$150,000 for PLG for private non company person.
- Entire process up to “Portaria de Lavra” stage, may cost \$\$1-5 million and may take 2-5 years to conclude

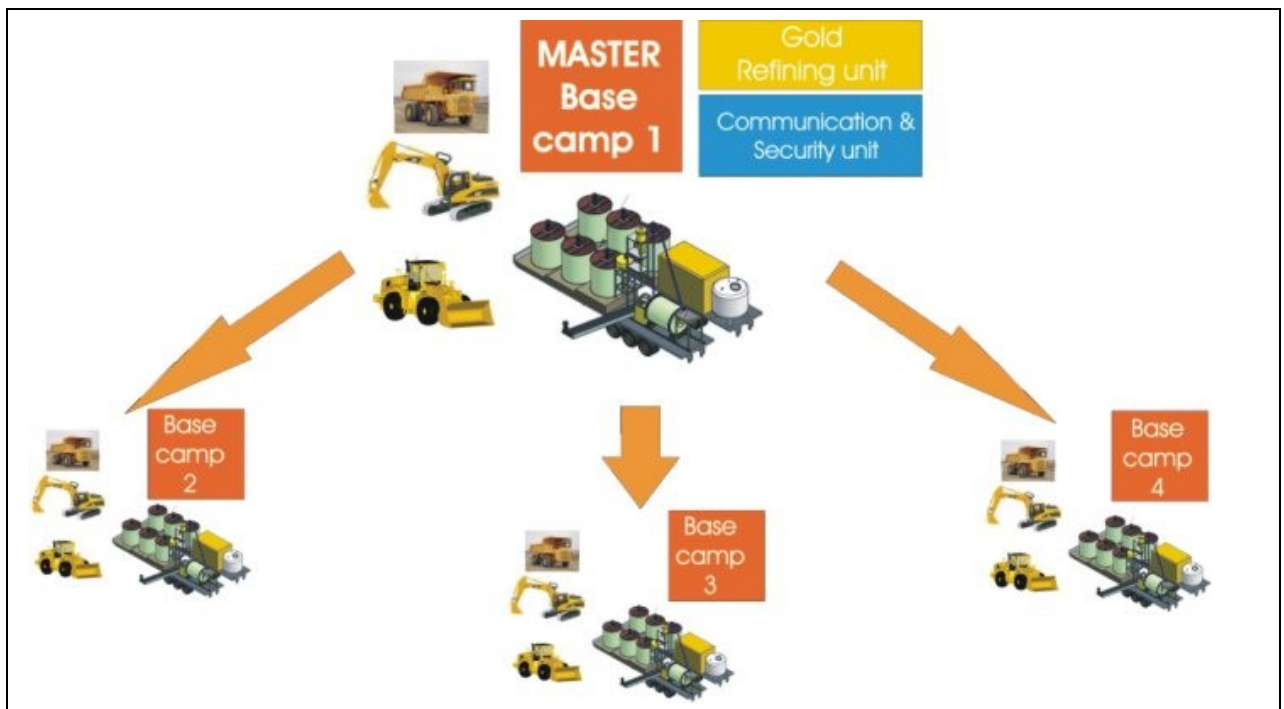
In the end, the owner will be sitting on a “pile of dirt” which may take him years to market.

LEST LOOK AT THE ALTERNATIVE

- Find motivated mine claim owners and lease or JV on their claimes with 10%-20% max in royalties to them.
- Or lease the area from them on a monthly basis.
- Deploy one Repeat process in as many sites as possible
- When the site stop producing, plant is moved
- Purchase a ready PLG (a licensed area for artisan miner) whenever possible.

WHAT ARE THE REQUIRMENTS OF A GOOD MINING SITE:

- Area must have PLG license or with LO (Operating License)
- Only alluvium projects with minimum 0.7-1,5 ppm will be considered.
- 1 km x 0,3km minimum size requirement
- Areas must undergo shallow testing to measure their gold volume potential. This testing phase costs US\$ 75,000 -\$100K and takes no more than 6 months to conclude. (depending on the size)
- Initial investment of US\$ 5 Million – project can bootstrap and parlay itself to as many sites we can get.



MAIN ADVANTAGES OF THE QUAD MINING MODEL

- **LEASED CLAIMS OR JV ON HIGHER % RATIO IN THE INVESTOR'S FAVOR –**

The sites which form the project will be leased from the site owners on a 10% -20% of revenues or a flat monthly fee basis for the duration of the mining operation. This results in enormous savings and higher profits by eliminating the need for the normal 51-49% JV and by using 80%-20% or even 90% 10% JV contracts in Lion Gold's Brazil favor.

- **GEOLOGICAL PRE-QUALIFICATION –**

The site proposed for each project will be pre-qualified by a geologist and must have good land logistics. These sites possess mainly alluvial or tailings and are ready for immediate exploration. The site claim owner will be solely responsible for the licensing and environmental permits. This will reduce the liability of Lion Gold Brazil.

- **SPECIAL VEIN DETECTION TECHNOLOGY –**

Although the main bulk of the project will be based on alluvium and tailings, in many cases, veins are present in many of the alluvium sites (this is because some of the alluvium deposits were originated by the local veins). Therefore mining in the veins makes sense because:

1. There are there in the same general area of the alluvium deposits.
2. To stay focused, we will target only the shallow veins (down to 25 meters deep). Working with this goal in mind does not require any special extra effort to mine them.
3. The ore can be processed in the same plant used for alluvium or tailings or can be processed in a much smaller plant model. Although the vein material volume is at times small, it still can improve the overall plant production by elevating the gram/tonnage ratio. For example, if the site claim has a recovery rate of 0,7 grams/ton, by adding the vein's ore, it can be brought up to 2 grams per ton or more.

To locate the shallow veins Lion Gold Brazil will be using the latest vein detection technology with metal signature. This technology combines GPR (Ground Penetrating Radar) with radio-magnetometry imaging. Using this equipment, the geologist can pinpoint the exact location of a vein at up to 25 meters deep. This is only one of the components of the project because veins that are close to the surface (the Oxidized type) do not last for more than a year or two. This is why Lion Gold Brazil's project has to be ACTIVELY looking for veins at adjacent areas to ensure maximum revenues. This is also the reason why the mobile plant is so crucial for the success of the operation. While the plant is producing gold at one site, an on going vein exploration should occur at the vicinity.

- **MOBILE PLANT –**

Lion Gold Brazil will deploy its equipment and machinery which will be completely mobile modular and manned. The mining operation could be proven successful or not within 30 days from plant deployment. This will lower the operational risk. In case of failure to produce enough gold, the plant will be moved to another location and have no further obligations with the site owner. This ability to move about will provide 3 major advantages:

- A.) Efficiency to react to changes in vein or alluvium conditions and location.
- B.) The mobility will ease the logistics and speed up plant deployment.
- C.) Mobility will speed expansion of the project in new areas in a very short time.

- **TWO MAIN PLANT MODELS –**

All mobile plants will be made by Lion Gold Brazil's specifications and be comprised of two main plant models.

- The first one is capable of processing 100 tons per day of primary vein material and operates 600 hours per month (4 days are reserved for maintenance).
- The second model will be a gravitation plant capable of processing 80 tons per hour and process in one month (500 hours per month) 40,000 tons of per month.

This type of plant can be deployed in areas where the gold is disseminated either by many shallow and thin veins or in river beds with alluvium gold in a concentration of 1-1,5 grams per ton.

- **LOWER OPERATION COST –**

This is due to the fact that very little crushing is necessary since the alluvial ore is a soft and fine material that was already milled before by mining equipment (by the artisan miners). Also in comparison to Primary gold (in the rock), alluvial mining cost \$250-400 to produce 1 ounce of gold while hard rock mining costs anywhere from \$700 to \$1,100 to produce 1 ounce. This is due to the crushing cost and the cost of tunneling.

- **LOWER RISK OR LIABILITY –**

Reduce corporate liability Since all the sites are leased qualified from land owners, if the project does not fetch its expected revenues, it will be moved to another site where it will meet production standards. The mobility feature of the project is a major risk factor reducer. Lion Gold Brazil has currently several owners who are willing to participate in the project either on flat fee basis or percentage basis. Also since this is an open pit process, there is no comparison to the risk of digging galleries and tunnels where the probability of accidents are far greater.

- **INDEFINATE EXPANSION –**

Lion Gold Brazil intends to expand its operations indefinitely using this mining and administration model. Its goal is to operate simultaneously 50 open pit sites in the next 6 years under one centralized management team. This multiple site approach using the Quad model for mining will ensure the multiplication of revenues. This model could be bootstrapped into a billion dollar business in 4-5 years.

- **TIME CONSTRAINS ELIMINATED.**

Project can be deployed in few weeks from signing (provided all equipment is on hand)

- **IMMEDIATE PRODUCTION (AND RESULTS) NOTHING DOWN**

It takes in average 7-9 years for a public company to take its mining project from a pledged claim into a fully operating mine. The QMM has the advantage of being immediate. Instead of doing a JV on a 51-49% basis with owners, Lion Gold Brazil will either lease the small mine claims on monthly leasing payment or do a JV on a much lower percentage basis (80-20% is the maximum acceptable) with the added advantage that these leases require NO DOWN PAYMENT at all!!

- **IMMEDIATE CASH GENERATION INCREASES SHARE VALUE**
- **DUPLICABLE AND SELF CORRECTING PROCESS**
- **THE GOLD CAN BE MINED EVEN IN THE RAINY SEASON.**

DISADVANTAGES

- The site can not presented as an asset of a company which is traded because it is leased. However, some of the sites could be purchased or pledged later on by using an option to buy clause.
- This sites do not come with 43-101 report. However, each site will undergo a shallow testing (5 meters vertical probes). This test can give us an idea of the site potential and an inferred volume estimate. This test would cost anywhere between 75K – 100K. An independent research by a third party has carries some value in the market although it does not have a NI 43-101
- There is a considerable logistics challenge but it could be met with the right administrative team.

PLANT CHARACTERISTICS

The plant will have several essential features:

1. **Advanced Communication technology** – The plant can be seen 24/7 while operating by the investors from any cell phone with internet access. All camera feeds will be accessible in in real via satellite link. The Flagship plant will integrate the information from the other 3 plants of the Quad model and will feature them as well in real time.
2. The plants are secured by special **advance loss prevention technology** concepts devised by ex military security field officers. It will be equipped with special security features, such as wireless cameras, hidden cameras, perimeter watch, daily reports, and field refinery lab with 2 stage entry procedures. (An Israeli technology used in the diamond industry).
3. The entire project and its components are all **modular**. i.e. The plant is the same, so are the generators, crusher, barracks, communication, surveillance equipment, etc. All fits in a container and can be brought anywhere.
4. The plant and it components are completely **mobile** and equipped with purifying laboratory, complete with Cyanide and floatation tanks. This will ensure that the gold produce on the site will be 99% pure or very close to it.
5. Plants with **processing capacity of 500-600 tons of ore per day** of oxidized or alluvial ore. Highly efficient. A concentration of 1 gram per ton will fetch 30-35

kilos per month average per site.

6. **Adaptability** – This plant model could be used in almost all the areas because of the use of 2 plant models which respond to 90% of the ore type requirements in Brazil. Furthermore, the alluvium plant will come with adjustable gravitation screens, thus it could be used several types of quartz and rock material.
7. **Low operation cost.** Plants operational cost run at about 15% of gold production. It is not labor intensive and requires only 4 persons per shift including excavator and truck operator. (Wet plants will not use trucks or excavators but the ore will be sucked by pumps)
8. **Low cost** - Unlike gold mining plants that cost US\$ 8-10 million, capable of processing 1000-1500 tons a day, Lion Gold Brazil's plants, cost substantially less. The entire project investment for one site will run at about US\$ 2,500,000 for the first Flagship plant site and will be comprised of, mobile plant, excavator, truck with inclined ramp, utility vehicle, compressor, generators, Ground penetrating Radar, barracks and field HQ. The cost of the additional 3 plants will be less since they will be using the same logistics umbrella of the Flagship's plant. The cost for the first 4 Quad plant units is \$ 7,500,000. The cost of the second and third 4 plant units will drop substantially since the equipment purchase will be in a bulk rate.
9. **Total boot-strapping** Another option is to bootstrap the entire operation and start with the Flagship plant and use part of the revenues generated to purchase the other 3 plants. A 3 months production of 15 kilos (total of 45 kilos) will suffice to pay for the second plant and after it too becomes operative, the other 2 plants can be paid in even less time since both will be producing.

PHASE 1: Deployment of 1 Quad (4 plants) in the designated location.

Lion Gold Brazil will use a quad model (4 plant) for the deployment of its 4 mobile plants. The Flagship plant will be deployed at the first site and within 6-9 months, 3 additional plants will be in position.

Their deployment will take place at 2 to 3 months intervals and produce gold at a rate of 15-20 kilos per month EACH for a total of 60-80 kilos from all 4 plants when fully operated. If the project nets 50 kilos per month or 600 kg per year. (20,000 ounces after operating cost and leases were deducted). Then its revenues before taxes will be about \$ 38M per year. The initial investment for the deployment of all the 4 plants will run at about US\$ 9 million (\$5 M initial cost + \$ 4M from production).

NOTE:

All the sites that Lion Gold Brazil has targeted, have a good history of gold production either through garimpeiros (artisanal prospectors) or by small scale explorations. Nevertheless, a certified geologist will conduct a low cost preliminary research which aims at:

A.) Qualifying the site's logistics, identifying alluvial targets, also the main veins and their content (gram per ton). The minimum gram/ton expected accepted for veins normally ranges between 15 – 25 grams/ton in the veins and 0,7g/t -1 g/t gram/ton in disseminated, alluvium ore or tailings.

B.) Calculating the reserve volume and estimate the duration it would take to explore the entire reserve. This process should not take more than 3-6 months.

Once sample results have been verified, then Lion Gold Brazil will proceed to signing the agreement with the land owners. As stated earlier, lease agreement could be done on a percentage basis or flat fee basis. Each one will be negotiated separately. The maximum Lion Gold Brazil will pay is 20%. The lease agreement will be subject to all licenses and permits being in order.

PHASE 2: EXPANSION

After one year, when all 4 plants were fully operated, an additional investment capital of US \$ 5 million will be siphoned off the project's income and an additional Quad will be deployed at other areas.

Lion Gold Brazil will procure 4 other plants (from revenues) and have them ready to be deployed at 4 new locations. Lion Gold Brazil will target a dozen of other sites and sign lease agreement with their owners.

This will double the production. To 1400 kilos of gold (46,000 ounces). These figures will be expanded for as long as we can administrate the projects. Each 12 plants (3 Quads) will be administrated by one central field headquarter.

PHASE 3: EXPANSION INDEFINATELY

3. EXPANSION PHASE 3: This expansion model could be expanded indefinitely at will or be accelerated as needed.

With the cost of gold production at no more than \$300 per ounce of gold (currently less than 15% of the price of gold), this project is very resistant to the fluctuations of the gold price.

Lifetime:

Due to the mobility of the plants, their great number, they could be easily moved to any location. If we consider the expansion model explained above, virtually for many years.

Team:

Lion Gold Brazil will provide the management and security team and will take care of the logistics and distribution.

Required Capital:

\$ 5 million USD for the deployment of 4 plants throughout various regions.

The attached spreadsheet will outline the project's financial goals. Additional information is available to qualified investors for due diligence purposes after an MOU is executed between the owner and potential joint venture partner, and such information involves geological report, permits, licensees, ownership documents, resume and references for team members.

CONCLUSIONS

By using the QUAD model, many plants can be deployed and administrated throughout the Tapajos region, Pocone, and the north of the Amazon as well as in other states that are rich with alluvium deposits. This project present an administration and logistics challenges, Even at low estimates, this mining model can be very successful because of its low entry level. The question that comes to mind is: Are there any sites available that meet these criteria with owners who accept these terms? The answer absolutely yes!! There are literally dozens of sites available with owners who agree to those terms and we have several projects in our pipe line which we have spoken to their owners.

The model resembles a military structure and it does for a reason- once the area is tested and ready, its all about logistics. Having one Quad operating, can teach us a lot in the parallel expansion of the other Quads. Establishing a reasonable goal of deploying 1 quad the first year, then 3 on the other, and so forth, can prove that this model is in fact sound and profitable.

QUAD 1



QUAD 2



QUAD 3



QUAD 4



QUAD 5



A 5 Quad project is expected to fetch 2,5-3 tons of gold a year