

# Faina Goldfields Project

**Building Brazil's Next Gold Mines** 

**ANNUAL GENERAL MEETING** 

May 2015

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Competent Person's Statement: The information in this presentation that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr Klaus Petersen who is a member of the Australasian Institute of Mining and Metallurgy and CREA. Dr Klaus Petersen is an employee of Orinoco Gold Limited and has sufficient experience, which is relevant to the style of mineralisation and type of deposits under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Klaus Petersen consents to the inclusion in this presentation of the matters based on the information in the form and context in which it appears.

**Exploration Targets**: It is common practice for a company to comment on and discuss its exploration in terms of target size and type. The information in this presentation relating to exploration targets should not be misunderstood or misconstrued as an estimate of Mineral Resources or Ore Reserves. Hence the terms Resource(s) or Reserve(s) have not been used in this context in this presentation. The potential quantity and grade of resource targets are conceptual in nature since there has been insufficient work completed to define them beyond exploration targets and that it is uncertain if further exploration will result in the determination of a Mineral Resource or Ore Reserve.

**Previous Reported Results:** There is information in this report relating to Exploration Results at Cascavel. Full details of the Results were included in the following ASX Release and are available to view on the Company's website www.orinocogold.com:

7 July 2014 – Bonanza Gold Results up to 27 oz/tonne from Cascavel Exploration Decline/14 May 2014 - Outstanding Gold Grade from Latest Cascavel Bulk Sample/30 May 2014 - Orinoco to Drill Test Significant New Tinteiro IOCG Targets /8 May 2013 – Thick High Grade Silver Discovered at Cascavel /23 December 2013 – Clarification to Inside Briefing Interview Announcement/20 January 2014 - Successful Bulk Sampling Highlights the Opportunity for High Grade Development at Cascavel Gold Project./8 October 2012 - High-Grade Gold Results Returned From Curral De Pedra Project, Brazil/12 December 2012 - Hits of up to 193gpt Au confirm mineralisation over 620m down dip

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the Exploration Results in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

#### **Orinoco Overview**



- Aiming to develop the **high grade** Faina Goldfields Project into a significant producing goldfield over the next three years.
  - Cascavel (OGX:70%)
  - Sertão Gold Mine (OGX:100%)
- Mine development underway at high grade Cascavel Gold Mine.
- Mill to be commissioned Dec 2015 ramp up to 80ktpa.
- Funding & Permits in place.
- Exploration budget in place to define next development projects.

Multi million ounce potential from Orinoco's tenement holding.



#### The Path So Far



#### 2012

- Purchase Curral de Pedra tenement package, including Cascavel.(March)
- ASX Listing through reverse takeover of Strickland Resources (November)

#### 2013

- Drilling and underground sampling confirms discovery of large mineralised system at Cascavel
- Discovery of Tinteiro polymetallic system

#### 2014.

- Purchase of Sertão Gold Mine
- Commencement of exploration decline grades exceed expectations, continuity of structures confirmed

#### 2015

- Project Finance secured
- Cascavel decision to mine taken
- MoU with Goiás State Government
- Plant and equipment ordered, mine development commenced





# **High Grade Gold: Faina Goldfields**



#### Cascavel:

- Bonanza grade, structurally controlled coarse Gold shoots.
  - Part of a larger coarse gold system
  - Latest sampling: 15m @ 88g/t Au (panel samples along shoot)
  - Metallurgical Testwork ~90% gravity recovery no cyanide required
- Multiple gold lodes: bulk sampled over 500m along strike (open) intercepted in drilling 700m down dip (open)
- Capex of US\$6.6m for initial ~mine development and 14tph gravity plant

#### Sertão:

- Historic, shallow open pit (2003- 2006) producing 256koz at 24.95g/t Au.
  - Permitted mining lease.
- Existing haul road from Sertão to within 8km of Cascavel.
- Gravity circuit to be sited here to process Cascavel material.

No JORC Mineral Resources exist at either Cascavel or Sertão





# High Grade Archean Gold: Start Small, Think Big.



- Significant near term upside potential for rapidly growing the Faina Goldfields resource base
- High-grade/narrow vein gold deposits generally have short initial/ongoing mine life
- Difficult and expensive to completely drill out from surface

Company	Project	Initial JORC Reserve (koz)	Initial Mine Life	Oz Produced (koz)
NST	Paulsens	45	8 months	+600
SLR	Mt Monger	-	-	+250
DOM/KCN	Challenger	105	2 years	+800
RMS	Wattle Dam	13	3 months	250
DRM	Andy Well	248	3.7 years	+70
TRY	Sertão	-	-	256
And at the other end of the scale				
Goldcorp	Dome/Hollinger -		-	+16,000

# **Sertão Gold Mine** (OGX 100%)



- Historic mine (2003- 2005) producing 256koz at 24.95g/t gold.
  - Only oxide ore mined to a depth of ~35-40m
- Gold hosted in same shear zone structure as Cascavel.
  - Shear zone hosted quartz veins.
  - High grade shoots within mineralised envelope.
  - Different host rock to Cascavel : ~53% gravity recoveries.
- Fully permitted mining lease.
- Haul road from Sertão to within 8km of Cascavel.
- Continuation of mineralised structure intercepted ~600m down dip from open pit, along strike and beneath old plant site.

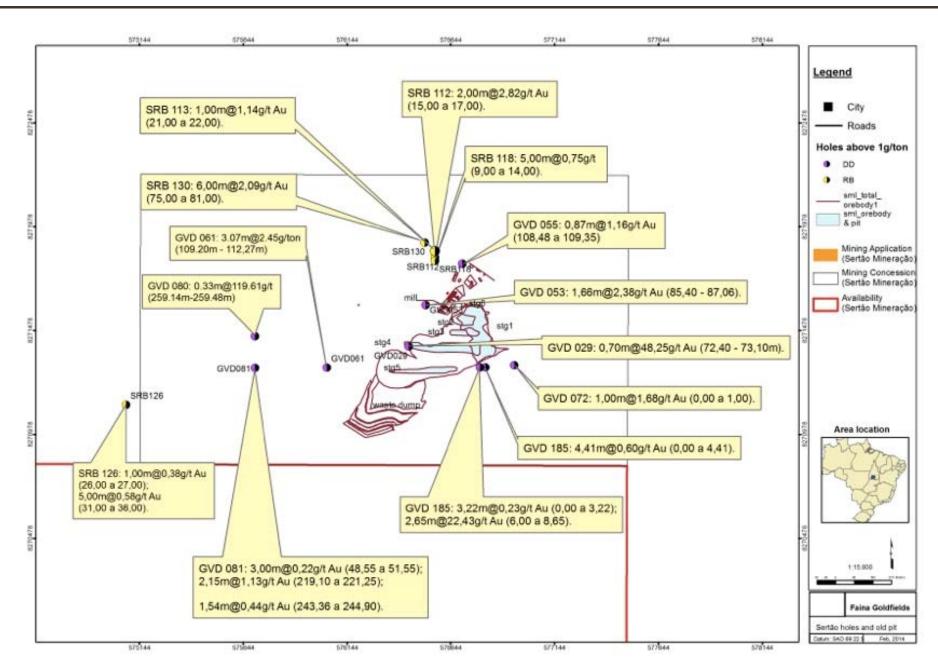




Existing site works, power, licencing, haul road and potential resources make Sertão a logical choice for a the Cascavel gravity plant.

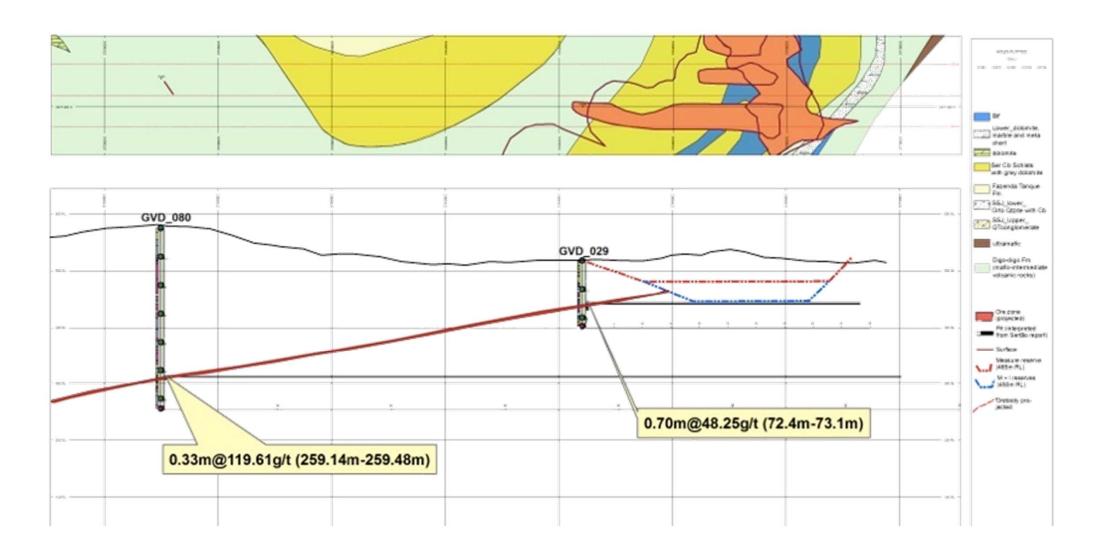
#### Sertão: Mineralisation Outside Pit



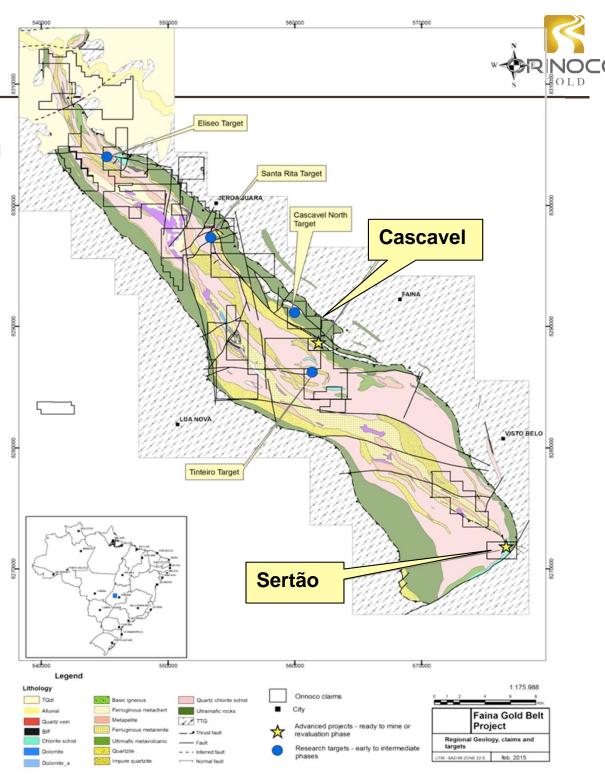


# **Sertão: Cross Section**



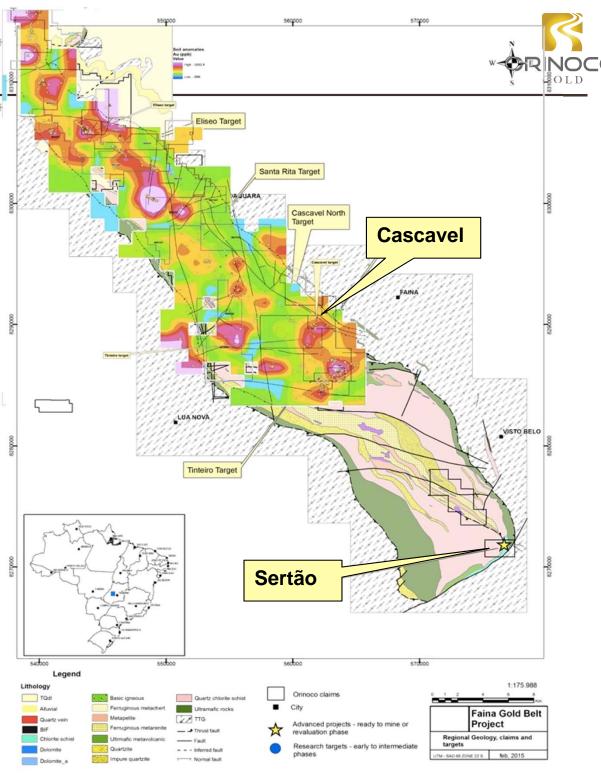


- Cascavel Gold mine remains open along strike and down plunge
- Sertão Gold Mine remains open along strike and down plunge



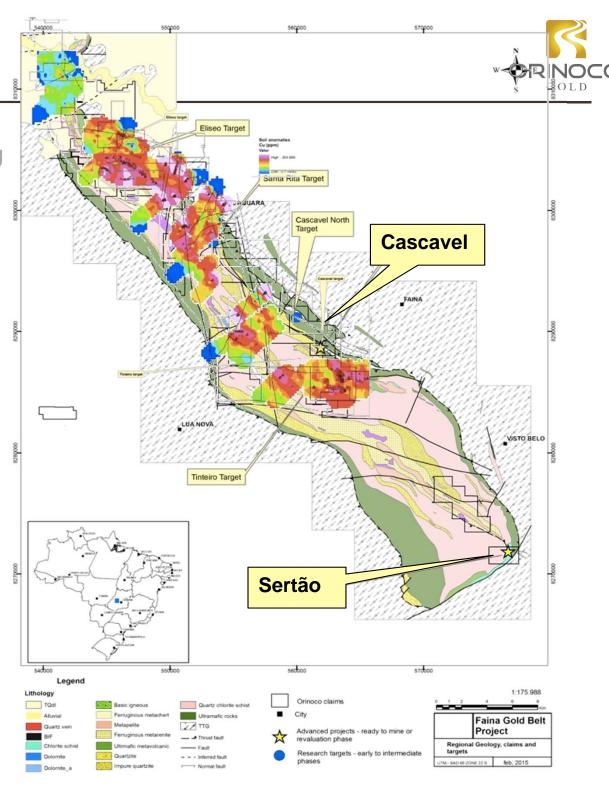
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 Significant Au in soil anomalies over 25kms (a further 25km untested)



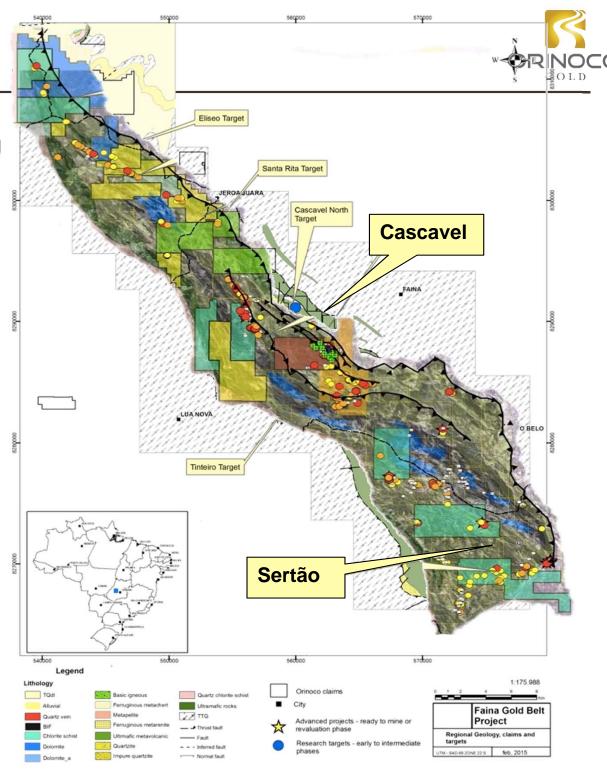
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- Sertão Gold Mine remains open along strike and down plunge

- Significant Au in soil anomalies over 25kms (a further 25km untested)
- Significant Cu in soil anomalies over 25kms (a further 25km untested)
- Significant Au rock chips over 50ks
- Tinteiro discovery: 17.5m @1,263g/t Ag
- Further discoveries to be made

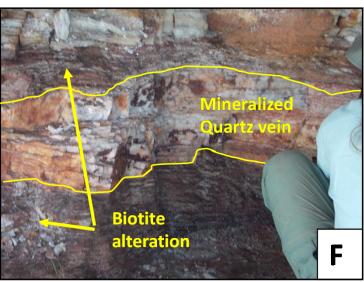


# **Garimpo Target**



- 1.5kms north from northern most Cascavel bulk sample (2.5t @ 27.2g/t Au)
- Gold hosted in low angle thrust fault immediately parallel to the structures that host the mineralisation at Cascavel & Sertão Gold Mines
- Previous artisinal production consisted of a series of winzes over 200km of strike
- Limited chip sampling program returned positive gold grades in all samples.
- Tenement is currently an approved Exploration Lease Application awaiting granting.





# **OGX: Faina Goldfields Project**



# Successfully executing our strategy to become a growing, high grade gold Producer

#### High Grade, High Margin

- Developing & growing a production profile from a large, high grade mineral system
- Low cost, simple gravity recoverable material
- Permits, funding and team in place
- Excellent mining jurisdiction
- Only the 'tip of the ice-berg' for the Cascavel

#### **Adding Large Scale, Long Mine Life Assets**

- 20km Cascavel Sertão corridor has unknown upside
- Sertão & Garimpo are next targets
- Tinteiro large upside from 7kms of high grade silver + copper/gold on doorstep of Cascavel.















# CASCAVEL GOLD MINE Dr. Andrew Tunks

### Archaean -Paleoproterozoic Belts in Goais

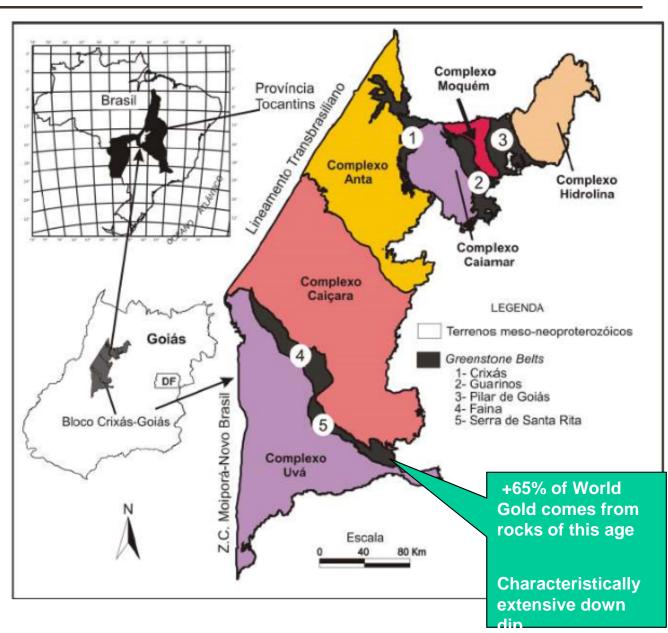


The Faina belt is shown in black as number 4.

Significant gold mineralisation is currently being mined Goias

Anglo Gold --Crixas mine 2.3Moz @ 7.8g/t (past production of 3.4Moz)

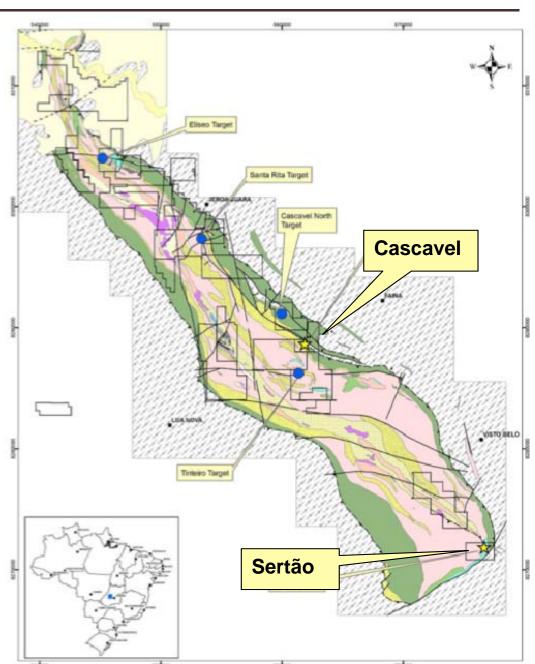
Yamana Gold Inc --Pilar Deposit 1.4Moz @ 4.1 g/t.



# Cascavel –Large System... Small Start.

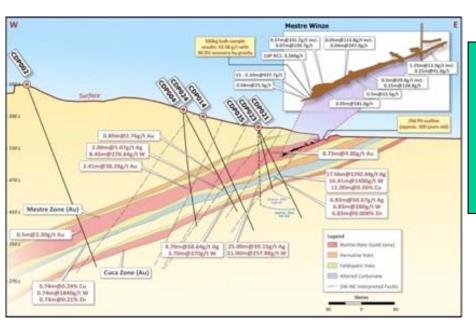


- Large, well endowed mineral system from Sertão to Cascavel
- Coarse gold: drill for structure, decline for grade.
- Shear hosted quartz veinset + alteration + anomalous gold + stretch lineation = target for exploration decline.
- Large scale high level Au in soil anomalies



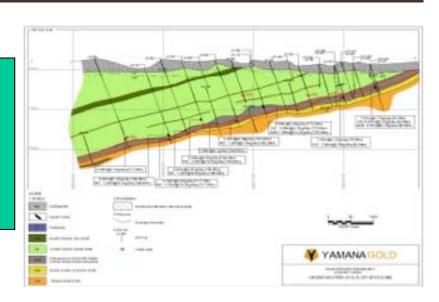
# Very similar tectonic and structural controls on the all main gold occurrences



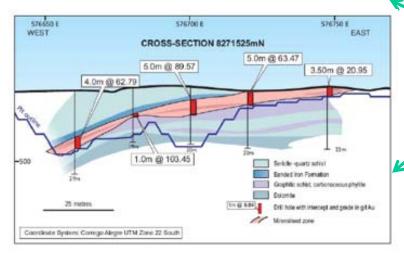


Shallow dip

- = high tonnes per vertical meter
- = reachable

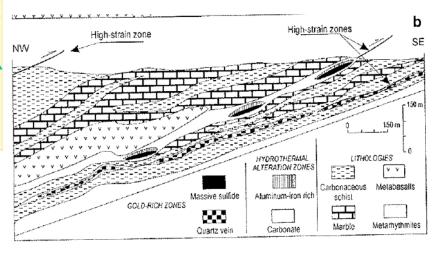


#### **Cascavel section (Orinoco)**



# Pilar section (Yamana)

Pilar deposit: 1.4M oz @ 4.1g/t



## Crixás section (AngloGold)

Crixás deposit: 2.3M oz @ 7.76g/t

#### Sertão section (Troy)

#### **Coarse Gold**



#### The coarse nature of the gold at Cascavel:

- Makes gold grade (not volumes and tonnes) very difficult and expensive to accurately classify into JORC categories
- Is contained within structurally controlled shoots excellent continuity of structures assists mine planning
- Means drill holes and small samples typically under-call grade – not representative samples
- Means that we drill to locate and confirm structure not confirm grade.
- Leads to excellent gravity recoveries low cost, low risk
- Coarse grind to 100% passing 1mm.
- Makes mining the most effective way to take project forward
- Free-milling gold recovered from gravity circuit.





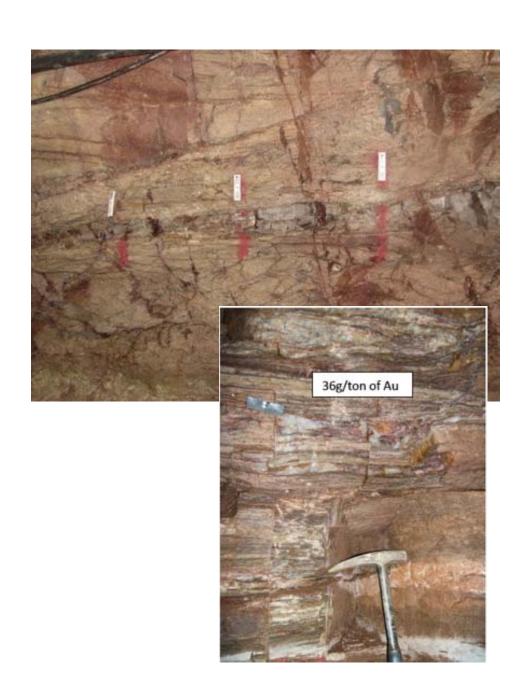
## **Cascavel – Initial Mine Area**





# What does it look like?







# Vein and halo







# Rod like parallel to stretch





# **Just Gold!**









- Veins are emplaced into a broad thrust fault zone
- Thrust faults are continuous 20km along strike and drilled over 1 km down dip
- Within the veins the gold is structurally controlled into high grade shoots that are developed parallel to the lineation
- We see the same features at all the prospects
- Allows us to be predictive on where the high grade zones are within each orebody



# **But whats the Au grade?**





Historic production estimates - Mestre Winze - grades are +50g/t

Bulk sample Mestre Winze - 0.5 t @ 39.3 g/t Au

Bulk sample Cuca Winze - 2.7 tonnes at 27g/t Au

Bulk sample Cascavel Winze - 2.8t @ 24.1g/t Au

Panel sampling of Cascavel decline - 15m @ 88g/t.

➤ Met testwork shows 80% > 200microns – very coarse



#### **Cascavel – Initial Mine Plan**



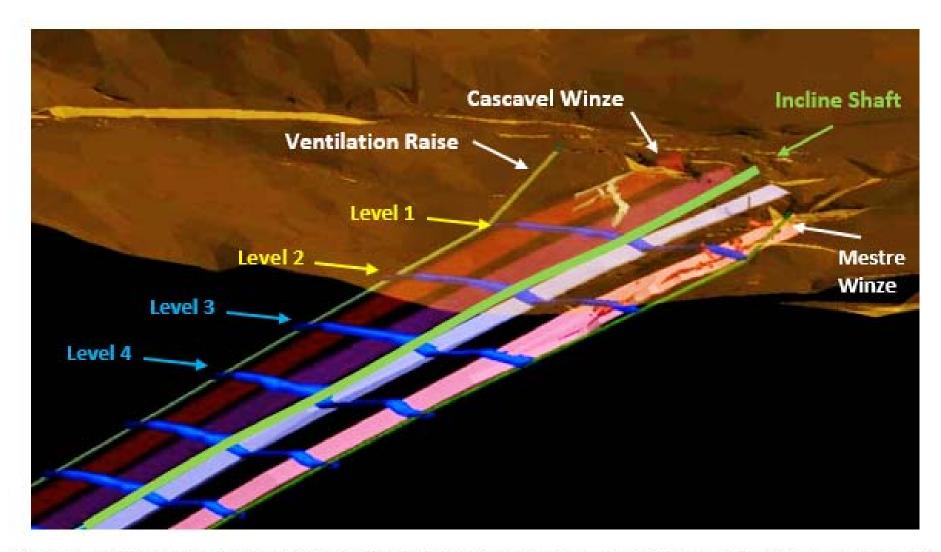
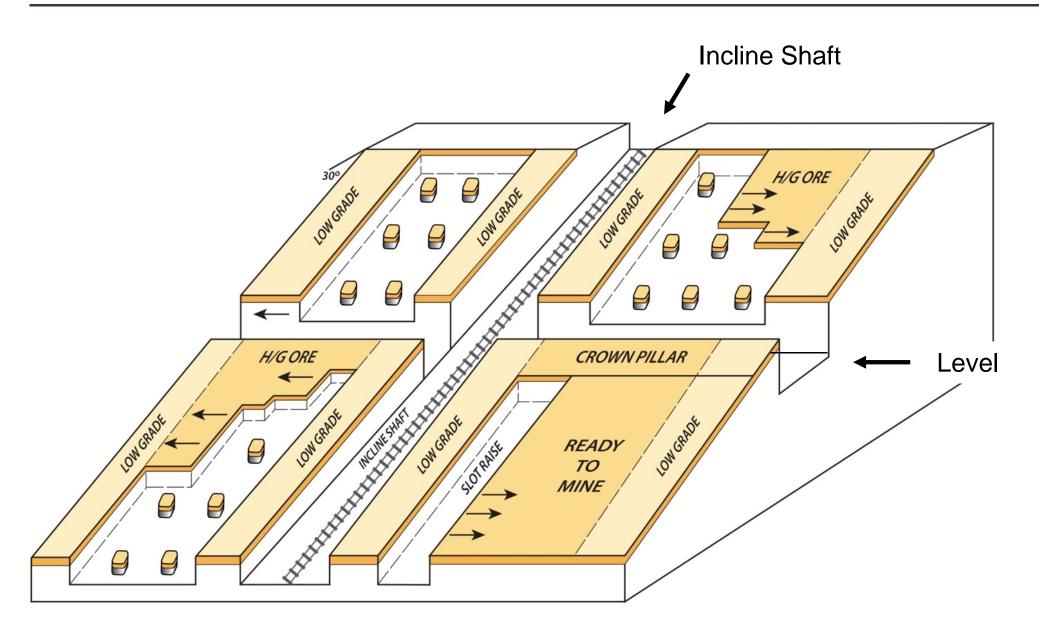


Figure 6. 3D view of planned underground development at Cascavel –Main incline shaft in Green and levels in blue. Ore stopes will rise from levels mining out the high grade shoots by airleg room and pillar. Level1 and 2 will be completed in year 1 of mining.

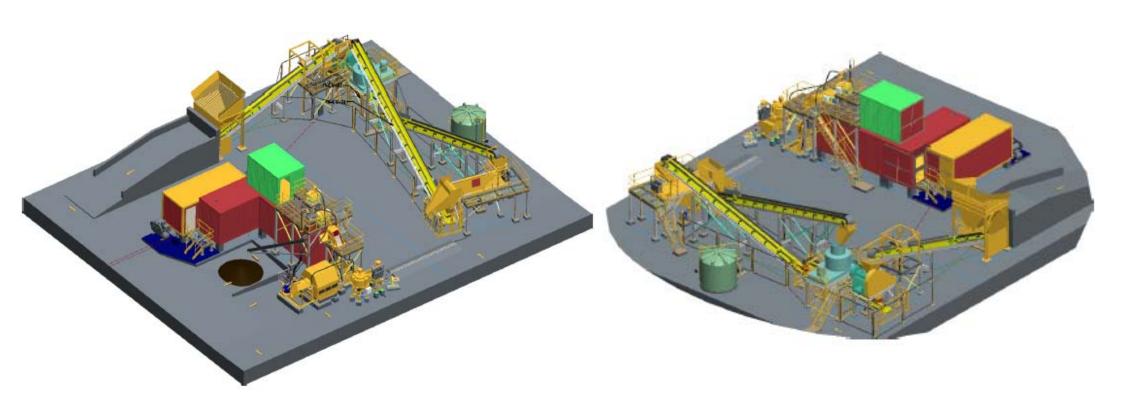
# **Underground Development Underway**





# **Processing Circuit**





- Initially operated at 40ktpa:
  - > 14t per hour
  - 10 hours per day,
  - ➤ 6 days per week.

- Capacity for 80Ktpa
  - 14t per hour
  - > 20 hours per day,
  - 6 days per week.



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**ASX: OGX**