



September 2016 Quarterly Report

Cascavel Project

- Commissioning of Cascavel plant commenced, with a trial gold pour completed utilising some of the gold concentrate produced.
- First dore bars containing 7kg of gold shipped for refining and sale, produced from development material processed during commissioning.
- Performance of the mine and processing plant following first two months of commissioning and operations (August and September) was assessed.
- Decision taken post-quarter to temporarily suspend mining and processing activities to reduce cash drain and provide time to review and remedy the operational issues identified during commissioning, while planning for a re-start of production. It is the Company's intent to recommence operations as soon the issues have been satisfactorily resolved.
- There is not currently evidence of any fundamental issues with the process circuit or metallurgy of the ore that would prevent the Company from being able to achieve targeted gold recoveries of 85% or higher.

Corporate

- In-principle agreement reached with Cartesian Royalty Holdings ("CRH") to replace the milestone/date default clauses relating to the gold stream financing arrangement secured with CRH in May 2015.
- Discussions are underway with shareholders and other parties regarding funding arrangements, as well as negotiations with the 30% owners of Cascavel and other parties that include potential joint venture, partnering and financing arrangements in relation to the broader Faina Gold Project, which includes Cascavel, Sertão and other regional targets.
- The Company's securities will remain in voluntary suspension until it concludes these discussions.

CASCAVEL GOLD MINE (Orinoco: 70%)

Operations

Following completion of the first gold shipment from the Cascavel gold mine, Orinoco has reviewed the performance of the mine and processing plant in the first two months of commissioning and operations (August and September).

As a result of this review, the Company has decided to temporarily suspend mining and processing activities to reduce cash drain and provide time to review and remedy operational issues identified during commissioning, while at the same time planning for a re-start of production.

The Company does not have sufficient cash reserves to allow for the necessary optimization and remediation to occur while continuing to generate negative cash flow during the ramp-up period.

Orinoco Gold

Ground Floor, 16 Ord Street
West Perth WA 6005
PO Box 234
West Perth WA 6872

Contact

P (08) 9482 0540
F (08) 9482 0505
info@orinocogold.com
www.orinocogold.com

ASX Code

OGX
(Ordinary Shares)
OGXOB
OGXOC
(Listed Options)

Issued Capital

303,742,856 Ordinary Shares
10,000,000 Performance Shares
123,128,226 Options

Plant

The total performance of the plant could only be assessed once the maiden commercial gold pour had been completed, which occurred on 7 October 2016 and the final gold content of the concentrate was known.

During the commissioning period of August and September, ~7,000 tonnes of material was processed through the gravity plant (during July only waste material was used for the commissioning process).

Of the material processed, 91% was development material or mineralised waste, removed from the mine during development of the main incline shaft, level development drives and internal ramps; the remainder (9%) was production ore from initial stoping activities.

While the head grade of the processed material is difficult to precisely measure via sampling because of the coarse gold nature of the mineralisation, the average grade of all material processed – which was predominantly mineralised waste – for this period is estimated at between 3 and 4g/t, which should equate to a gold content contained in the concentrate reporting to the gold room of ~25kg.

The actual amount of gold in doré poured from smelting the concentrate was materially lower, which is unacceptable even during a commissioning and ramp-up phase. The doré was refined post-quarter and found to contain 7kg of gold. The majority of the gold not reporting to concentrate has reported to tailings with some gold retained in solution following lead removal by acid wash. The tailings are dry stacked and can be reprocessed if necessary when the plant has been optimised and availability allows.

Various factors are viewed as potentially contributing to the poor performance of the plant including the grind size and particle size distribution currently achieved by the comminution circuit, the performance of the gravity circuit arising from possible complications with the industrial lead, operator inefficiency and gold theft also are being considered as potential contributing factors. It is believed that the lead issue has arisen from the use of detonators containing industrial lead in the blasting process, not any intrinsic metallurgical characteristic of the ore.

Attempts by staff to deal with the recovery issues have been hindered by the inability of in-country assay laboratories to turn around accurate samples for assay in a timely manner. Negotiations with local authorities are continuing for the necessary licensing and environmental approvals to allow a dedicated on-site laboratory.

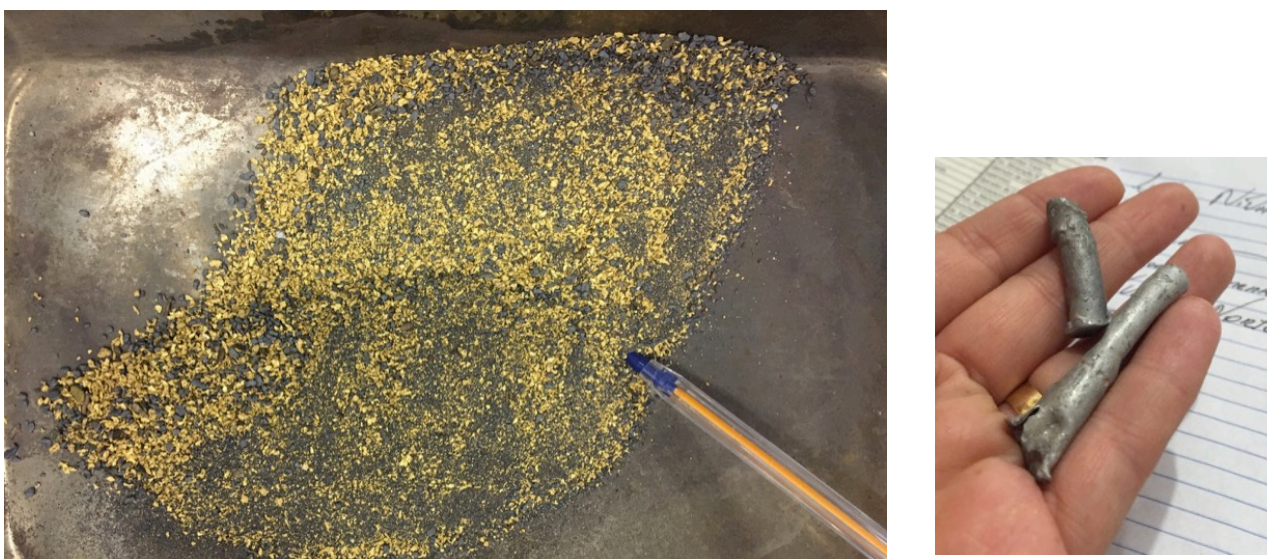


Figure 1. *Left* – Concentrate containing lead (grey material); *Right* – The source of the lead material, the delay elements from the detonators. The aluminium casing from the detonator is in the lower right of the photo, while the lead element is the upper left of the photo.

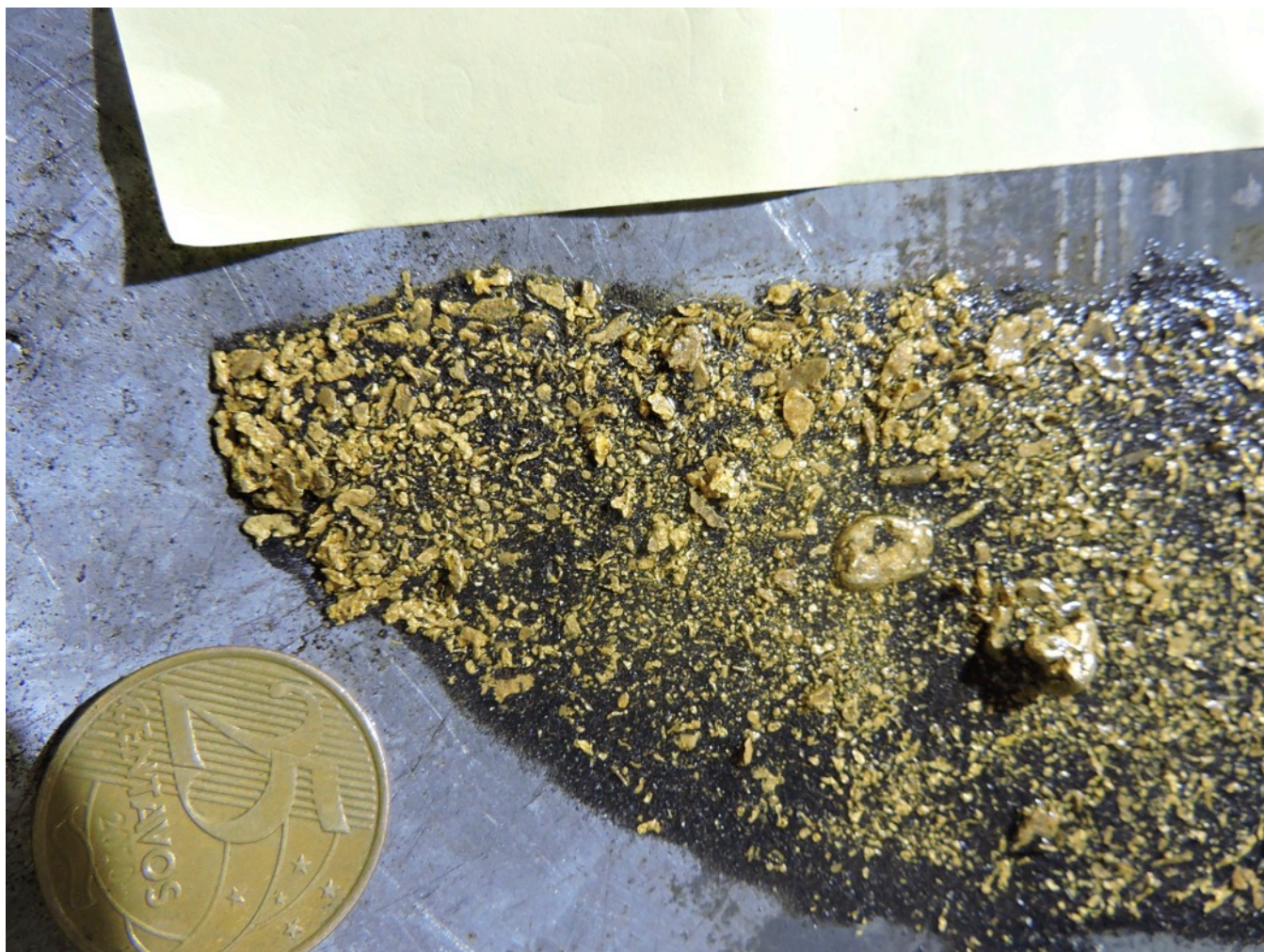


Figure 2.– Concentrate taken from the same mine location, but from a sample collected with a rock-saw and milled in Orinoco’s prep-lab prior to be tabled. No lead content.

Importantly, there is not currently evidence of any fundamental issues with the process circuit or metallurgy of the ore that would prevent the Company from being able to achieve targeted gold recoveries of 85% or higher.

Note: The majority of all underground development at Cascavel is within the mineralised zones, however additional dilution due to the size of the development opening (between 3-3.8m high) means this material is significantly lower grade than production material from the stopes (designed to average ~1.2m high, but currently at 1.5 to 1.8m in the upper areas of the mine due to ground conditions) and at times not in mineralised areas. As such, this development material is classified as “mineralised waste”.

Mine

As outlined in previous announcements (see ASX Announcement – 10 May 2016), the initial focus of underground development at Cascavel was on the central/northern zones in tandem with development at a slower pace to open up the southern areas.

Current development within the mine is approximately 55m below surface at its deepest point and remains in weathered transitional rock between oxide and fresh rock. Ground conditions in the northern part of the mine are significantly better, allowing for faster development, where the alteration surrounding the mineralised vein set is much thinner than in the southern areas of the mine.

Conversely, in the southern portion of the mine where alteration around the vein set is currently thicker, ground conditions necessitate a slightly lower rate of advance and additional ground support technologies (as outlined in the Company’s 2015 Annual Report – 30 March 2016). The southern portion of the mine is interpreted to contain

thicker and generally richer areas of mineralisation, however the associated thicker alteration zones and extensive abandoned artisanal workings make development slower in this portion of the mine.

In recent times, development has been focused on the higher-grade southern areas of the mine in order to liberate more production headings. Consequently, there is immediate availability of production material from the north where significant development has taken place and there are no scheduling conflicts between development and production, but very little stope availability in the higher-grade southern areas, where development is ongoing.

Whilst no access was available to the northern area prior to mine development, and consequently no bulk sampling was undertaken, mineralisation was inferred from Orinoco’s previous drilling and has now been visually confirmed in the mine development (2015 Annual Report – 30 March 2016). The information gathered from ongoing sampling and mapping of Cascavel supports the current geological model where the mineralised veins consist of both high and low-grade ore shoots. In the north, there is a predominance of low-grade shoots, interspersed with high grade; whereas in the south, there is a predominance of high-grade shoots, interspersed with low-grade.

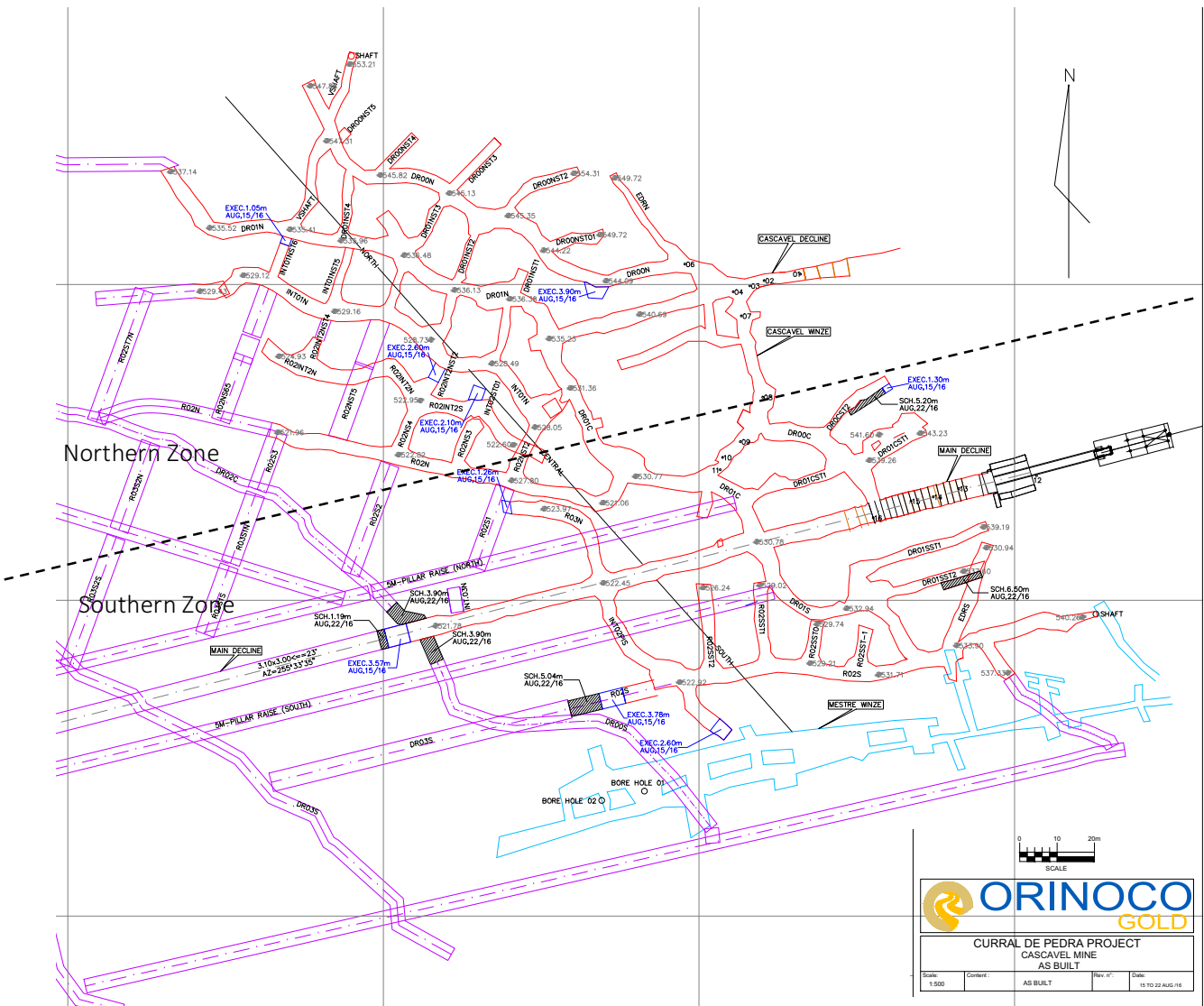


Figure 3.– Current mine plan.

The inability to accurately assess grade from small sample sizes is a well-established feature of the coarse gold mineralization at Cascavel. Processing of bulk samples or mined material is the best indication of grades available to the Company. The relatively small amount of production material processed to date from high-grade stopes throughout the mine has been estimated to have head grades of between 10-17g/t depending on the stope, and as previously announced (4 September 2016), mining dilution in the upper weathered portions of the mine where ground conditions are poor is greater than desired. Head grades delivered to the processing circuit from the mine are expected to increase with depth.

The Company's view is that the material sourced solely from the lower-grade northern area of the mine will not by itself allow the Company to generate sufficient operating cash-flow at this scale of operations, and that production ore from stopes in the south of the mine is required to generate positive cash flow.

POST QUARTER

Operations Review

A technical committee has been established to oversee an operations review. This committee will be chaired by non-executive director, Brian Thomas, a geologist and mineral economist with several decades of mining experience.

The operations review will address all aspects of the Company's operations with a view to improving the recoveries from the plant, re-scheduling the mine and completing necessary development prior to re-starting operations. Orinoco continues to work with its equipment suppliers, consultants and technical specialists to remedy the issues.

The review process will include ensuring that key management roles are appropriately staffed for a re-start of operations.

Corporate

The significantly reduced saleable gold content of the produced concentrate has impacted Orinoco's cash position as well as its cash flow forecasts. Additionally, the large fall in the Company's share price to 11.5c on 7 October has meant the Company can no longer project receipt of up to \$6.4m proceeds from the exercise of 60.4 million listed 11.0c options (ASX:OGXOB) expiring 30 November 2016 in its cash forecasts.

In light of the Company's reduced forecast cash position, the poor gold recoveries to date as well as the inability to access sufficient higher-grade ore in the short term, the Company's Board decided to suspend operations at Cascavel to preserve cash while resolving the issues and securing finance to ensure ongoing solvency.

Financing

The Company entered into a gold stream financing arrangement in May 2015, pursuant to which Cartesian Royalty Holdings ("CRH") provided US\$8 million in return for an entitlement to receive 20% of the gold produced during the first three years of commercial production from Cascavel, subject to a minimum quantity of 16,000 ounces of gold delivered to CRH. The agreement contained several milestone/date based defaults that the Company believes may be in danger of not being met should the sub-optimal recoveries and ore-scheduling issues described above not be quickly resolved or should the mine activities be temporarily suspended.

The Company and Cartesian have agreed in principle to replace milestone/date default clauses contained in the gold stream agreement and the Company believes it is close to signing a binding variation deed containing the revised terms, including a restructure of the gold stream to provide for a maximum period of up to 300 days in

which to restart operations. It is the Company's intent to recommence operations as soon the issues have been satisfactorily resolved.

Concurrently, the Company is also in discussions with shareholders and other parties regarding funding arrangements as well as negotiations with the 30% owners of Cascavel and other parties that include potential joint venture, partnering and financing arrangements in relation to the broader Faina Gold Project that includes Cascavel, Sertão and other regional targets.

These complex and inter-related discussions and negotiations will be ongoing in the short term and the Company therefore estimates that its securities will remain in voluntary suspension until it concludes these discussions. The Company will continue to provide updates to the market as and when it has material new information.

-ENDS-

For further information, please contact:

Mark Papendieck
Managing Director
Orinoco Gold Limited
08 9463 3241
info@orinocogold.com

Nicholas Read
Managing Director
Read Corporate
08 9388 1474

Forward-Looking Statements:

This Announcement includes "forward-looking statements" as that term within the meaning of securities laws of applicable jurisdictions. Forward-looking statements involve known and unknown risks, uncertainties and other factors that are in some cases beyond Orinoco Gold Limited's control. These forward-looking statements include, but are not limited to, all statements other than statements of historical facts contained in this presentation, including, without limitation, those regarding Orinoco Gold Limited's future expectations. Readers can identify forward-looking statements by terminology such as "aim," "anticipate," "assume," "believe," "continue," "could," "estimate," "expect," "forecast," "intend," "may," "plan," "potential," "predict," "project," "risk," "should," "will" or "would" and other similar expressions. Risks, uncertainties and other factors may cause Orinoco Gold Limited's actual results, performance, production or achievements to differ materially from those expressed or implied by the forward-looking statements (and from past results, performance or achievements). These factors include, but are not limited to, the failure to complete and commission the mine facilities, processing plant and related infrastructure in the time frame and within estimated costs currently planned; variations in global demand and price for gold materials; fluctuations in exchange rates between the U.S. Dollar, the Brazilian Real and the Australian dollar; the failure of Orinoco Gold Limited's suppliers, service providers and partners to fulfil their obligations under construction, supply and other agreements; unforeseen geological, physical or meteorological conditions, natural disasters or cyclones; changes in the regulatory environment, industrial disputes, labour shortages, political and other factors; the inability to obtain additional financing, if required, on commercially suitable terms; and global and regional economic conditions. Readers are cautioned not to place undue reliance on forward-looking statements. The information concerning possible production in this announcement is not intended to be a forecast. They are internally generated goals set by the board of directors of Orinoco Gold Limited. The ability of the company to achieve any targets will be largely determined by the company's ability to secure adequate funding, implement mining plans and resolve logistical issues associated with mining. Although Orinoco Gold Limited believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements. No JORC Mineral Resources or Reserves have been estimated for the Cascavel Gold Mine.

Interests in Mining Tenements:

Tenement	Project	Type of Tenement	Location	Held at end of Quarter	Acquired during the quarter	Disposed of during the quarter
860167/2007	CASCABEL	Exploration Permit	Faina - Brazil	70%	-	-
860205/2014		Joint Venture Application Claim		70%	-	-
860206/2014		Joint Venture Application Claim		70%	-	-
860480/2009		Join Venture Application Claim		70%	-	-
861453/2013		Join Venture Application Claim		70%	-	-
861501/2014		Joint Venture Exploration Permit		70%	-	-
861586/2009		Exploration Permit		70%	-	-
860051/2012	REGIONAL	Exploration Permit	Faina - Brazil	70%	-	-
860069/2010		Exploration Permit		80%	-	-
860188/2012		Joint Venture Exploration Permit		70%	-	-
860193/2011		Exploration Permit		80%	-	-
860336/1990		Joint Venture Application Claim		-	-	60%
860337/1990		Joint Venture Application Claim		-	-	60%
860404/2013		Exploration Permit		70%	-	-
860570/2016		Joint Venture Application Claim		-	-	60%
860571/2016		Joint Venture Application Claim		-	-	60%
860582/2016		Joint Venture Application Claim		-	-	60%
860583/2016		Joint Venture Application Claim		-	-	60%
860600/2011		Exploration Permit		70%	-	-
860683/2016		Application Claim		80%	-	-
860684/2016		Application Claim		80%	-	-
860685/2016		Application Claim		80%	-	-
860686/2016		Application Claim		80%	-	-
860803/2016		Application Claim		-	-	60%
860856/2012		Joint Venture Exploration Permit		70%	-	-
860947/2010		Exploration Permit		80%	-	-
860948/2010		Exploration Permit		80%	-	-
860964/2010		Exploration Permit		80%	-	-
860968/2010		Joint Venture Exploration Permit		-	-	60%
860988/2010		Exploration Permit		80%	-	-
860995/2013		Joint Venture Exploration Permit		-	-	60%
860995/2016		Application Claim		-	-	100%
861229/2005		Application Claim		80%	-	-
861258/2003		Tender Application		-	-	100%
861277/2010		Exploration Permit		70%	-	-
861288/2009		Joint Venture Exploration Permit		-	-	60%
861340/2008		Application Claim		60%	-	-
861341/2008		Application Claim		60%	-	-
861359/2015		Exploration Permit		70%	-	-
861360/2015		Exploration Permit		70%	-	-

861365/2015		Joint Venture Application Claim		-	-	60%
861445/2010		Application Claim		-	-	60%
861590/2009		Application Claim		-	-	60%
861859/2010		Application Claim		-	-	60%
861868/2010		Application Claim		100%	-	-
861912/2010		Joint Venture Application Claim		-	-	60%
861917/2013		Exploration Permit		70%	-	-
861918/2013		Exploration Permit		70%	-	-
760742/1996	SERTÃO	Mine Concession	Faina - Brazil	100%	-	-
860096/1986		Mine Concession		100%	-	-
860368/1995		Mine Concession		100%	-	-