Exploration Strategy

Analyst Day

3 November 2009

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EXPLORATION AND GROWTH

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INTRODUCTION

Forward Looking Statements

Certain statements in this document constitute "forward looking statements" within the meaning of Section 27A of the US Securities Act of 1933 and Section 21E of the US Securities Exchange Act of 1934.

Such forward looking statements involve known and unknown risks, uncertainties and other important factors that could cause the actual results, performance or achievements of the company to be materially different from the future results, performance or achievements expressed or implied by such forward looking statements. Such risks, uncertainties and other important factors include among others: economic, business and political conditions in South Africa, Ghana, Australia, Peru and elsewhere; the ability to achieve anticipated efficiencies and other cost savings in connection with past and future acquisitions, exploration and development activities; decreases in the market price of gold and/or copper; hazards associated with underground and surface gold mining; labour disruptions; availability terms and deployment of capital or credit; changes in government regulations, particularly environmental regulations; and new legislation affecting mining and mineral rights; changes in exchange rates; currency devaluations; inflation and other macro-economic factors, industrial action, temporary stoppages of mines for safety reasons; and the impact of the AIDS crisis in South Africa. These forward looking statements speak only as of the date of this document.

The company undertakes no obligation to update publicly or release any revisions to these forward looking statements to reflect events or circumstances after the date of this document or to reflect the occurrence of unanticipated events.

FORWARD LOOKING STATEMENTS

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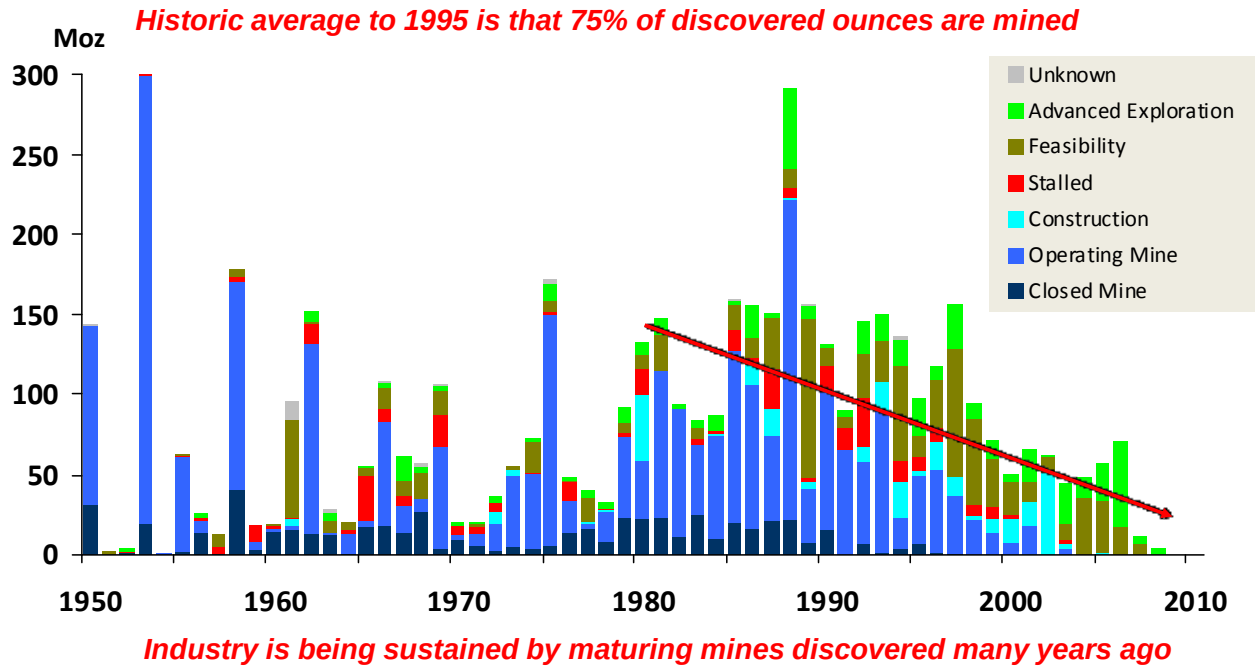
EXPLORATION Gold discoveries over time



Primary gold deposits >0.1 Moz found in World

Source: GFL & MinEx Consulting

GOLD DISCOVERIES ARE DECLINING

Good morning ladies and gentlemen.

It is certainly my pleasure to review with you today our exploration strategy and some of our exploration projects.

Hopefully my presentation will give you a feel for the quality and scope of the projects available to grow Gold Fields today.

My colleagues will elaborate further how these projects impact on their regional development and growth prospects.

So view my presentation as the appetizer for the main meal.

It is particularly pleasing to be able to talk you about some of our successes where we are currently drilling on more than one significant discovery, both near mine and grassroots; a very rare event in an explorationist's life – luckily "lightning does strike in the same place more than once."

Jimmy has just explained the reasons why Gold Field's growth strategy will be driven

largely by exploration and discovery.

If successful, there is no better way to create value in our business.

This is not an easy task though - thanks Jimmy - as an industry discoveries are declining and the 70Mozpa industry production rate is being sustained by discoveries made well over 10 years ago.

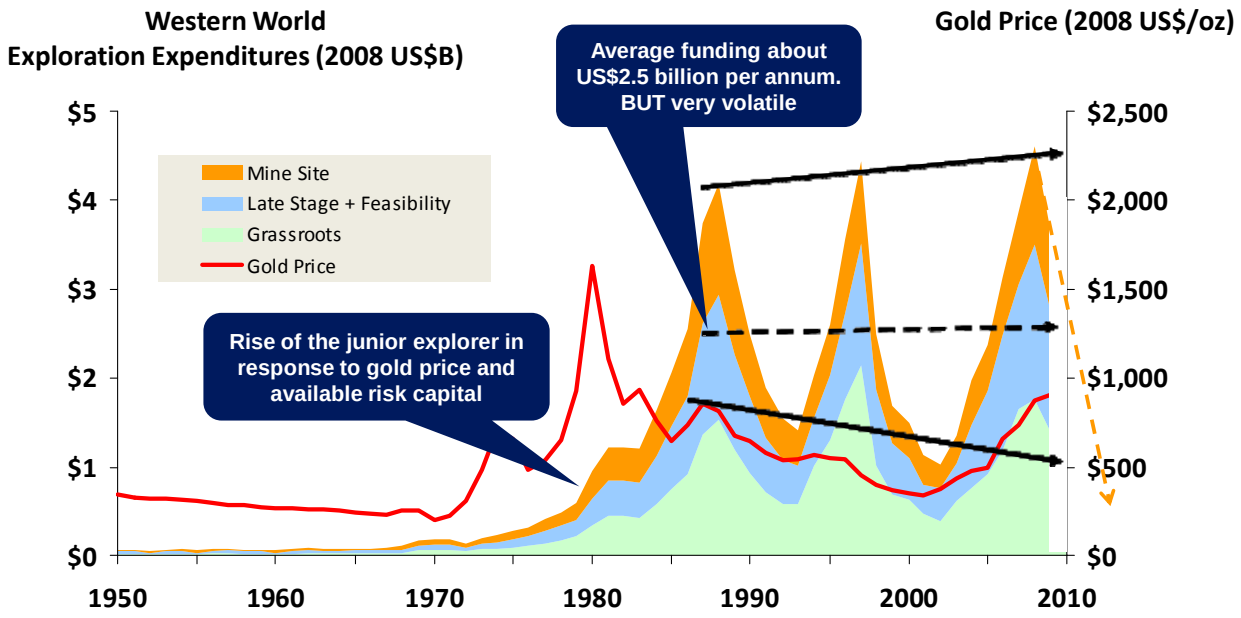
Alarmingly, the quality of discovery is declining as fast. I did a full presentation of gold discovery trends in June this year (the presentation is available on our website). I don't have the time to go into detail here, but in the study we saw that the average grade of discoveries was 8g/t in 1950 and this has dropped to an average of only 1.1g/t today.

This decrease in quality is reflected here in the number of projects that are stalled or being studied – some for over 20 years.

Clearly, either the gold price needs to go up – or – we need a technological breakthrough for the industry to sustain itself.

EXPLORATION

Exploration funding over time



Sources: MinEx Consulting + MEG (from 1992 onwards)

INDUSTRY EXPLORATION FUNDING IS VERY VOLATILE

Industry investment in gold exploration took off in the 80's, coinciding with easily available risk capital and the junior explorer.

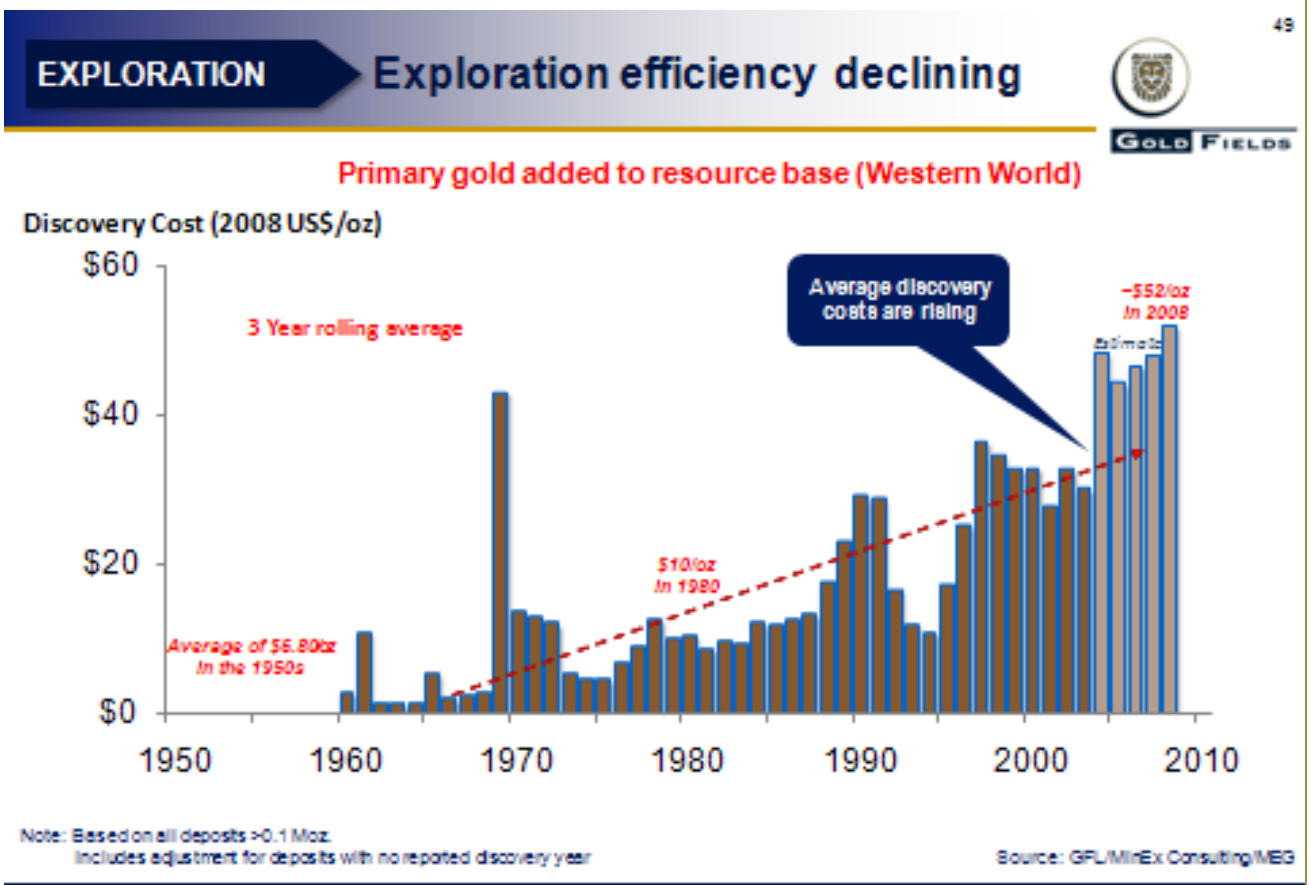
Junior explorers account for anywhere between 50% to 70% of the annual exploration investment for gold.

Overall investment is robust averaging about US$2.5 billion since 1985, but is very volatile, representing the risk appetite at the time.

Successful exploration requires commitment over time and cannot be switched on and off – which causes a loss of learning and momentum.

One of the consequences of this volatile investment environment is a decrease in grassroots exploration – junior explorers do not have the timeframes required to discover new and possibly higher quality deposits - so they often work in and around existing camps to ensure that they can bring projects to account within their funding windows.

I believe that this is one of the reasons for the decrease in quality of discoveries – the industry is not doing the work to find new high quality opportunities.



COST OF DISCOVERY IS INCREASING

Clearly, if discoveries are decreasing, yet exploration investment is robust, the efficiency of discovery is declining.

It costs nearly 8 times more to discover an ounce of gold resource today than it did in the 60's.

Even though exploration technologies have improved significantly over that time, as an industry we are still less effective.

EXPLORATION

Exploration dominated by Juniors

Primary gold discoveries from greenfields exploration - World: 1992-2008

	Majors + Intermediates	Juniors + Prospectors
Greenfields and late stage exploration funding	40%	59%
Average size of discovery	3.2Moz	2.2Moz
Cost per discovery (2008 US$M)	$104M	$174M
Cost per ounce (US$2008/oz)	$33/oz	$80/oz

Note: Have pro-rated the "unknown" deposits across both groups

Source: GFL/MinEx Consulting/MEG

More industry funding applied to less effective exploration

Why less effective? ***Volatile funding***
Investment objectives

INDUSTRY HAS RELIED ON THE JUNIOR SECTOR

The industry has relied heavily on the junior explorer to make the discoveries that will eventually be mined by mid-tier or major companies.

However, this sector has been less effective, averaging $80/oz resource ounce discovered versus the mid tiers and majors averaging $33/oz discovered.

Junior companies are not lesser explorers, on the contrary, they often comprise the best trained explorers out of the majors.

I believe that their relative lack of success reflects the volatile funding environment – which is not conducive to exploration success - and investment objectives that require delineation of resource ounces that can be valued by the market as soon as possible – making brownfields exploration preferable.

This possibly also leads to inflating resources which are not expected to brought to account through mining, but rather by selling the company at some premium.

EXPLORATION Gold Fields response

Increased F2010 budget to US$120M

- near mine US$40m
- greenfields US$80m

- Focused in high prospectivity areas
  - leveraging near mine optionality
  - supporting regional growth
  - establishing new regions
- Create competitive advantage
- Excellence in target generation
- Created a strong discovery culture

- Driving our projects
  - Increased operational capacity
  - Aggressive drilling and project turnover
  - Delivery focused
- Sustainability
  - "if we can't explore safely – we will not explore"
  - Strengthened community ties

FOCUSED AND AGGRESSIVE EXPLORATION GROWTH

Gold Fields is responding to these trends by:

- Increasing our exploration investment - committing to over $120 million this year up from $45 million some 3 years ago;
- Operating more of our exploration projects ourselves, with less reliance on the junior explorer – 3 years ago juniors operated the majority of our projects;
- Focusing and concentrating our activities in fewer areas that we believe are highly prospective and where we can gain competitive advantage; and
- Within these areas we operate our own exploration as well as partner with high quality junior explorers.

We have created a strong discovery culture:

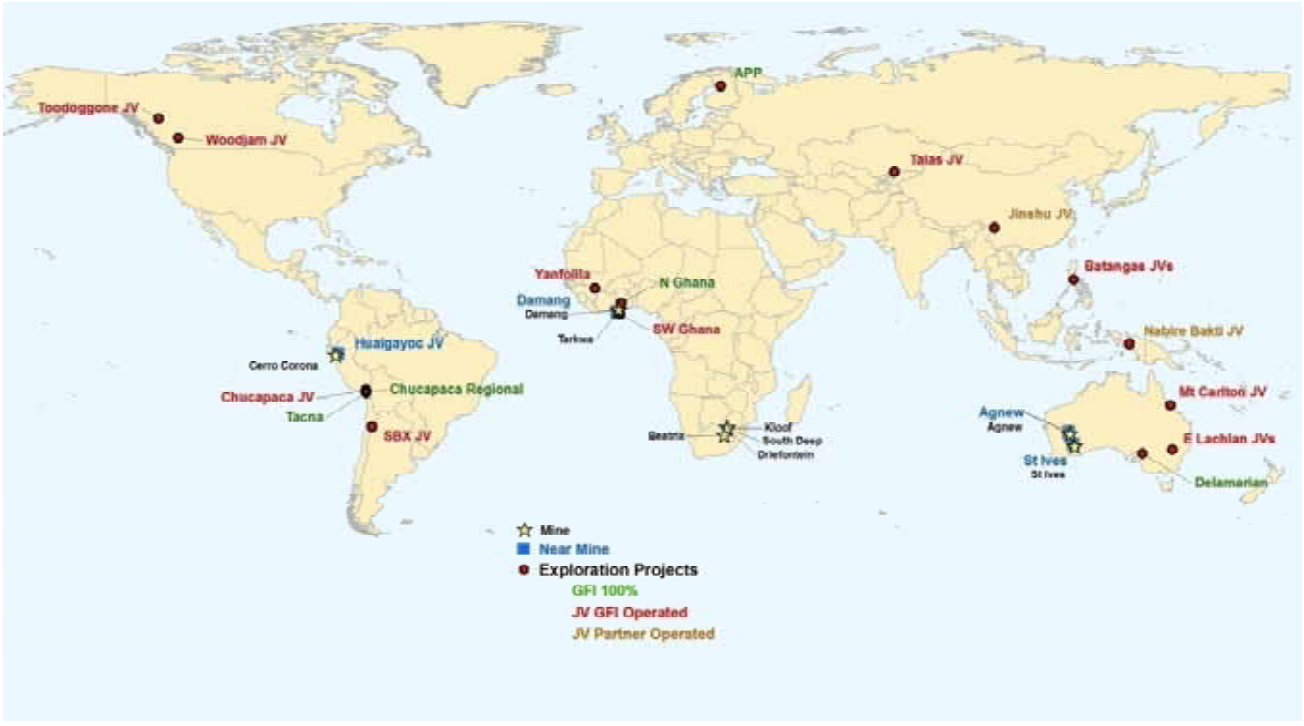
- We focus on testing targets and turnover; and
- We drill early and we drill frequently - last year we drilled over 413,000 meters and we have had some success – this year we plan to drill nearly 500,000 meters.

We are disciplined in our project delivery process – which Ben Zikmundovsky will describe later – we have clear decision gates to graduate projects and control investment.

For example, as Nick said, we have three projects that are now at advanced drilling stage and will require a positive scoping study (with conceptual economics) to move to the next and more expensive resource definition stage.

EXPLORATION

Exploration in Gold Fields



FOCUSED AND AGRESSIVE EXPLORATION GROWTH

Our exploration activity primarily supports the growth of the international regions described earlier by Nick:

- leveraging near mine optionality in Australia, at St Ives and Agnew, in Ghana at Damang and in Peru at our Cerro Corona mine; and
- generating grassroots opportunities in South America, West Africa and Australasia.

We also have two programmes outside of these core regions with a view to establishing a beach-head in a “Gold Fields frontier”, defined as an area where we do not currently have any operating capacity, but may wish to do so in future:

- In British Columbia, Canada; and
- the Tien Shan region, in Central Asia.

For the rest of this presentation I will talk to some of these projects, to give you a feeling for the quality and breadth of our portfolio.

Hopefully I will be able to show you why I am so excited about the quality and breadth of our growth portfolio.

I will go through:

- Near mine exploration at St Ives, Agnew and Damang;
- An update on our three advanced drilling projects, Chucapaca in Peru, Yanfolila in Mali and Talas in Kyrgyzstan; and
- An example of initial drilling stage projects that could hopefully become our next advanced projects namely our East Lachlan JV's in NSW Australia, and the Toodoggone and Woodjam JV's in British Columbia in Canada.

EXPLORATION

Near Mine Exploration

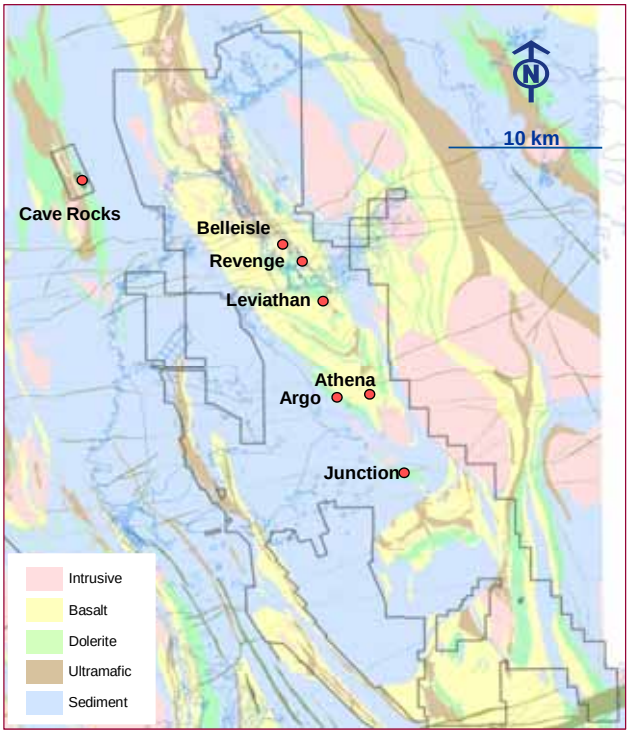
DELIVERING THE OPTION VALUE

Near Mine exploration represents one third of the group's exploration spend and is all about realising the option value on our properties.

I always say that "the best place to find a beer is in a pub" just like "the best place to find gold is next to a mine".

In this presentation I will describe our exploration philosophy and demonstrate some of the prospectivity at our mines and then, as I said earlier Glenn, Juancho and Peter will talk in more detail on specific opportunities and their impact on the development and production activities in their Regions.

EXPLORATION Near Mine – St Ives exploration



Exploration Strategy

- 30 year history of discovery
- Focus on developing Argo-Athena Camp
  - Resource expansion
  - Reserve conversion
  - Multiple targets available to drill
- Open pit expansions
  - Greater Revenge
  - Greater Leviathan
- Continuing target definition to supply the pipeline

OVER 15MOZ ENDOWMENT – WORLD CLASS CAMP

St Ives is a world class camp with over 30 years' history of gold discovery.

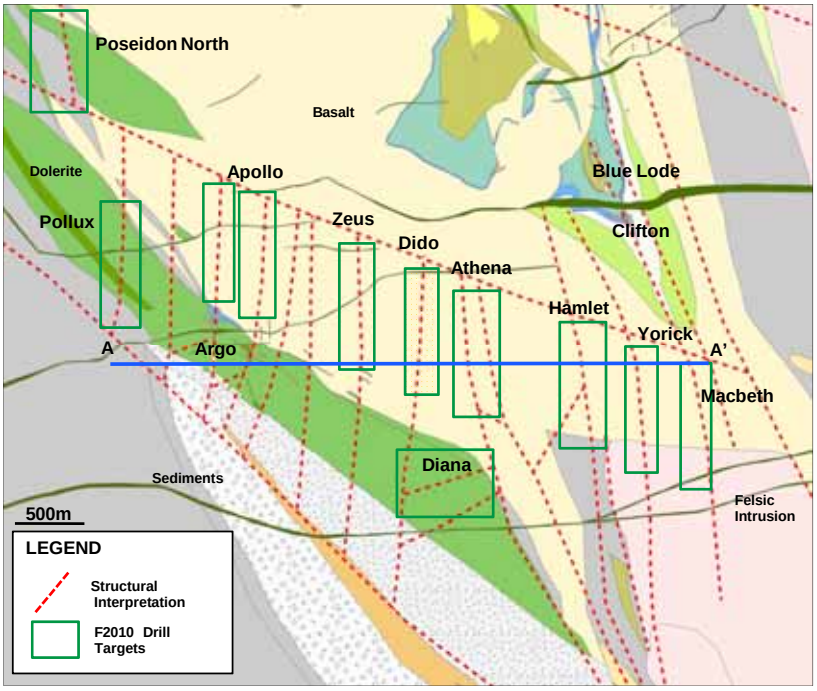
The mine will have produced 10Moz by the end of this calendar year, making it the third largest producer in Western Australia, behind the Superpit and Telfer.

But the difference is that at St Ives the discoveries keep coming.

This financial year we will spend about $25 million on:

- Resource and reserve conversion at our Athena and Hamlet discoveries;
- Initial drilling of targets within the Argo-Athena Camp;
- Expansion of open pits at Revenge and Leviathan; and
- Most importantly, continuation of target definition programmes with a view to discovering the next new camp at St Ives.

EXPLORATION St Ives – Argo-Athena Camp



Discovery History

- +1Moz mined at Argo
- Athena discovered in 2007 – added +1Moz
- Opened a new search space

F2010 Plan

Reserve Conversion
4 Projects

Resource Growth
7 Projects

Target Definition
3 Projects

BEST RECENT GOLD DISCOVERY IN AUSTRALIA

The area that I want to focus on is the Argo/Athena area where we've made a significant new discovery in the last two years.

The other work that we will be doing during the year is open pit drilling around the Revenge/Leviathan area as well as our continued target definition across the whole property.

So focussing on the Argo/Athena area, Argo is one of our main mines operating today. We've already produced one million ounces from an open pit, and we're now mining underground, with another nearly million ounces to come in resource.

Argo is basically a structure that sits at the intersection of a dolerite, in green and a structure ie the intersection with the dolerite was seen as the favoured unit and where the gold was located. As we drilled further up north into the basalts, which is this beige colour, we saw that the mineralisation dropped away. So the model became very clearly to look for the structures where they cut this dolerite, and let's see what we find. We tested it with limited success, very focused targeting.

About two years ago we changed our exploration philosophy at St Ives, and we moved to a full field air core programme, which is essentially everything under cover we drilled with air core through the cover to get basically collect a soil sample beneath the cover. And we also embarked on a big framework drilling programme where we drilled deep diamond holes for structure and geological information. Not ever with the intention of finding anything, it was more to inform the big data sets that we had, so we could pin them on something real.

In that process we were lucky. Number one, we understood better all of our data sets, and we understood where these nested structures were coming through the crust. But secondly we also hit Athena in our air core drilling.

The first intersection was four metres at 2g/t. So that doesn't sound very spectacular. The second air core was about 16 metres at 4g/t, which caught our attention and we started drilling beneath it.

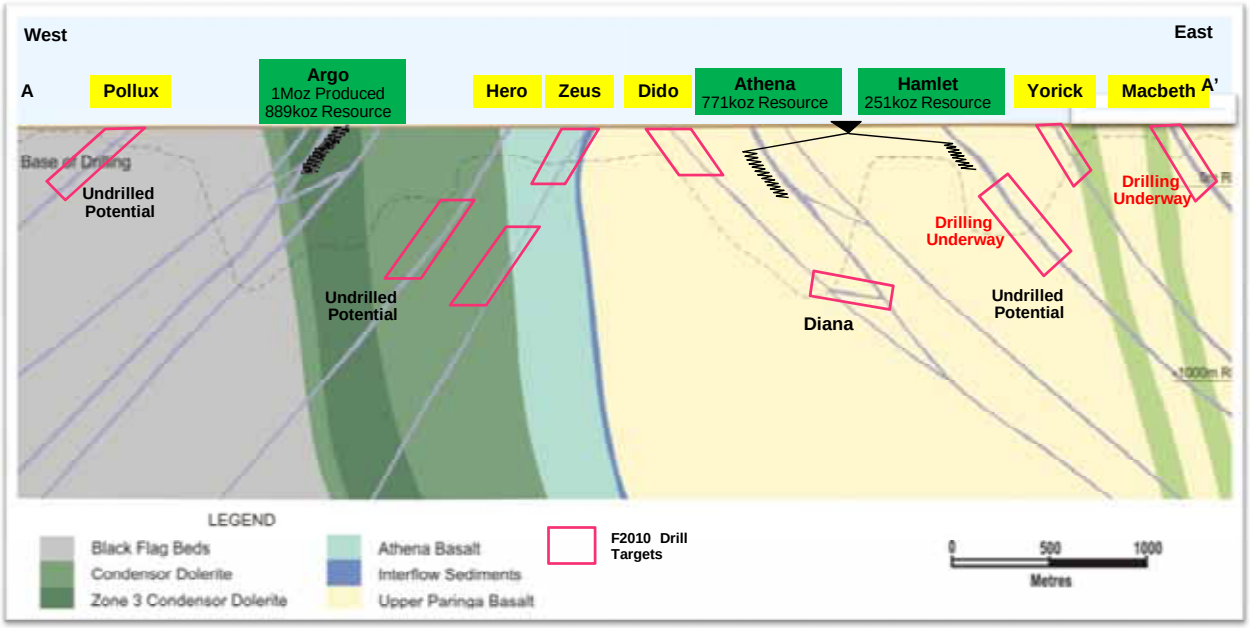
At Athena, together with Hamlet, we've declared a resource of over a million ounces. So within just over a year we've grown that position to over a million ounces.

But with that understanding we've opened up a whole new search space. There was gold where the structure cut the basalt, contrary to our previous model. So we've gone in and started testing these other structures with a lot of success. We're starting to see the same structure, the same alteration, and in a lot of cases visible gold. So I think what we're seeing here is a camp within the St Ives tenement that could be as significant as most of the other large camps in Western Australia.

I'm going to take you through a cross section, which let me remind you is 5km by 2.5km.

EXPLORATION St Ives – Argo-Athena Camp

Schematic section through the Argo-Athena Camp



+3Moz endowment (plus abundant new targets) – within a 5km by 2km area

A DEVELOPING GOLD CAMP WITHIN THE ST IVES LEASE

So looking west to east you can see the Argo position over here where the structure cut through the dolerite. One million ounces with 900,000 ounces in resource. A lot more exploration potential on that project alone.

The newly discovered Athena and Hamlet, with just over a million ounces of resources.

Glenn is going to talk a whole lot more about how this impacts his development plans.

But what's important is the understanding that, where these structures cut any rock type they are prospective. And we've drilled holes in Macbeth, Yorrick, Pollux and Poseidon, and we've got visible gold in all of those.

We're waiting for assays with baited breath.

I think what you're seeing here is already a three million ounce camp and it's growing all contained within the St Ives tenements, a couple of kilometres south of the mill.

If you compare this to other discoveries in Western Australia I think this is by far the best in the last couple of years.

EXPLORATION

St Ives – Argo-Athena Camp

VISIBLE GOLD IN ATHENA STRIKE EXTENSION

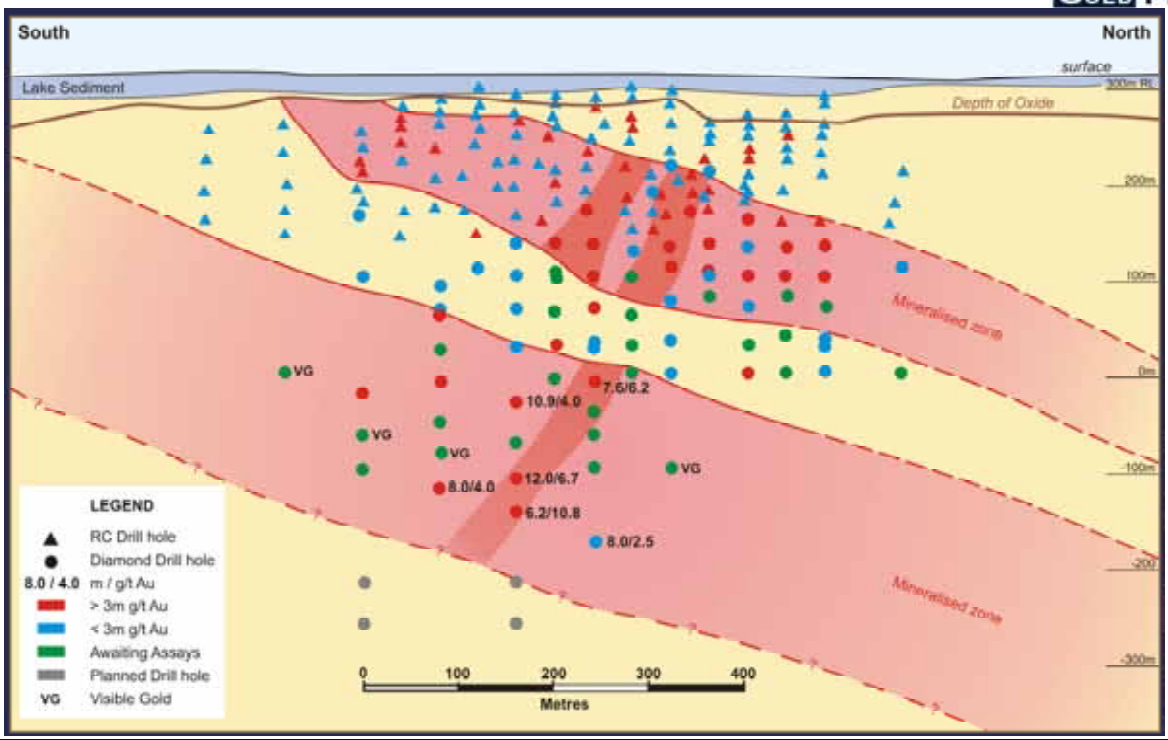
A geologist must show some core. This is a photograph of core from the south shoot of Athena.

This is the visible gold, just to prove I wasn't talking rubbish.

This is on the Athena structure to the south of the Main Lode.

EXPLORATION

St Ives – Hamlet long-section



HAMLET DRILLING DELIVERING SPECTACULAR GRADES

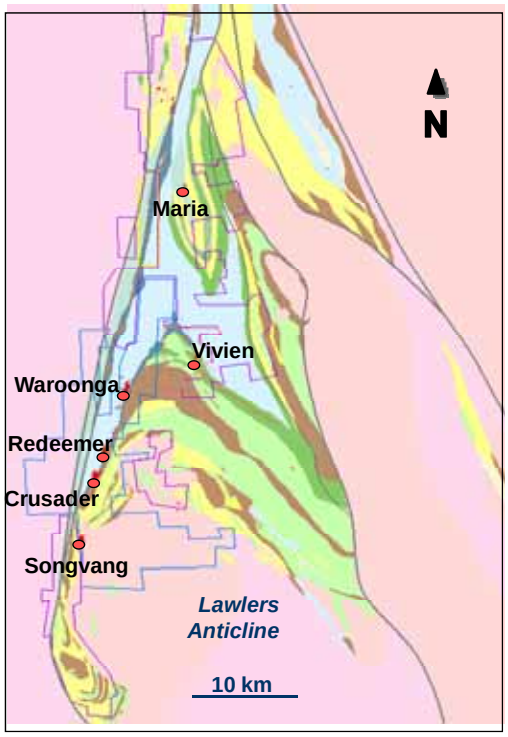
As we've been drilling Hamlet we've started to see new controls that will build our understanding of Athena and the other structures.

This is a long section through Hamlet which is along that north/south structure – you can see these pink zones here. They are the higher grade sections of the ore body. That's essentially where the structure has got a little wrinkle in it. And where that wrinkle is, there is an opportunity for dilation, and that's where the gold drops out.

So we're seeing a northerly plunge on the structure, and I think we can take that understanding to our other structures.

As we learn about this camp - it's going to give us a lot more positive surprises.

EXPLORATION Near Mine – Agnew Exploration



Exploration Strategy

- Discovery history of high-grade lodes
- 5-year life of mine
  - Drilling Kim to 1,500m
  - Surprise Edmunds Lode drill-out
- Generate flexibility by drilling under the remaining Waroonga Lodes:
  - Main
  - Rajah
- Regional aircore programme for new open pit sources

CONTINUES TO DELIVER POSITIVE SURPRISES

So moving to Agnew, a project that's had a discovery history over a very long time. But it has always only had about a two to three year life of mine. It is high grade so it always gives nice, positive surprises. But it never had a long enough planning window.

We have set ourselves a goal of getting at least a five year life of mine.

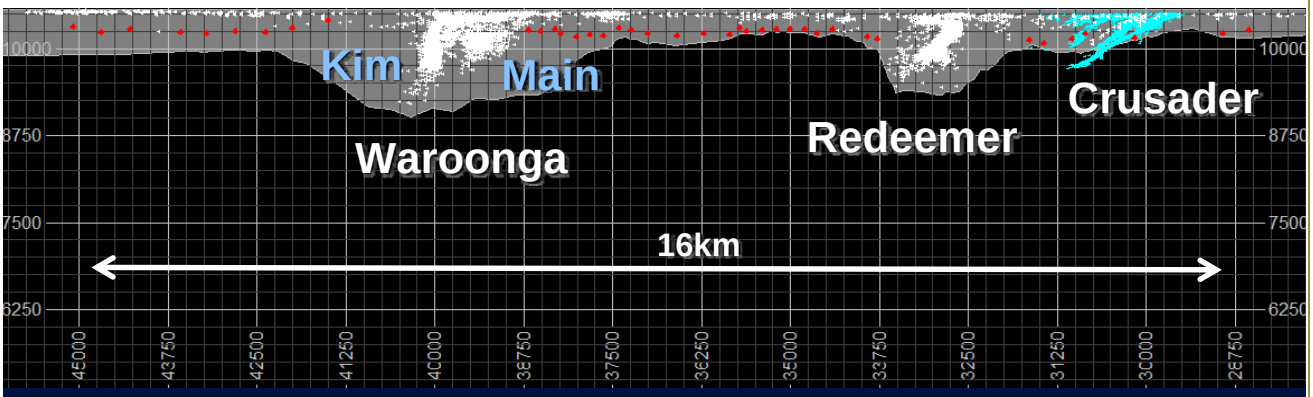
And the way to do that is quite simply taking the Kim Shoot, which is here under the Waroonga pit, deeper. We're currently mining at around 1,000m below surface, and we're extending it down to about 1,500m below surface. Now, it's easier to do that from surface, to get the right angles into the ore body, than it is from underground. So we're going to be doing that from surface, and I'll show you a little bit more about it in a few slides time.

The other work that we will be doing is drilling beneath the main and Raja lodes, which are underground positions to the south of Kim beneath the Waroonga pit. We want to understand those better so that we can provide more mining flexibility, as Nick was talking about. It applies to these mines as well. It needs more mining flexibility.

We will carry on doing the same sort of work as we found to be successful at St Ives.

EXPLORATION Near Mine – Agnew exploration

- Unexplored opportunities below 100m between known mines
- Drill target
  - small and discrete footprint
  - extensive plunge continuity - +1km
  - robust shapes and grades for productive mining



SYSTEMATIC DRILLING UNDERWAY

Looking at that specifically, if you look at that area from the Waroonga pit south to Crusader, so north to south, you can see the white dots there are all the past drilling. And very, very shallow drilling with the exception of where we've discovered lodes.

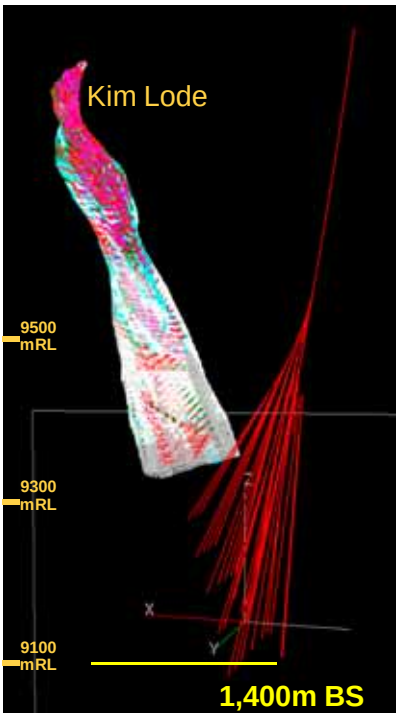
So what happens in-between here? Previously with our air core drilling we drilled shallow and if we didn't hit some sort of anomalism we assumed there wasn't a lode.

These lodes are very narrow. They are pencil-like. They've got a very small footprint. We could have easily missed one. So we have applied the same philosophy that we applied successfully at St Ives to Agnew, saying let's go and get some geological information so that we can then pin all of the data that we've collected over a long time to real data, that way we can do some really good science in putting this together.

We've embarked on this drilling programme, a structural framework drilling programme, here the red dots. We're right in the middle of that now. We haven't hit something directly, which is always what we hope for, but the information that we're getting here is going to help us target going forwrad. And I would be fairly confident at some stage there is going to be more of these structural positions somewhere along this main zone, which is over 16km long.

EXPLORATION

Agnew – Kim extensional drilling



Step-change technology for Agnew

TARGETING A 5-YEAR LIFE OF MINE

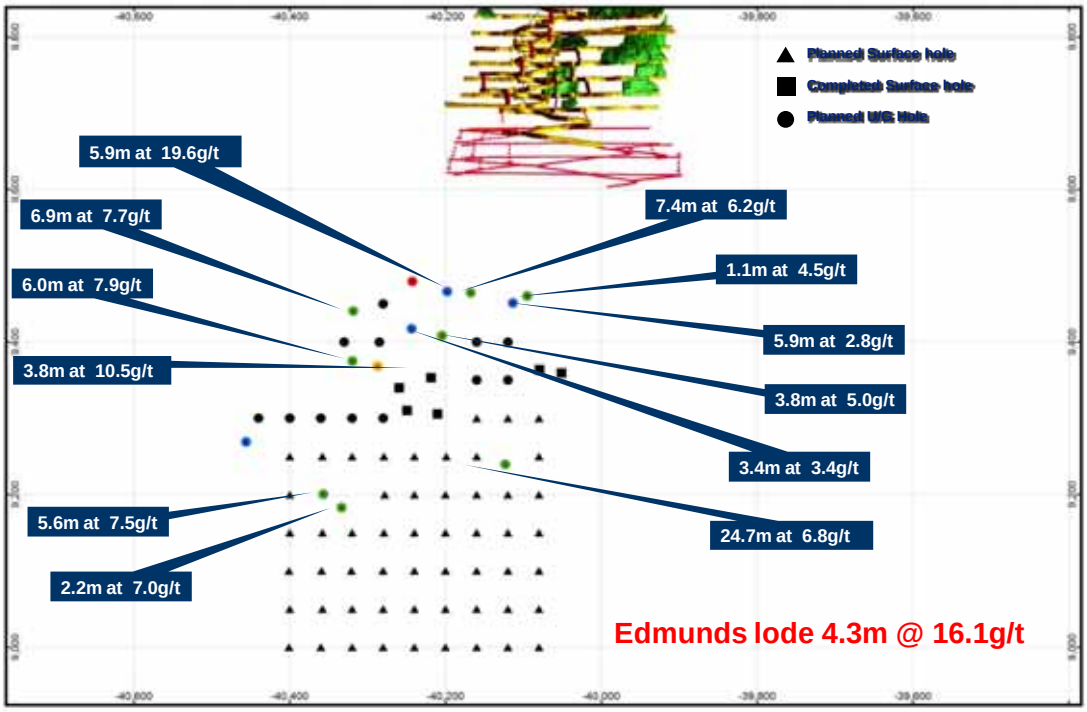
Our deep drilling at Kim, is from two rigs set up with two mother holes with a whole bunch of daughter holes deflecting off that with NAVI drilling, drilling at a 40 by 40 metre grid.

So we're doing reserve definition drilling from surface down 1,000m to 1,500m below surface.

It's new technology for us, and it opens up a lot of opportunity for us as group to be able to look at deeper areas and get them into reserve to provide the planning profiles that the mining production teams need. We've only just started this process.

EXPLORATION

Agnew – Kim extension results



NEW HIGH GRADE LODE DEVELOPING IN THE FOOTWALL

We're currently drilling the top holes over here. Some of the early stage holes are coming back with pretty good grades, 6m at 20g/t, one of the best on this section.

What we're seeing is that the strike length of Kim is definitely getting a bit longer than what we saw above in our mining development. And it's looking very positive.

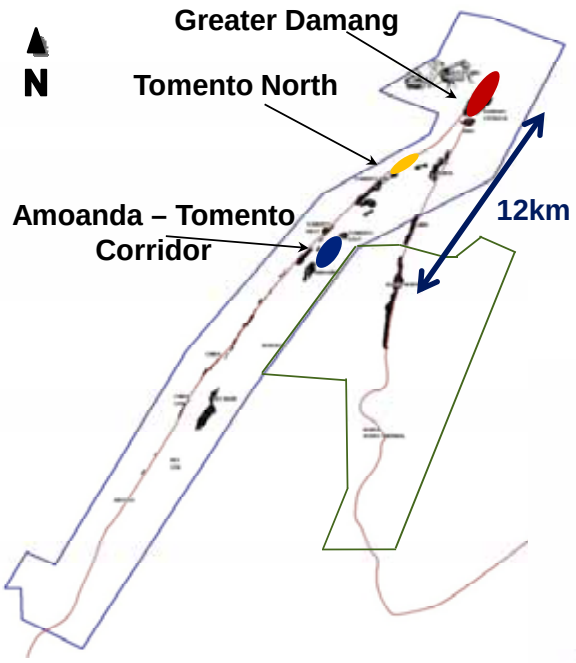
But like Agnew does with high grades we've got another surprise, the Edmunds lode. As we were drilling through the lode, we drilled into the footwall and discovered a new lode in this position down here.

This lode is at this stage a little bit unclear to us, we don't understand it properly yet. We are drilling it out as we speak. But it has got the same kind of tenors and widths as the main Kim zone. So hopefully we're seeing a duplication developing at depth. It's only about 20m into the footwall, so we would easily be able to access it from the same infrastructure.

So a really positive surprise.

Agnew is one of those properties that just keeps on kicking out pleasant surprises.

EXPLORATION Near Mine – Damang exploration



Exploration Strategy

- Reliance on oxides reduced
- Able to scope out Damang system for the first time
- Confirmed Damang style mineralisation as far as Amoanda

TARGETING A 10-YEAR LIFE OF MINE

Damang in Ghana is the next near-mine exploration project I'd like to talk about. We've done a lot of work exploring for oxides over the last five years, and basically we are mining oxides faster than we can discover them.

The reason why we needed to find oxide is because our mill configuration required a certain ratio of fresh rock to oxide to work optimally.

Peter realised this, and with his team they have motivated for the installation of a secondary crusher so that we can take a higher percentage of fresh or hard, higher grade, rock into our process route. With the new secondary crusher, which is being installed as we speak, we will now be able to take 95% hard and 5% soft ore.

What this has done is to open up a whole new search space for us. We can now go and explore beneath all of the oxide pits that we've discovered in the past for the hard rock higher grade extensions.

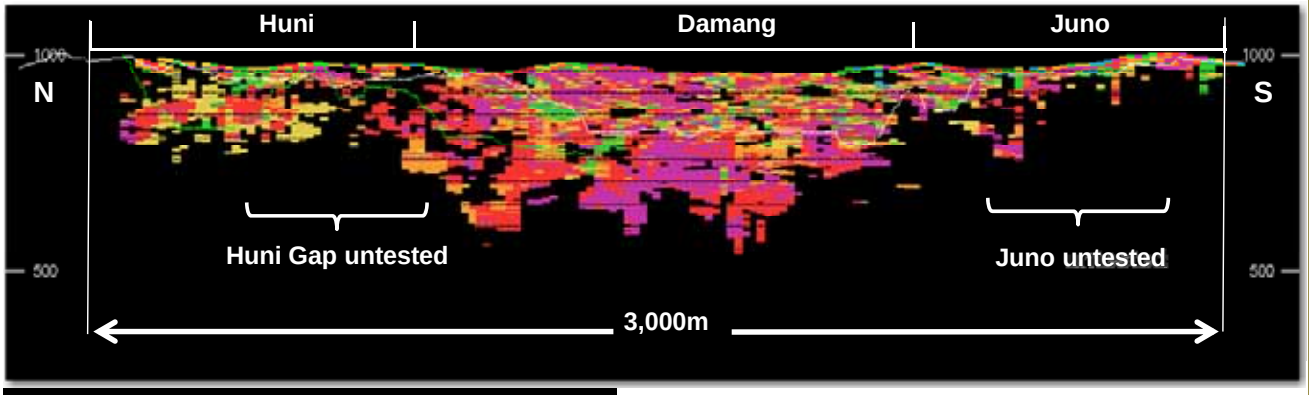
You know those structures came to the surface and got oxidised. We're now going in and exploring beneath them. Typically the hard rock mineralisation is higher grade, so we've opened up a really interesting search space.

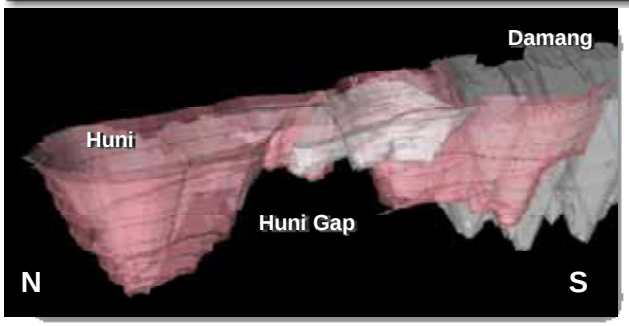
In the drilling we've done so far, we've confirmed Damang-style mineralisation, which is a hydrothermal style mineralisation, extending over 12km from the Damang pit down to Amoanda.

And with this confidence we've tripled the exploration budget at Damang from what was ticking along at $3 million per year to $10 million this year. We can go and test this exploration potential in the hard fresh rock.

EXPLORATION

Damang – untested potential





- Huni gap drilling underway
  - 12m @ 5.6g/t
  - 93m @ 1.2g/t
- Damang pit cutback (eastern highwall) being investigated

STILL TESTING THE LIMITS OF THE SYSTEM

One of the first areas we're looking at is right near the Damang pit.

There is an area between Huni and Damang that we call the Huni gap. It hasn't been tested in the past.

The first couple of holes we put in there have come back with some pretty good results.

Drilling is ongoing as we speak, and I think this is going to be easy adding ounces, basically right next to an existing mine.

EXPLORATION

Greenfields Exploration

"a discovery is said to be an accident meeting a prepared mind"

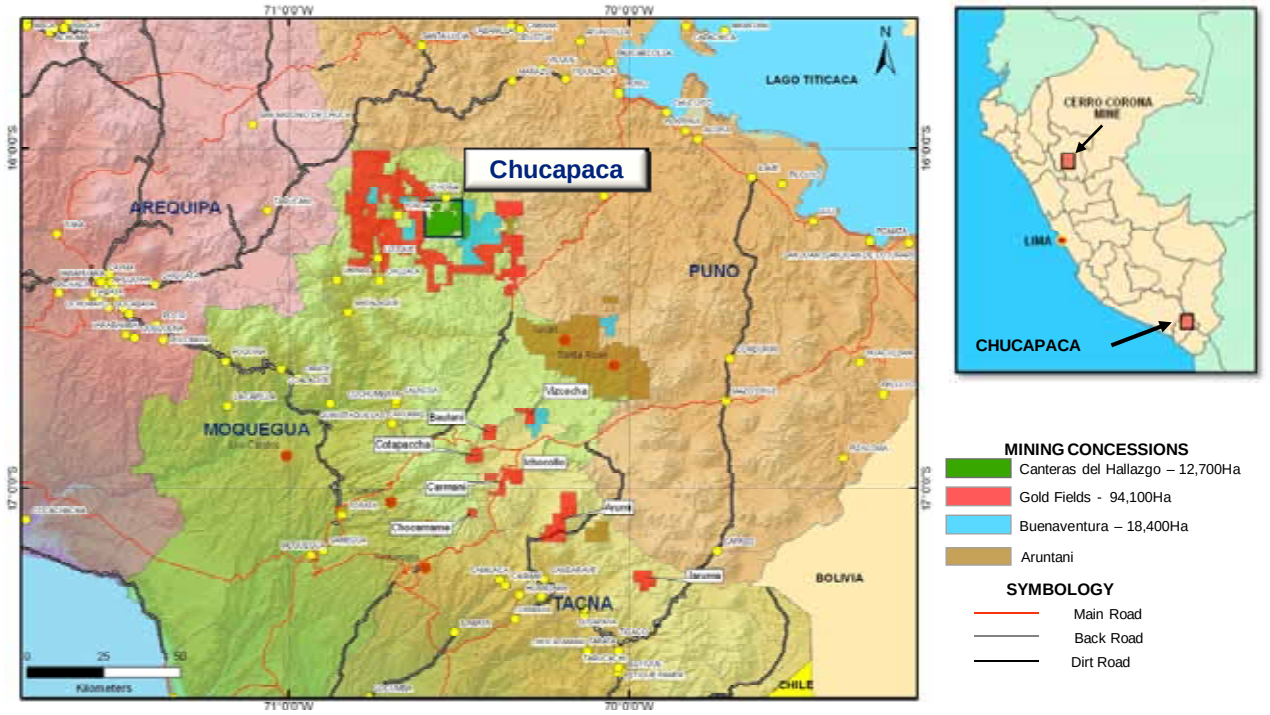
GOLD FIELDS NEXT GENERATION OF MINES

Moving now to greenfields, exploration.

Greenfields and grass roots exploration is looking for that next generation of opportunities, the next generation of Gold Fields mines. And really, Gold Fields had a very successful year with lightening striking more than once, and it's fun to talk about it.

EXPLORATION

Chucapaca JV - location



GREENFIELDS DISCOVERY WITH BUENAVENTURA

The first greenfields project I want to talk about is our Chucapaca project which is a joint venture with Buenaventura in southern Peru, quite distant from our Cerro Corona mine.

It's a new district. There is limited known gold mineralisation down there. There are only two operating mines, Tucari and Santa Rosa, down there. It's not an area known for gold mineralisation.

Gold Fields targeted this area in 2004, and we went in and drilled what we thought was a high sulfidation gold target. We did some geo-chemistry and found some gold geo-chemical anomalism at surface.

We went in and drilled it and got about 200m at 0.4g/t in about ten holes. I think we were probably too high in a lithocap and we hadn't got through to the high sulfidation mineralisation. In our geo-chemical analyses we picked up some lead and zinc anomalism to the flank of the target that we were testing. We offered the project to Buenaventura to joint venture, which they were pleased to do. In the process of drilling the lead zinc anomaly they drilled right into a gold deposit.

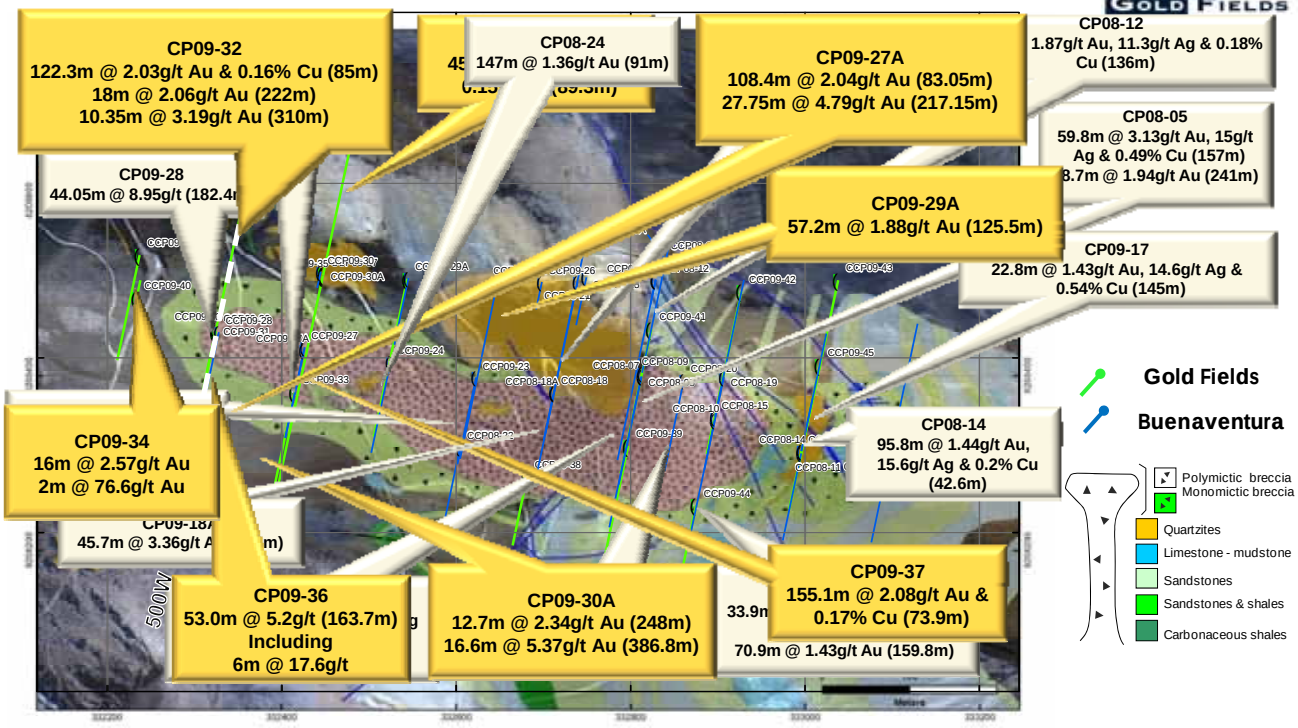
We luckily had a back-in right, so we exercised our back-in right, which gave us the ability to earn back into the project to 51%, by spending three times what Buenaventura spent - roughly $8 million.

But with this discovery we also realised that we had uncovered a new district. So quickly, together

with Buenaventura we pegged the largest portion of the prospective terrain. We at Gold Fields own 100% of the red, which is about 94,000 hectares. Together with Buenaventura in our area of interest, which is the joint venture interest, we own about 12,700 hectares of ground. And Buenaventura also owns some of their own ground to the south. So, work is going on across that whole regional area, where hopefully we can find similar styles analogous to our new Chucapaca discovery.

I am now going to focus in on a very small part right in the middle over there.

EXPLORATION Chucapaca JV - Canahuire drilling



ENCOURAGING RESULTS WITH FOUR RIGS TURNING

The area that Buenaventura discovered is now called Canahuire. That's their drilling, the blue drilling. And what they did is they drilled into a diatreme which is this pink body here which is roughly east-west oriented and about 900m long. And basically found that gold was localising around the contact of this breccia with the sediments, and especially where the sediments were brecciating. We drilled all the green holes. And so far we've drilled 24,000m at this project, and we have had four rigs turning for most of the period – more recently we only have two turning though.

Buenaventura's drilling – this is all their results – peaked our interest, specifically when they started drilling 44m at 9g/t, 170m at 3g/t, which are very exciting type intercepts so close to surface. We've come in and started drilling in and around and trying to extend the zone. We've had some similar type intercepts, 122m at 2g/t, 50m at 5g/t. So basically the system is robust. It's open to the west; it's open to the north. I'm going to show you just a section through there, which is 500 west

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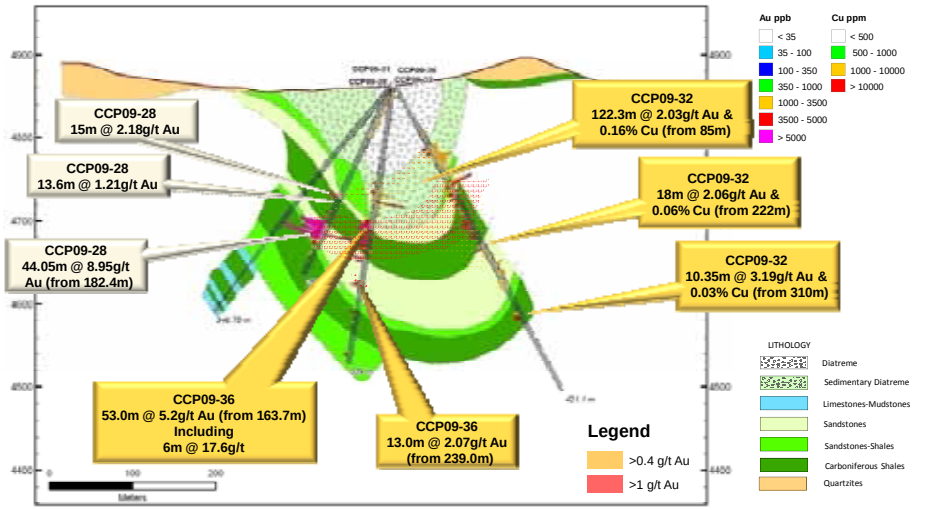
EXPLORATION Canahuire - Section 500W

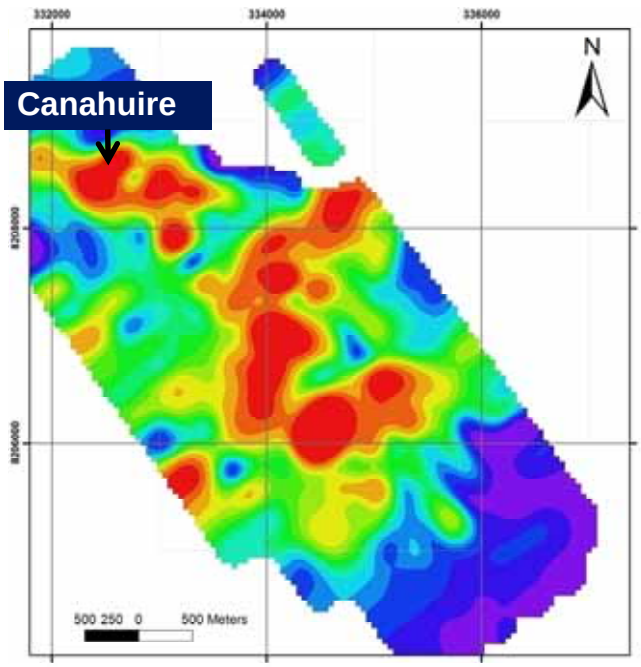


DEVELOPING INTO A HIGH GRADE OPEN PIT POSITION

As you can see here is the diatreme with the brecciated sediments. And what it looks like is the diatreme has intruded along the keel of a local syncline, and where it has intruded and brecciated the sediments we're finding the mineralisation developed. And it's strong. With these kinds of intercepts we really are hoping to develop a high grade open pit opportunity.

EXPLORATION

Chucapaca JV – Targets



CANAHUIRE IS PART OF A BIGGER SYSTEM

But the really exciting thing about Chucapaca is that Canahuire is part of a bigger system.

Canahuire is there – that's the diatreme breccia. The original drilling that Gold Fields was doing was on these gold soil anomalies here, which was essentially coincident with the top of this hill. As I said, we drilled 200m and got 0.4g/t. But with our ongoing work now we've collected IP, it's a geophysical survey that tells you the conductivity of the rock. And basically what we're seeing is Canahuire is a very strong conductor.

And what's more important, there is an even bigger and stronger conductor around the main intrusive, of which Canahuire is just a little aphophesy off the main intrusive. So this conductor is at the same position as Canahuire. That is where the contact of the intrusive with the sediments.

So we believe that this could be a very similar style of mineralisation to Canahuire. And we've set up here and we're starting to drill now right into the conductor. So hopefully Canahuire is good enough on its own, but I think with the potential right next to it as well as within the very big regional package, we're going to be here for a very long time and hopefully discovering a lot of metal.

EXPLORATION Chucapaca JV - Programme

Jun 2009 **Dec 2009** **Jun 2010**

Canahuire drilling → **Interim resource**

Target definition → **Additional discoveries**

Scoping Study → **Conceptual economics**

INTERIM RESOURCE AND SCOPING STUDY END F2010

This picture shows the Canahuire deposit with four rigs operating mainly on the western side of the hill.

We're going to be continuing our Canahuire drilling until the end of January 2010, when we will do the first resource for the Canahuire discovery.

We're going to continue doing the target definition drilling, which is that drilling on the bigger picture, throughout that period. Hopefully as we get information we'll be able to feed that into the scoping study.

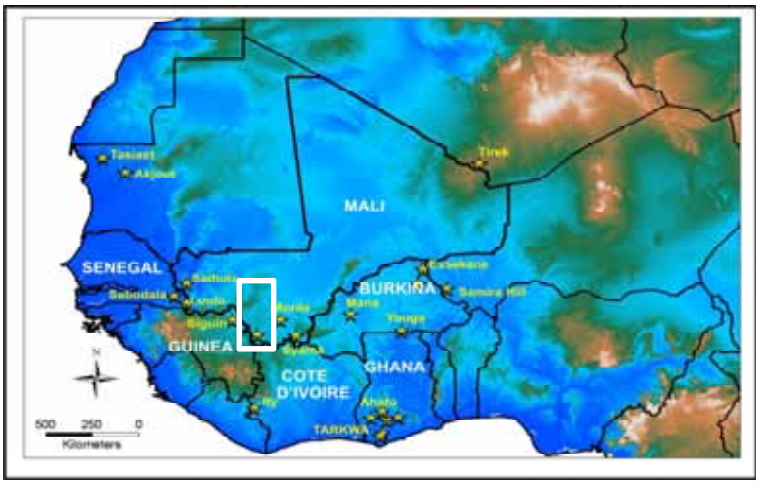
And we're planning to complete a scoping study. All the elements are well in hand. We're doing the metallurgy, environmental baseline, geotech, social studies etc there are a number of areas that we're working on in conjunction with the drilling.

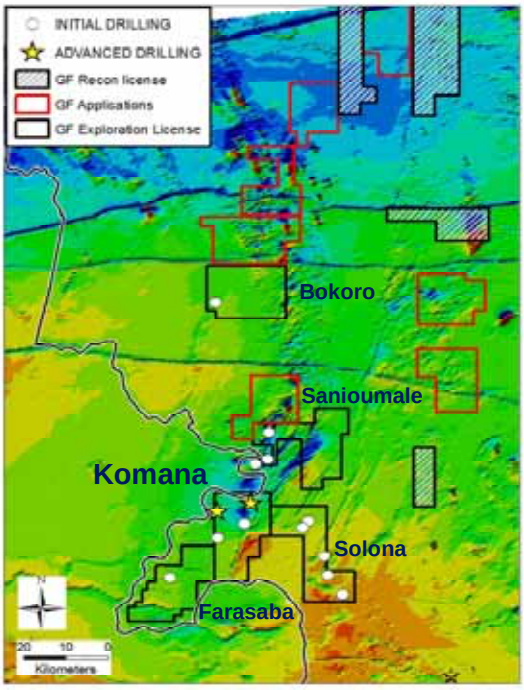
And we're looking to deliver the conceptual study by the end of this financial year.

So fingers crossed this is the first new mine that Nick referred to earlier.

EXPLORATION

Yanfolila – location





- **GBP28M acquisition of Glencar Mining**
  - **Komana 1.25Moz (Glencar)**
  - **Sankarani (Farasaba, Sanioumale, Bokoro)**
  - **Yanfolila (Solona, lease applications)**

RECENTLY CONSOLIDATED EMERGING GOLD DISTRICT

The next advanced project is Yanfolila, which is in Mali. We were in joint venture with a company called Glencar Mining for about three years where we jointly explored the Sankarani licences, which are the black licences there, Bokoro, Solona, Sanioumale, and Farasaba over there.

We did geochem and we did a bunch of RAB and air core drilling, very much like we do at St Ives. And what we found was very extensive structures with large zones of anomalous gold in the air core drilling, up to 10km long. Often these structures had significant ore grade hits along them, just in the initial air core testing.

At that point we realised that we're on to something fairly interesting and fairly big. Our partner, Glencar, was operating independently the Komana prospects, Komana west and east, and they announced a 1.25 million ounce resource on those prospects.

We tried to include the Komana prospects into our joint venture, seeing them as a sort of centre of gravity to our projects. And the vision that we had for this area was a central facility with a number of ore bodies that would feed into the central facility, you know, a pearls on a string type scenario. We agreed a letter of intent with Glencar, couldn't agree final terms, and eventually we agreed an acquisition with them, and we completed that just recently. We paid £28 million to now consolidate 100% of all of those black tenements.

In the mean time we have also pegged a bunch of our own tenements, which are these hashed ones. And we have also applied for a bunch of other tenements.

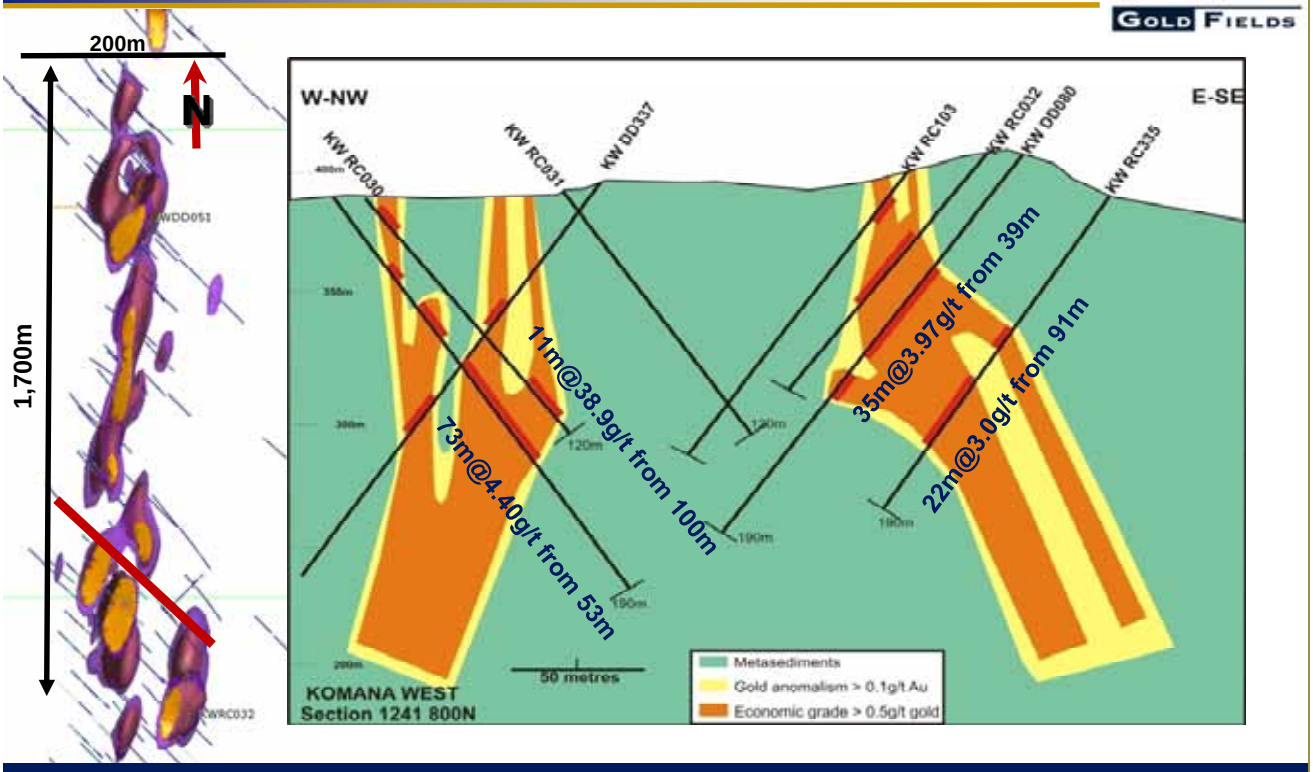
So we are consolidating a camp scale opportunity here in southern Mali.

What's interesting about this area – other explorers have been over including Randgold – but because it is under thin cover they went for the easier targets first. But the thin cover is something we understand how to explore through very well, and we're just bringing the same exploration philosophy that we have at St Ives and Agnew and we're applying it here.

We are seeing the success already.

EXPLORATION

Yanfolila – Komana W section



GOOD GRADES – GEOLOGY POORLY UNDERSTOOD

Just a quick example of some of the spectacular grades that Glencar got during their drilling of Komana west.

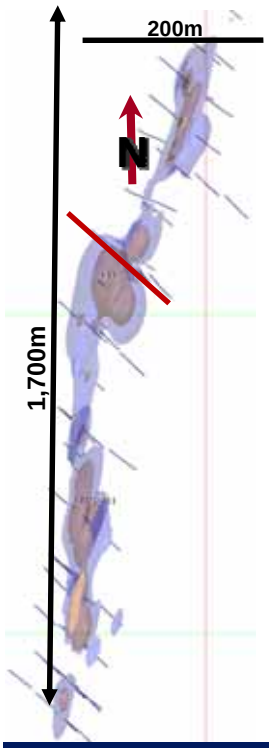
This is the section through there. You can see bonanza grades, 11m at 40g/t. So this has got the same sort of grades that they were seeing at Morila in the early days.

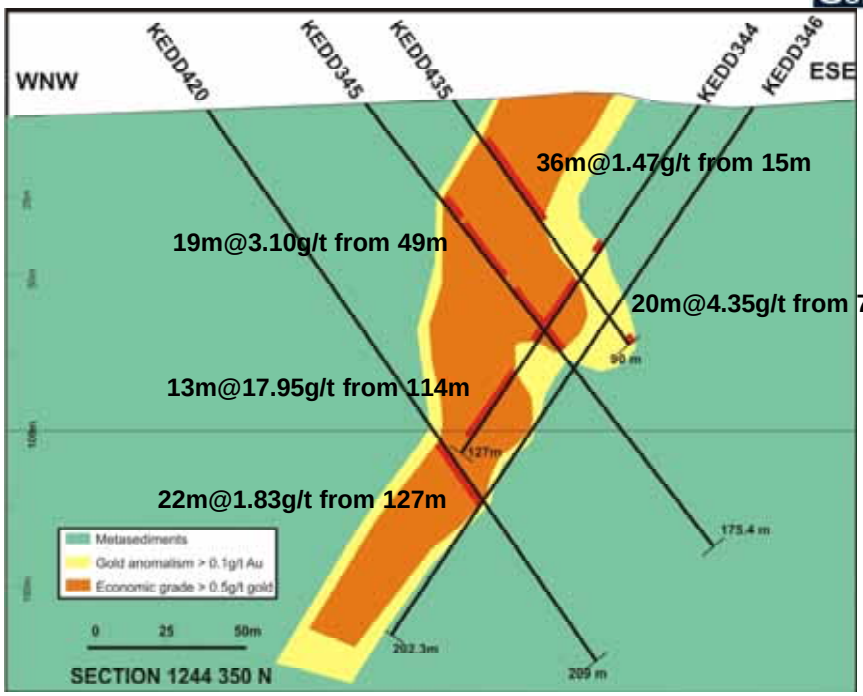
A very interesting project. Certainly not well understood. Glencar RC drilled the whole project, so the geology is very poorly understood. There is some smearing in the RC that we need to understand.

Our programme will be to go in and diamond drill through the guts of this ore body so that we can understand it and then work on extending it along strike and at depth.

EXPLORATION

Yanfolila – Komana E section





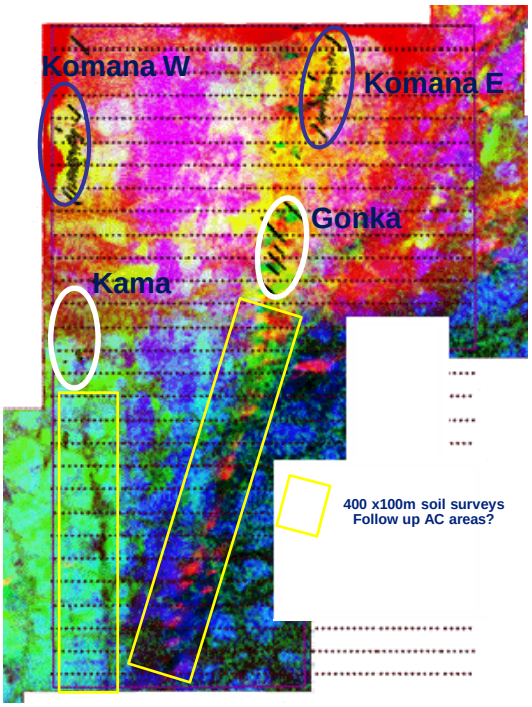
SIMPLER GEOMETRIES WITH ROBUST GRADES

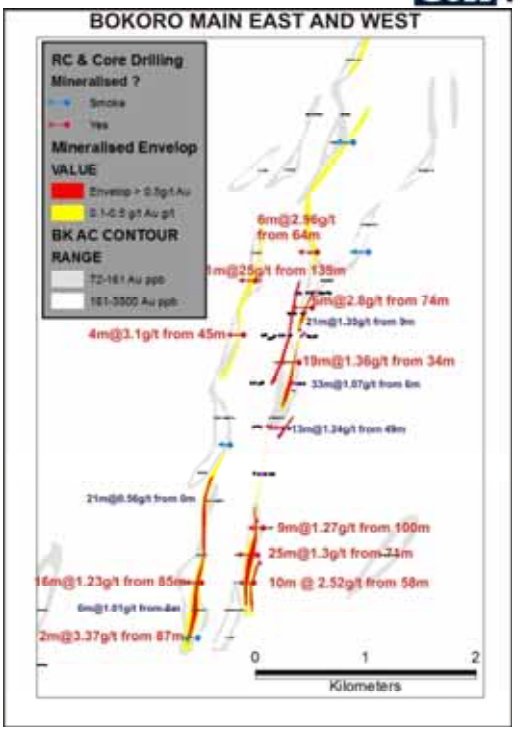
Komana east is a lot simpler, and it looks like it's going to be an easier ore body to drill out. It also has some spectacular grades, 13m at 18g/t.

The interesting thing about most of this drilling is it doesn't go much deeper than 100m, so there is a lot of potential along strike and at depth in these ore bodies.

EXPLORATION

Yanfolila – targets





SEVERAL CAMP-SCALE TARGETS – DEVELOPING DISTRICT

As I said, it's going to be pearls on a string. We have about six or seven 10km long targets with significant grades in them. Glencar focused on Komana east and west where there was old artisanal workings. As the structure extends south under cover we can trace it with geophysics and now with our air core drilling the mineralised structure appears to extend for 10km. It would be really interesting what happens where they join down at the bottom of the tenement.

Our other projects, and Bokoro is just one of them, they're all the same. 10km long strike lengths with very high grades, sporadically intersected in the air core drilling. We're going to go in and aggressively drill these projects this year.

EXPLORATION

Yanfolila - programme

	Jun 2009	Dec 2009	Jun 2010	Dec 2010
Komana drilling	→	→	Interim resource	
Other targets	→	→	→	Additional discoveries
Interim scoping study	→	→	→	Conceptual study

INTERIM SCOPING STUDY Q2 F2011

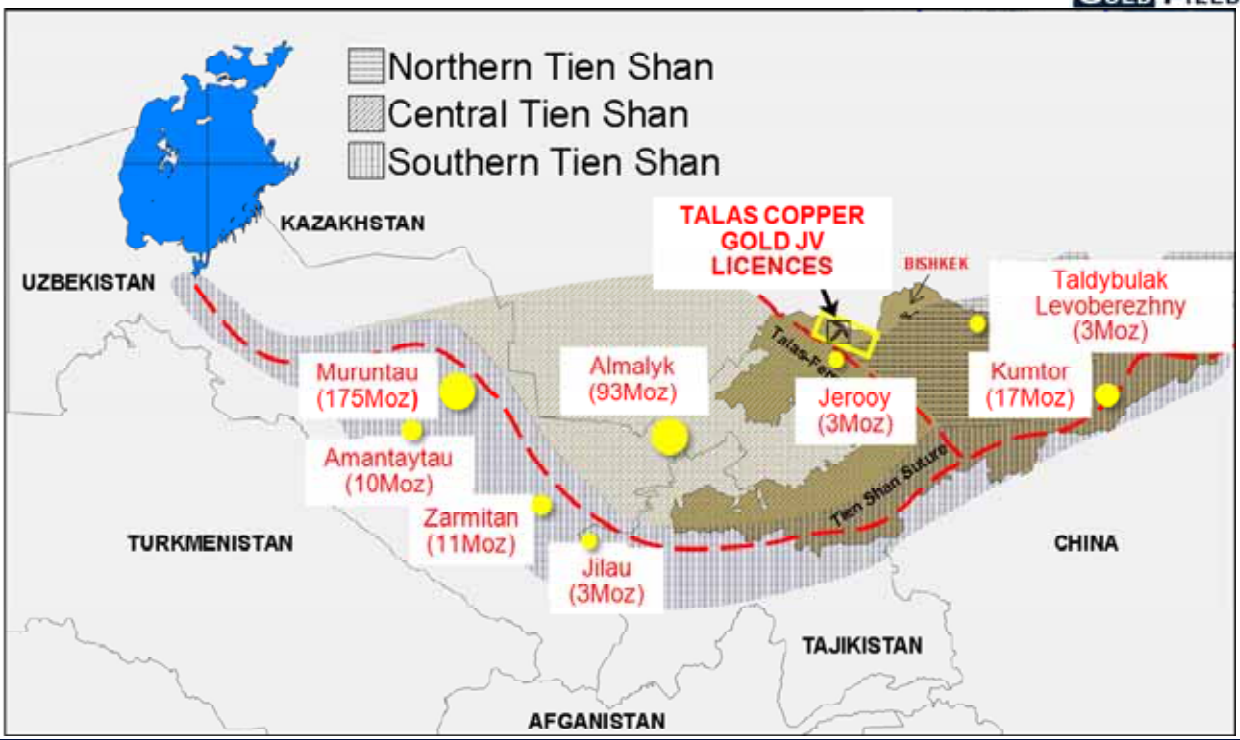
The rainy season has just come to an end. We have started drilling this week.

At Komana we're going to be drilling all the way through to June next year and then redo our interim resource, which will be an update on what Glencar has given.

And we will also by that time have developed one or more of our other targets, hopefully to resource status, which will then feed into our scoping study which is going to be delivered by the end of next calendar year.

EXPLORATION

Talas JV - location

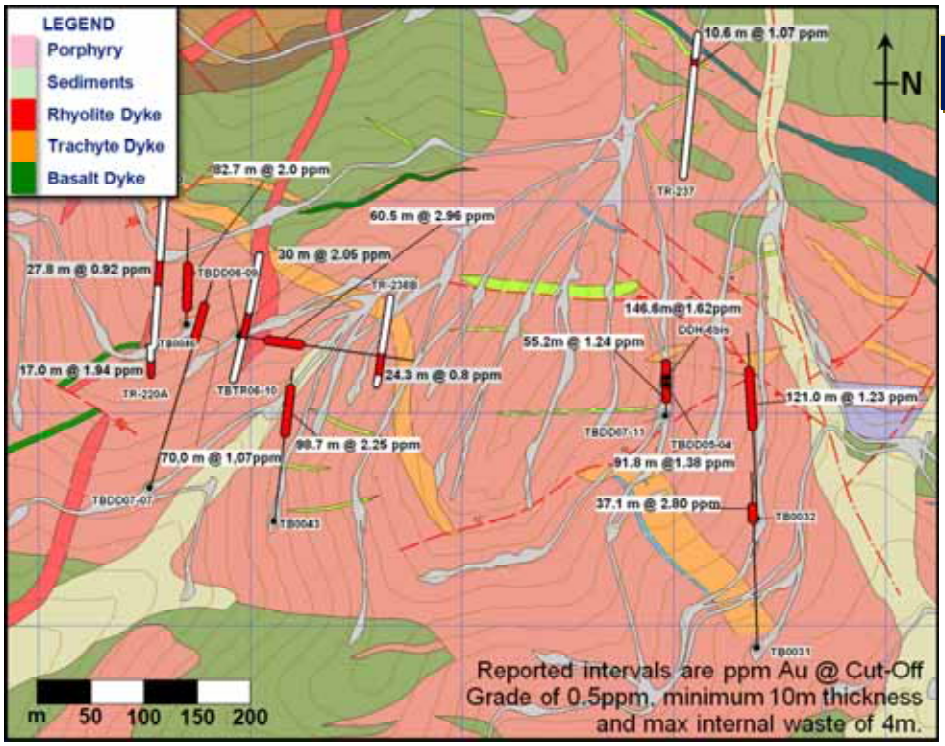


GOLD RICH PORPHYRY DISCOVERY WITH ORSU METALS

Talas is our last advanced project that I'm going to talk about. It's in northern Kyrgyzstan, right at the northern part of the very prolifically endowed Tien Shan belt. Tien Shan is the host to the 175 million ounces Muruntau deposit, the Almalyk deposit and many other big and world class deposits.

This discovery was made initially by a Russian exploration team. They saw very low grade copper and they walked away from it. Our partner, Orsu Metals, picked it up and in 2006 we funded Orsu through a number of private placements and started drilling this porphyry. With that process and through that process Orsu announced a resource of about 240 million tonnes at 0.6g/t gold and 0.15% copper, with very clean and simple metallurgy.

EXPLORATION Talas JV – Taldybulak drilling



Taldybulak Deposit

Resource (0.3 g/t c/o)

- 242Mt @ 0.6g/t Au and 0.15% Cu
- Orsu Metals (Apr 08)
- 6.39Moz Aueq

Better understanding

- Overprinting higher grade gold zone
- 198m @ 1.93g/t Au and 0.26% Cu

Analagous to Newcrest's Cadia-Ridgeway

FOUR RIGS DRILLING OPEN PIT POTENTIAL

But at that point Gold Fields was, you could say, grubstaking through a private placement, and wasn't hands on with the project. We had the right to joint venture the project, so we exercised the right about a year ago and we started operating at the beginning of this year. And since then we've really started to understand this project a lot better, understanding where the high grade potential is, and we're seeing that there is a high grade overprint east-west across this really large low grade porphyry system that sits in this area here.

Now, some grades that we've intersected recently are 200m at nearly 2g/t and 0.26% copper. These are the kinds of grades that you're seeing in the Cadia Ridgeway district. That's probably the best analogy to this style of mineralisation.

What we've got here is the only outcropping porphyry, but along the structural trend we have a large land position that goes undercover on both sides. There is a lot of very interesting geophysical anomalism that we would want to go and test at some time, but at this point we're focussing on near-surface potential.

The interesting thing about this project is it's one of the best located projects we've got in the group. There is a tar road that drives right close to it. There is power to site. It's all hydro-electric power so it's cheap about US$2.5c per kilowatt hour. We've got a substation about 25km away to deal with the higher loads that we would require for a mine. There is a rail head about 100km to the west. It is a conveniently located near population. It's out of sight from the population but close enough that they would all work from the town. So it couldn't be better located from that perspective.

EXPLORATION

Talas JV – programme

Jun 2009 Dec 2009 Jun 2010

Taldybulak drilling → updated resource

Scoping Study → Conceptual economics

LARGE RESOURCE – GOOD INFRASTRUCTURE

Our drilling is essentially coming to an end we are going to shutdown for the guts of winter.

We will do an updated resource, and we are in the process of collecting real cost data for Kyrgyzstan, which is a little bit challenging because it is a different environment, but from what we can see so far is that you do definitely get significant cost discounts in this part of the world.

We're also doing our metallurgical test work, which so far has been very encouraging.

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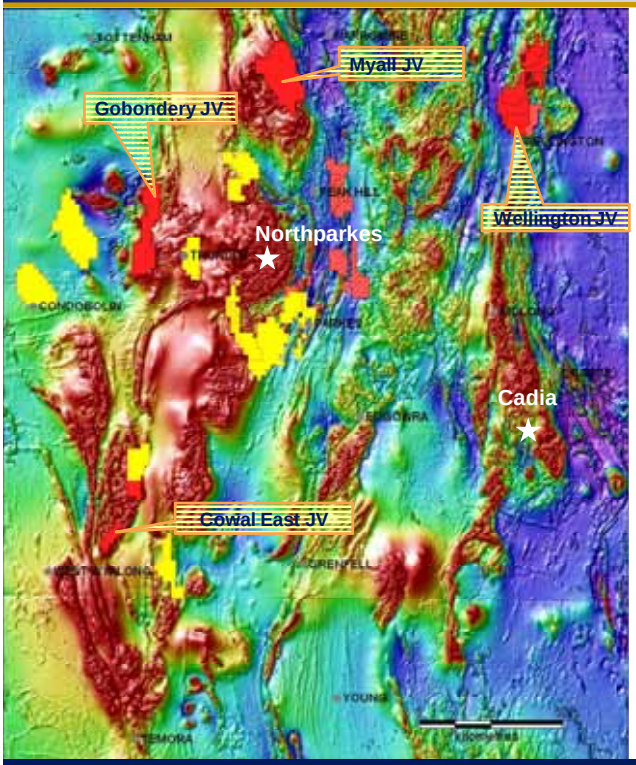
EXPLORATION East Lachlan JVs - location



Exploration Strategy

- Cu-Au porphyry targets
  - Cadia-Ridgeway (94Moz Aueq)
  - Northparkes
- From conceptual targeting (2005) to successful initial drilling (2009)
- Earning 80% on 4 projects with an option on 4 more with partner Clancy Exploration
- Three rigs turning
- Two porphyries discovered

A DOMINANT LAND POSITION IN A PREMIER BELT

So those were the more advanced projects.

Now I just want to give you a flavour of two of our less advanced projects, basically to show you the depth and the quality of the portfolio and our pipeline.

But we've got a number of these brewing in our pipeline – not just two.

This one is located in East Lachlan, in New South Wales.

Basically all around where there are a number of really world class deposits. I've already spoken about Cadia Ridgeway, Rio Tinto's Northparks, Cowal, Barrick's mine. So it's a very well endowed part of the world.

It's under cover. It's an Ordovician arc sequence - so we're looking for porphyries that are intruding into the country rocks.

About five years ago we had an alliance with a junior company called Clancy Exploration, and what we did together with them is we modelled this whole area and we spent a lot of time targeting. It took us about two years of targeting to build up our target bank, and then we started picking up ground through Clancy. They picked up the ground, we reviewed the ground, and if we liked the ground we joint ventured it.

Under that scenario we have already picked up four joint ventures. In each of those joint ventures we can earn 80% by spending somewhere between $1 million and $3 million. So in most of them we have already earned our 80% position. We have the right to earn into four more. The ones that we already have in the portfolio are the reds shown here. The yellow ones are the projects that we're able to joint venture and we're busy currently reviewing. And this pink colour here is ground that Gold Fields has picked up 100% on its own.

So through all of these tenements and through Clancy, Gold Fields is now exposed to the largest tenement holding in New South Wales.

It's been quite a long process, and we're now starting to do the initial drilling on the porphyries.

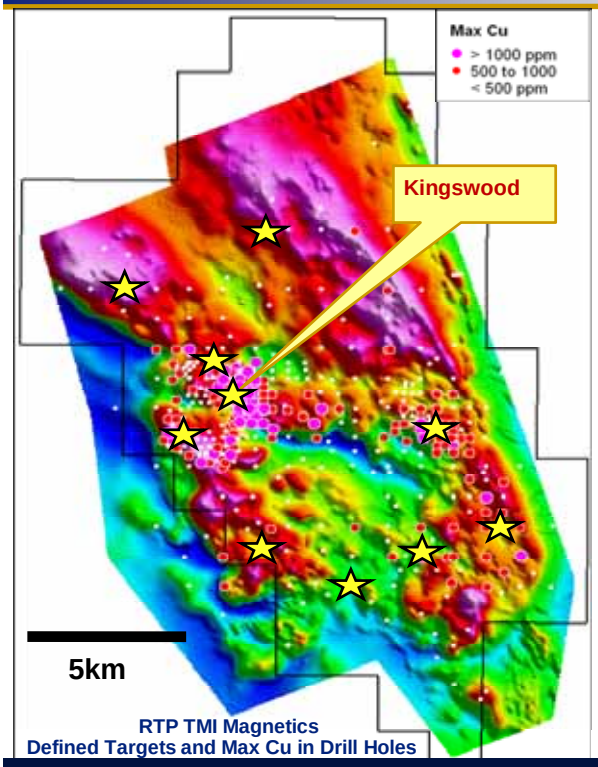
We've had two tests so far and we've hit two porphyries.

So the team is hugely excited by what they're seeing. I'm going to show you an example of the two porphyries.

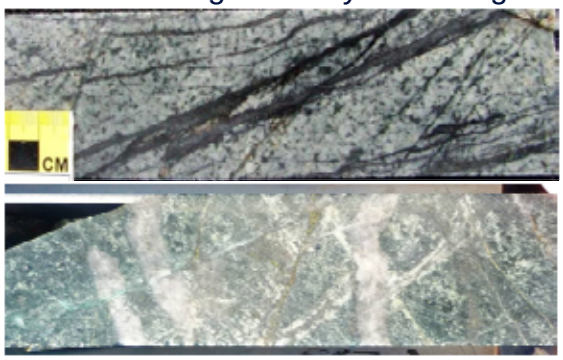
One is going to be up here in the Myall joint venture, and the other one in the Wellington joint venture.

EXPLORATION

Myall JV – Kingswood target



- 3km by 2km porphyry discovery
  - within 40km^2 Cu-Au anomaly
  - 70m @ 0.54% Cu and 0.15g/t Au
  - 10m @ 0.64% Cu and 0.61g/t Au
- Cowal-style high grade epithermal veins intersected
- Numerous targets ready for drilling



LARGE ALTERATION SYSTEM WITH MULTIPLE TARGETS

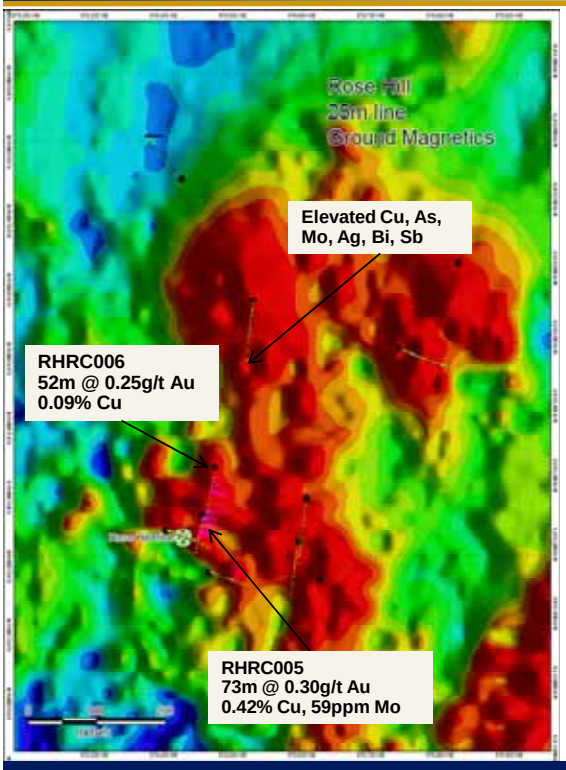
The intersection that we've got in the Myall joint venture, the first hole that we drilled was 70m at 0.5% copper and 0.15g/t with some high grade parts further down the hole. It's the right type of rocks.

We're close to a system, at least that's what the geologists are telling us. It's within a 40km square anomalous zone that we've defined with air core drilling, and what we see here at Kingswood is a three by two kilometre porphyry centre that we think we're right on the edge of with that hit.

So drilling is ongoing. They're drilling there at the moment, hopefully moving towards the centre of a system. Keep looking out for news on this one.

EXPLORATION

Wellington JV – Rosehill target



- High grade porphyry-style mineralisation in initial drilling
  - 9m @ 0.73g/t Au, 1.01% Cu
- Vectoring towards the mineralised centre
- 4,000m drilling planned

DRILLING ON A RIDGEWAY ANALOGUE

The same with Rose Hill.

It's a similar type project.

That was our first hit, really encouraging grades, just a small porphyry apophese coming off hopefully what is the bigger porphyry.

We are vectoring towards the mineralised centre.

This whole project has a committed budget of $4.5 million over the next year, and most of that is going to be in drilling.

So there is going to be a lot of news coming out of this project, and hopefully positive.

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EXPLORATION Canada – BC Porphyry JV's

Exploration Strategy

- Established porphyry Cu-Au province
  - Kerr Sulfurets
  - Kemess
  - New Afton
- Mining friendly jurisdiction
  - Period of difficulty
  - Today good incentives to explore
- Low cost environment
  - Hydroelectric power
  - Good skilled workforce

ESTABLISHING A NEW REGION FOR THE FUTURE

The other area that we've moved into recently is Canada. And specifically we have moved to BC in Canada.

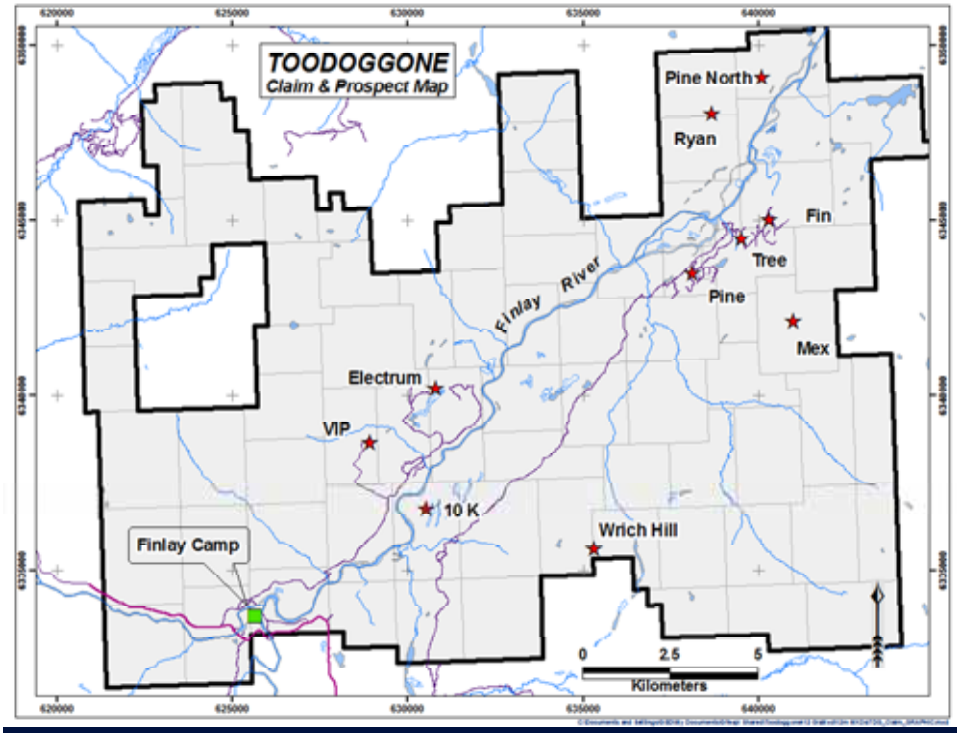
It's a similar type geology to what we're seeing in New South Wales and what we're seeing in Kyrgyzstan. So there is some method in our madness. We're building an expertise in that style of exploration and that style of mineralisation, and I think we're exporting that and building on our understanding.

Why is BC interesting? You would think Canada is a mature area; everyone has been through it many times. BC is kind of an anomaly. For many years it was an environmentally taboo place to do exploration. The forestry industry had its claws in the area and there was very little exploration done. So as such for about 20 years there has been no new exploration. Well, global warming has affected the forestry industry. There is a beetle bug there that has eaten up all the wood because it doesn't get cooled off by the severe winters any longer. And basically this area is very depressed, so the government is bringing forward a lot of incentives. In fact, we're getting about 30% of our exploration money back for every drill hole we put into this area.

So it's very mining friendly now, and it's a very low cost environment. It has got hydro-electric power, and a very skilled workforce, good infrastructure where we're operating. We're staying away from this area here, the Galore Creek area where it's really difficult and remote. We're looking at areas where we can get to quite easily by road. We've got two projects so far, two JVs, Toodoggone JV up here in the north and the Woodjam JV down in the south.

EXPLORATION

Toodoggone JV – target definition



Tenure: 32,875Ha

Close to Kemess Mine

Three main targets

- Pine
- Tree
- Mex

Several new geophysical targets

Initial drilling on two targets completed

BUILDING A PIPELINE OF HIGH QUALITY TARGETS

Toodoggone is a big property position, 33,000 hectares, with a number of known porphyries on it drilled in the past but never followed up.

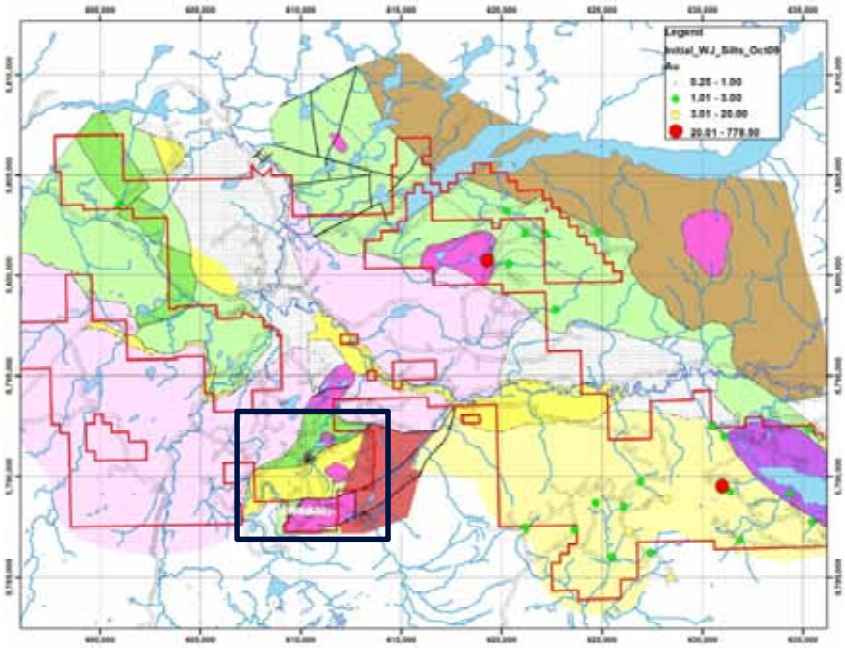
And we literally only signed this joint venture in June so we've only had a couple of months on the ground. But we've gone in and done a first programme over Fin, Tree and Pine.

We've done our drilling. We're waiting for the assays.

But in the process we've also found another area called Mex, which has got some significant stream geochem and rock samples coming off it. So this is a very significant prospect that we'll be hitting next summer.

EXPLORATION

Woodjam JV – project geology



Tenure: 40,500Ha

Close to New Afton

Deerhorn

69m @ 0.22%Cu 0.5g/t Au, including
15m @ 0.32% Cu, 0.87g/t Au

Megabucks

275m at 0.14%Cu and 1.03g/t Au

Takom

72m @ 0.34% Cu and 0.6g/t Au

MULTIPLE TARGETS IN CENTRAL CORRIDOR

Woodjam is a bigger property. It's even better located.

It's also another property that there are a number of porphyry deposits already discovered on it.

It's a matter of taking our understanding and applying new technology to it.

These were explored 20 years ago. But there is some significant grades already discovered at this project. 275m at 1g/t gold and 0.14% copper is a pretty interesting intercept.

EXPLORATION Growth pipeline

IMPROVING QUALITY – DELIVERING RESULTS

So, in conclusion, this slide shows the pipeline, and I have hopefully given you an appetizer for what's going to come in the regional presentations of how the pipeline is busy building – especially down at the early stage.

And we continue to bring in new quality projects, test them, move them forward or out.

Hopefully one or two of those will be able to graduate to the next stage.

The pipeline, both from a greenfields and near mine perspective is deep and contains quality projects. With earlier stage projects bubbling away ready to move to advanced drilling.

So hopefully the portfolio excites you as much as it excites me.

Thank you.

END OF TRANSCRIPT