

ERA's post Diggers visit report to Phoenix Gold (PXG) and why our recommendation is a SPEC BUY at 12c with a target of >15c.

This report started as a post-Diggers 2015 Site Visit report, but we/ERA were also intrigued, having followed and written research a number of times on Phoenix, what had happened, as in :

Why did the grade from Kintore fall by 0.7g/t from 1.9g/t at the mine to 1.2g/t at the mill? Why had Castle Hill not started mining yet - as in what was wrong with it ?, and What had happened to all that potential exploration upside?

On 20 August 2015, Evolution (EVN) announced its intention to make an off-market takeover offer for PXG in the form of **0.06EVN shares and \$0.06 in cash or ~\$0.12 per PXG share**, thus valuing PXG at ~\$56m (which although 20% higher than Zijin's 10c cash offer, **is in ERA's opinion still a bargain** as detailed in this report, FIRB is not expected to be an issue, as it has already been granted to Zijin).

# Our current recommendation for PXG at 12c is a SPEC BUY with a target of >15c.

So why would anyone pay over 15c for PXG ?, well theoretically PXG's assets appear to have the potential to produce ~100kozpa to ~200kozpa for more than 10 years, based on our site visit and discussing what happened and why at Castle Hill, Kintore and the exploration; including the fact that Castle Hill's Mick Adams alone could potentially be,

comparable to Gold Road (GOR ~\$265m market cap)'s Gruyere.

The details as to why Castle Hill (Mick Adams - Wadi) has not yet been mined and why the resource grades at Kintore do in fact exist, are contained in the attached report.

Regards

Keith

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# Phoenix Gold (PXG) Update based on a Post - Diggers 2015 Site Visit

(by Keith Goode : 21 August 2015)

This report started as a post-Diggers 2015 Site Visit report, but we/ERA were also intrigued, having followed and written research a number of times on Phoenix, what had happened, as in :

- Why did the grade from Kintore fall by 0.7g/t from 1.9g/t at the mine to 1.2g/t at the mill?
- Why had Castle Hill not started mining yet as in what was wrong with it ?, and
- What had happened to all that potential exploration upside?

On 20 August 2015, Evolution (EVN) announced its intention to make an off-market takeover offer for PXG in the form of **0.06EVN shares and \$0.06 in cash or ~\$0.12 per PXG share**, thus valuing PXG at ~\$56m (which although 20% higher than Zijin's 10c cash offer, is in ERA's opinion still a bargain as detailed in this report, FIRB is not expected to be an issue, as it has already been granted to Zijin). *Our current recommendation for PXG at 12c is a SPEC BUY with a target of >15c.* So why would anyone pay over 15c for PXG ?, well theoretically PXG's assets appear to have the potential to produce ~100kozpa to ~200kozpa for more than 10 years, based on our site visit and discussing what happened and why at Castle Hill, Kintore and the exploration; including the fact that Castle Hill's Mick Adams alone could potentially be *comparable to Gold Road (GOR ~\$265m market cap)'s Gruyere*. *However, EVN's offer raises three possible outcomes:* 

1. What does Zijin do next ? Zijin may increase its cash offer (after all depending on the pre-bid arrangement it may have paid up to the 13c that Geologic participated in), and it started its offer for NGF at 20c on 17 April 2015, increasing it to 23c on 30 April and then 25c (the same as it offered in 2012) on 26 May. Zijin certainly has plenty of cash, revealing in its Diggers 2015 presentation that it had a war-chest of ~\$2.2bn (Rmb10bn) for acquisitions. **PXG shareholders should not just want cash**, because *cash means no participation in any future potential upside* due to PXG's holdings (whereas bids involving scrip mean participation). In much the same way that NGF shareholders have probably now realised that they gave their NGF shares to Zijin for 25c in cash, in a company that potentially could produce up to ~450kozpa or so (as indicated in Zijin/NGF's Diggers presentation with its rated mill expansion to 4.6mtpa [though 5mtpa may be achievable], and game changing additional 1mtpa refractory plant [on which work is already in progress] within 3 years to probably treat Racetrack, re-open Ora Banda (Gimlet etc) for the Victorious Basalt hosted mineralisation and possibly treat Aphrodite, etc; & yet still excluding Mt Morgan [QLD - see ERA's 2003 Lodestone Exploration report on www.eagleres.com.au], and Bullabulling).

**2. Ideally PXG shareholders should want EVN to have majority control or PXG in strategic control** (based on previous Chinese held positions, we/ERA doubt that Zijin will relinquish its PXG holding because the PXG assets have significant long-term upside potential). If Zijin did manage to get majority control, then it may gradually takeover, eg by providing loans, and converted into shares, with resulting dilution.

**3. So how far may EVN chase the offer**, if Zijin does increase its cash offer. And if EVN is successful when does EVN consider increasing the size of its 1.5mtpa rated (though possibly achieving up to 2mtpa) Mungari plant. For our post Diggers PXG visit on 7 August 2015, we/ERA visited some areas that we have visited before, but focused on:

- **the Kunanalling Shear** : namely Premier (source of the gold nuggets in the booth at Diggers 2015), what happened at Castle Hill, and examined the grade discrepancy at Kintore West.
- **the Zuleika Shear**: being the 7 proposed priority target areas from the NST boundary through Blue Funnel to Broads Dam; and Carbine North (on an offshoot of the Zuleika), and
- the Ora Banda / Grants Patch trend namely the Old (and original) Ora Banda prospect.

# The Kunanalling Shear Zone (KSZ)

# **Castle Hill**

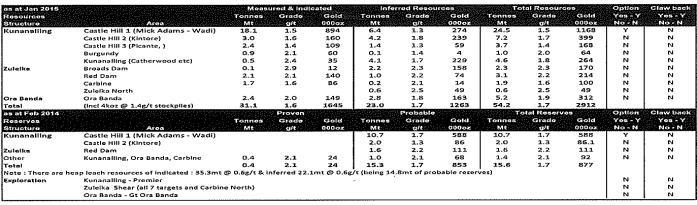
On the KSZ, PXG's key issues are its holdings in Kintore and Castle Hill, and PXG's decisions there have held itself back. Also Kintore was mined and treated at Greenfields, whereas Castle Hill was supposed to have started by November 2014 and treated at Paddington, but did not and still has not started. **To elaborate, a bit of history** (note : this includes the expiring option and claw back arrangements and why Castle Hill has not yet been mined, plus the major error (in hindsight) that PXG made in focusing on Castle Hill to the detriment of its regional exploration outside of Castle Hill, because it believed an agreement was going to be honoured).

Delta Gold (DGD) took over Goldfields (of Australia, who owned Paddington, Kundana etc) and formed Aurion Gold in ~2001, which was almost immediately taken over by Placer Dome (who was the JV partner of DGD at Granny Smith, & the mega-moz Wallaby had then been recently discovered). Before Placer Dome was taken over by Barrick, it sold a number of tenements in the region (being Castle Hill etc) to Hayes Mining Pty Ltd (a subsidiary of Cazaly) in ~2005 on the basis of a ~70% claw-back provision to Paddington should a resource exceeding 300koz be delineated at any point in time for any deposit over the tenements in the agreement (note that a deposit could straddle different tenements, but 250koz can be discovered, 250 koz mined and another 250koz discovered, provided at any one point in time 300koz is not exceeded).

The claw back applied to the tenements in the agreement except for 4 deposits/pits which were deemed to be advanced, namely Mick Adams, Kiora, & Wadi at Castle Hill and Catherwood (just south of Castle Hill)] which were under an **"option to mine"** by Paddington, on the "agreement" that should the option be exercised, mining costs would be at Paddington's expense with the proceeds split 50/50, and mining would commence within 3 months (of the option being exercised). As a "gentleman's agreement" there was **no penalty** or provision if mining did not commence within 3 months - because it was expected to occur. Studies were undertaken on the 4 advanced deposits/pits over 2008 and 2009. On 10 October 2012, PXG entered into an agreement with Paddington/NGF to mine Catherwood and mining commenced on 20 December 2012 (within 3 months). The **tenement ownership** of PXG looks and **is fairly complex**. However, if the royalties are ignored (for simplicity - it has been commented that almost every tenement in the WA goldfields seems to have some sort of private royalty attached to it), then focusing on the 4 option orebodies : Castle Hill's Mick Adams, Kiora and Wadi are still in the option agreement, but Catherwood

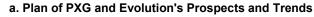
having been mined (even as a Stage 1 pit) is not, as there is no provision for "taking two bites of the same cherry", once mined all rights are lost.

Similarly Premier and Emu cannot be clawed back having been defined in mining data at the point of sale in the Placer sales agreement that hence excludes them. Nor can Picante, Wookie etc at Castle Hill because a development notice was given to NGF & they rejected it / "no" - once that occurs it can no longer be clawed back. The result is that shown in Table 1; most of the remaining tenements subject to possible clawback (only really applicable to the Kunanalling Shear) are currently thought (by PXG) to be fruitless.

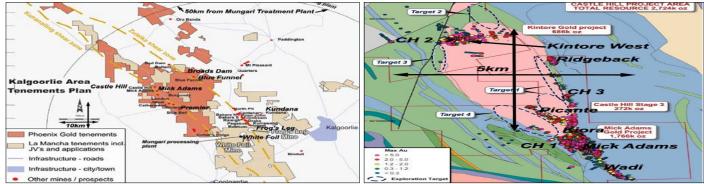


#### Table 1. Phoenix Gold's Ore Reserves & Resources as at January 2015

On 20 November 2012, PXG started its \$20m exploration programme over all its targets on the different shears, but within 2 weeks on 5 December 2012, PXG reported a **94m @ 2.6g/t** intersection from 88m at Castle Hill. That intersection **caused PXG to shelve its planned exploration programme along the Zuleika Shear & Gt Ora Banda, and focus on Castle Hill** and Kintore (which it had acquired in Aug 2012), in the belief that NGF would probably exercise its option and mine at Castle Hill. However, CY 2012 also marked the period in which NGF (and consequently Paddington) was taken over by Zijin, between April and August 2012, and the NGF management team was subsequently replaced. Through 2013, PXG focused its exploration on Castle Hill, explored Red Dam and mined the Blue Funnel pit deeper, treating the Blue Funnel ore at the Greenfields plant (in about mid-2013). In February 2014, following a successful DFS, studies were submitted to NGF showing that Mick-Adams, Kiora and Wadi could be mined as Castle Hill Stage 1 : mining 2.33mt @ 2.03g/t for 143koz resulting in a cash surplus of ~A\$35m at A\$1400/oz to be shared 50/50 with NGF incurring the expense of development (and then recouping it) with delivery of the studies triggering a 6-month period to accept the option, and start mining within 3 months after accepting the option. Figure 1. Plan of PXG's And Evolution's prospects and Trends, and Plan of Proposed Castle Hill Stages



#### b. Plan of Proposed Castle Hill Stages



On 14 **April 2014**, PXG entered into a long-term milling agreement to treat its ore from other sources through the Greenfields plant at 0.6mtpa to 0.8mtpa. In mid-2014, exploration focused on Castle Hill with a number of encouraging intersections at Castle Hill 2 (at Kintore West) as shown in Figure 1b. In July 2014 mining contracts were issued to start work at Kintore West and PXG entered into an agreement to acquire the St Ives 2.3mtpa 3-stage crushing circuit, heap leach plant for \$2.2m to process lower grade Castle Hill ore. At Diggers 2014, NGF exercised its option over Castle Hill 1 (CH 1) with the 3month agreement to mine and **should have started mining within 3 months but did not, and still has not (now over 12 months' later).** 

In September and **October 2014**, PXG reported encouraging intersections at Castle Hill 3; some high grade and thick (~15m to 20m) general ~1.5g/t to 2.0g/t intercepts at Burgundy; and intersections such as 23m @ 8.9g/t at Red Dam (suggesting possible open-cut and underground potential at Red Dam), because PXG firmly believed that NGF/Zijin were going to develop Castle Hill 1 and split the profits 50/50 with PXG. But instead after the 3 month period to November 2014, NGF acquired a PXG shareholding in December 2014 from CBA/Colonial at 8.3c per PXG share.

In January 2015, NGF and PXG commissioned a revised study on Castle Hill 1 that showed \$91m could be shared 50/50 at A\$1350/oz treating 8.7mt @ 1.51g/t with a 94% recovery producing almost 400koz, or A\$149m at a gold price of A\$1500/oz. (PXG's share price rose briefly to ~14c by the end of January 2015, but collapsed following the disappointing grades being achieved at the Greenfields plant, and NGF's failure to start mining at Castle Hill - which being under an accepted option could not be mined by PXG). Zijin/NGF had put their foot on the asset that PXG had spent so much time exploring and developing. So, although Zijin/NGF included mining from Mick Adams, Kiora and Wadi in its Diggers 2015 presentation as part of its possible projected growth to >300kozpa, then >400kozpa and beyond, no finalisation has occurred and no mining has yet started. Zijin/NGF stated in their Diggers presentation, that "we are in discussion" in reply to a question about when mining at Mick-Adams/Wadi would start.

Possibly the "discussion" is based on Zijin/NGF opting for the earlier (less profitable for PXG) February 2014 study that splits ~\$50m at A\$1500/oz 50/50 with a higher 8:1 strip ratio (based on mining ~2.2mt @ 2.0g/t at Mick Adams-Kiora for 133koz using a 94% recovery and 132kt @ 2.45g/t at Wadi for ~9.5koz recovered. Although Zijin have also stated that they intend to mine the higher grade Wadi pit last, [hence delaying any possible payment to PXG]), however, Zijin may still change its mind / revert and mine according to the January 2015 study with its 3x npv profitability of ~\$150m.

It should be noted that the ~\$75m cash at current gold prices using 50% of the larger, lower 4.3:1 SR significantly more profitable (especially for PXG) January 2015 study that PXG estimates (in its Diggers 2015 presentation) that it could receive over ~7 to 8 years, refers to Castle Hill 1's 8.7mt and that is less than the 10.7mt @ 1.7g/t probable ore reserves in Table 1 (or ~ one-third of the Castle Hill 1's ore resources of 24.5mt @ 1.5g/t). PXG's market cap at 10c is only \$47m (for 470m shares), less ~\$5m cash, ie ~\$42m; effectively giving Zijin (if successful at 10c) the rest of the Castle Hill tonalite through to Kintore (potentially comparable to GOR's Gruyere), and the rest of PXG's tenement holdings on the 3 shear zones/structures of Kunanalling, Zuleika & Ora Banda - Grants Patch, and other potential exploration upside, for free.

Should Zijin embark on the February 2014 study theoretically that's it, they forfeit the January 2015 study, *unless of course they take over PXG*. For more detail on Castle Hill see our/ERA previous PXG reports on the ERA website (www.eagleres.com.au) released in October 2013, July 2012 and June 2011.

## **Kintore West**

PXG made a placement (which involved Taylor Collison Ltd) and SPP at 10cps in **early Feb 2015**. PXG would have seen the falling grades at the plant but probably hoped that they would recover, especially with the expected higher grades at depth, however, the grades clearly continued to deteriorate, such that when PXG stated on 14 April that grades were lower than anticipated and mining at Kintore West would cease, the PXG share price collapsed from ~9c on 13 April to ~6.2c on 21 April. However, PXG began to recover when EVN entered into a strategic alliance on 1 May on PXG's Zuleika Shear through a placement of 44m shares at 7.5c, with Zijin's subsequent cash offer of 10c (from 20 August 2015) stating that they would be voting against the second tranche placement to EVN at 9.2c on 23 August, and the resolution was withdrawn on 23 August 2015. What was reported by PXG in its JQ 2015 quarterly on Kintore West is shown in Table 2, viz :

Quarter	SR	High Grade Ore	Grade	In-situ	High Grade Ore	Grade	In-situ	Recovery	Produced	Grade	Grade	In-situ	In-situ
	<b>X</b>	Mined (kt)	(g/t)	(oz)	Milled (kt)	(g/t)	(oz)	(%)	(oz)	Error (g/t)	Error (%)	Error (oz)	Error (%
Sep-14	13.6	47	1.52	2290								-2290	
Dec-14	16.5	113	1.54	5591	109	1.54	5231	93%	4865	0.00	0%	-360	
Mar-15	7.2	154	1.89	9357	176	1.17	6409	94%	6024	-0.72	-38%	-2948	
Jun-15	3.3	36	1.94	2243	83	1.32	3396	95%	3226	-0.62	-32%	1153	
Total		350	1.73	19481	368	1.31	15035	94%	14115	-0.42	-24%	-4446	-22.8%

#### Table 2. Phoenix Gold's Treatment of Kintore West ore to June 2015

So, comparing with Table 1, PXG mined and apparently delivered ore at the resource grade of ~1.7g/t, and when toll treated at the mill it fell to the reserve grade of ~1.3g/t (based on reconciling grades backwards). The mine checked its resource model undertaken using Kriging, and brought in consultants who said "you have to do conditional simulation" - which PXG did, and found no difference; and the third suggestion was bench comparison - which was done, again no difference.

Consequently, the resource/reserve grade model appears to be correct.

PXG then undertook a detailed mill check in JQ 2015, after all if it is not the resource as mined, it has to be the aging Greenfields mill which was built at 200ktpa in 1988 and expanded to 600ktpa in ~1994, with a gravity circuit added in 2013. Although in 1994 the plant achieved similar ~93% recoveries with the hard Lindsays pit as that being realised by the upgraded and expanded 3 Mile Hill plant.

The JQ 2015 check of the Greenfields plant by PXG, showed that the correct flushing procedure was being undertaken (a process taken between treatment of batches of ore from different sources) with recoveries in the 93% to 94% area, ie crushing and grinding all OK, or in other words :

## The lower grade being realised at the plant was also correct.

So where is the flaw ? We/ERA assumed that with the "Mine claim grade" being delivered meant that standard practice was followed in that the ore mined was assayed before it was sent to Greenfields.

#### However, standard practice was not followed and hence this was not being done.

The grades should have risen as shown in Figure 2a with specs/pin heads of visible gold present in the quartz veins in the deeper eastern wall of the pit. However, what occurred was that as Kintore West was being mined, it was marked according to expected grade areas and taken to the various stockpiles as in high grade (per the resource/reserve model), low grade (~0.5g/t) and waste (to the waste dump).

## Figure 2. View Looking South of Kintore West Pit, and View looking West of Eastern side of Kintore

#### a. View Looking South of Kintore West Pit

b. View looking West of Eastern Side of Kintore



What that practice did (in hindsight) was to **send ore grade to the low grade stockpile** and probably some to the waste dump, since the low grade at ~0.54g/t currently being treated at Greenfields has been realising between 0.75g/t and 0.90g/t, ie 40% to 67%, or 0.21g/t to 0.36g/t higher than it should be. *Hence the Kintore resource still appears to be intact, provided that it is not attempted to be high graded by selective mining.* 

Incidentally, within the Kintore West pit there is one vein cluster in the west wall that splits along the E/W length of the pit into each corner of the eastern wall with some veins ranging from 1g/t to 2kg/t over 1cm to 5cm. Also, continuing further east, the vein direction appears to broadly remain as two old shafts on the eastern side, both have veins striking NE/SW according to the historical long-axes of their shafts in Fig 2b.

# **Premier (or really Premier South)**

An exploration programme was submitted for 2 consecutive years on Premier South, being the area south of the Premier pit, but failed to gain approval (because of Castle Hill exploration). Apart from the gold nuggets found, that were displayed in the PXG booth at Diggers 2015, as shown in Figure 3a, Premier South lies unexplored at the intersection of two structures (Kunanalling & Telegraph) as shown in Fig 3b.

#### Figure 3. Gold

#### Nuggets Found at Premier South, & their Visual Proximity at the Junction of Two Structures

a. Gold Nuggets Found at Premier South

#### b. View of Premier South (where nuggets were found)



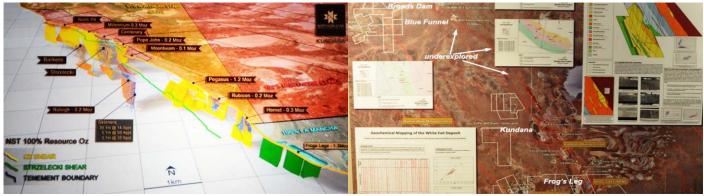
# The Zuleika Shear Zone (ZSZ)

PXG's holding along the Zuleika Shear extends from north of Northern Star's ground through Blue Funnel to Broads Dam, although the splays such as Red Dam to Carbine North are sometimes also included.

Figure 4. Northern Star's Zuleika Ore Deposits at Diggers 2015, and La Mancha Booth at 2009 Newgen Conf

a. Northern Star's Zuleika Ore Deposits at Diggers 2015

b. La Mancha Booth at 2009 Newgen Conference

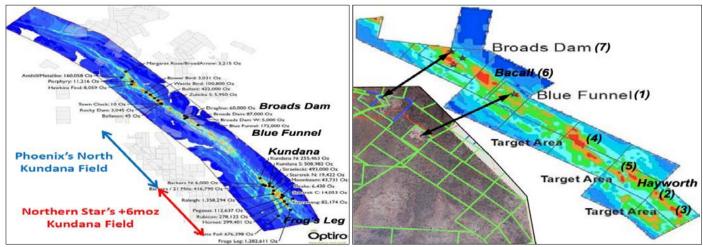


As shown in Figures 4a and 4b, the package is regarded as highly prospective, hence Evolution's Strategic Alliance with PXG to explore and develop it. On 25 February 2015, PXG announced preliminary findings of a 3-year 4D geological evolution study that was completed with the University of WA's Centre for Exploration Targeting and provided a greater understanding of the genesis of mineralisation, and together with advanced predictive modelling, generated higher probability drill targets along the Zuleika Shear as shown in Figure 5a, with PXG's 7 target drilling order of priority shown in Figure 5b.

## Figure 5. The Results of the Zuleika Shear Study, and PXG's Component Part Within the Study

a. Zuleika Shear Study Results (in PXG's Diggers 2015 Pres)

b. PXG's Component in the Zuleika Shear Study



Being early stage prospective exploration, PXG's target area currently has little value in a standard valuation, but could potentially reap significant benefits, based on the coincident relationship between the red highlighted areas and existing mines in Figures 5a and 5b. However, *due to Zijin's offer, all planned exploration has been put on hold because PXG is now in defence mode.* 

# Blue Funnel

Blue Funnel is regarded as PXG's number 1 priority drilling target due to the exposed vein structural package in the pit and the old workings extending south of the pit. However, it has had a disappointing track record. It started with great promise with intersections such as 4m (composite ?) @ 117g/t, 6m @ 37g/t, 24m @ 13g/t, 21m @ 7.6g/t etc (though they may all mostly have been in a supergene zone), and formed the main asset of the Golden Deeps (GED - still listed) IPO in 1987. Initial open-cut production was expected to be ~200kt @ 6.5g/t, but realised only 206kt @ 3.2g/t in 1988 when the pit closed at a depth of ~52m, with a possible resource of 150kt @ 4.5g/t beneath the pit floor.

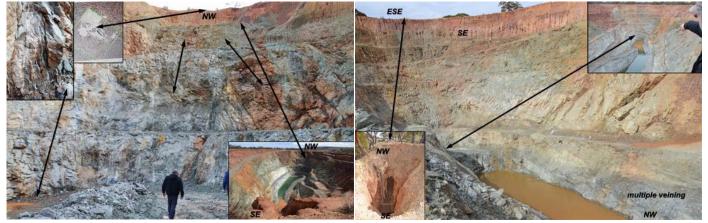
Gold mineralisation was described as ranging from 0.5g/t to 30g/t, hosted in quartz carbonate veins within ultramafic schists of up to 30m wide zones. RC drilling in 2004 gave relatively disappointing intersections of 1 to 2m @ 3g/t to 5g/t to depths ~190m, although most of the drilling was apparently vertical and so Blue Funnel remained untouched until PXG reopened the floor of the pit in 2013 with an expected target of 86kt @ 3.5g/t, which realised 95kt @ 2.5g/t with a 95% recovery when it closed in DQ2013. Dilution was mostly blamed on the ultramafic mining conditions.

However, there may be other structures, with an intersection of 4m @ 16/g/t next to the waste dump in the south and some higher grade deeper intersections such as 5m @ 9.7g/t & 5m @ 12.6g/t on another structure (*as per Figure 5b in our/ERA June 2012 report*), and a laminated quartz vein assayed as ~0.7m @ 49g/t near the floor of the South wall.

#### Figure 6. Blue Funnel's NW and SE Walls, and old workings ESE of the Blue Funnel Pit

#### a. Blue Funnel's NW Wall

b. Blue Funnel's SE Wall & old workings ESE of the pit



The vein package in the NW wall is shown in Figure 6a, along with two possible structures (that only become apparent with depth in the pit). The orebody/mineralisation does appear to turn banana-shaped in plan to the ESE going south and lines up with the old workings and stopes SE of the pit that strike NW/SE as shown in Figure 6b. There is also some multiple veining towards the southern end of the pit that may be indicative of a (cross-cutting?) structure.

## Hayworth

The main priority targets on the Zuleika Shear as shown in Figure 5b are either north or south of Hayworth. At Hayworth, there are ~5 costeans striking NE/SW, that are up to ~500m long by 100m to 200m apart that were cut/dug in the 1990s (confirmed by the size of the saplings/trees growing in them as shown in Figure 7a). Hayworth lies in a package of black shale and basalts, with ultramafic to the east and sediments to the west. There was a RAB to refusal programme (largely washed away) after the costeaning mostly to depths of ~30m with apparently a number of 1 to 2g/t bottom-of-hole hits that were not followed up by RC. One area has an inferred black shale dragged into a structure north of an anomaly, while there was also an intersection of 4m @ 21g/t in one of the costeans next to a black shale.

Figure 7. View and Location of Hayworth, and View SE Towards NST Ground

a. View and Location of Hayworth

b. View SE Towards NST Ground



We saw very few old workings in the area as seen inset in Figure 7b of a view SE towards NST's ground ~1km away. An extensive drilling programme based on the targets shown in Figure 5b was supposed to have started 2 months ago here with the funds from Evolution, but has been derailed by the Zijin bid.

#### **Broads Dam**

Broads Dam is located at the northern end of PXG's ~6km to 7km long strip of the Zuleika Shear zone, and apart from the ~745kt @ 3.9g/t mined between 1991 and 1993, little seems to have happened since we/ERA reviewed it in our June 2011 PXG report. Figure 8. View NW of Broads Dam, and Location Plan of Red Dam and Carbine North b. Location Plan of Red Dam & Carbine North

#### a. View NW of Broads Dam



Broads Dam is rated as a low priority (7) target by PXG in terms of a drilling programme because of the ~20m to 30m deep water level, waste dumps on its eastern and western walls, and the mineralisation appears to plunge north beyond its north wall into La Mancha (now Evolution) ground with cover increasing from ~25m in the wall to ~60m in the La Mancha ground.

The Broads Dam open-cut has a bulb-like shape in plan as shown in Figure 8a, because the orebody splits into an east and west lode at its northern end, of which the east lode was the higher grade, and hence that is what the pit went down on. There appears to be very few old workings along PXG's strip of the Zuleika Shear apart from the main Broads Dam and Blue Funnel pits.

## Red Dam

We did not visit Red Dam, bypassing it on the way to Carbine North. Red Dam has advanced since our/ERA last PXG report in October 2013 into a material prospect that in October 2014 was expected to start production in September 2015, based on cashflow receipt assumptions (which have not happened). Red Dam is perceived to lie on a splay of the Zuleika Shear Zone that extends north to Carbine North as shown In Figure 8b.

A number of high grade intersections have been reported such as 23m @ 8.9g/t from 88m, 1m @ 88g/t from 107m & 11m @ 5.3g/t from 31m, and PXG expected to have an open-cut and future underground based on a resource of 4.5mt @ 1.8g/t.

## **Carbine North**

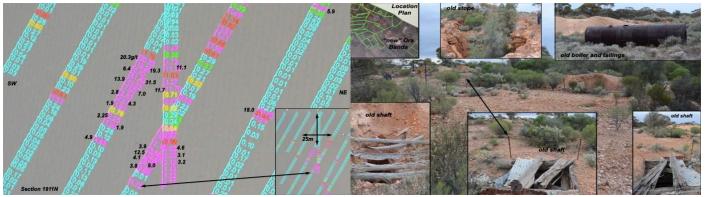
Carbine North is located NW of the old Carbine pit, now owned by Northern Star and on which NST reported encouraging intersections in its Carbine Camp at Paradigm North such as 18m @ 18g/t, 3m @ 80g/t & 16m @ 6g/t. The old Carbine pit gained notoriety due to an intersection under its southern ramp of ~20m @ ~180g/t, but was widely spuriously rumoured to be refractory in fresh rock. A later twinned drillhole in the mid-1990s reputedly intersected ~15m @ ~160g/t and disproved the metallurgical rumour by achieving a ~93% to 94% recovery in CIL testwork, but the pit appears to have remained dormant.

Figure 9. Location of PXG's Carbine North and Mineralisation, and View looking NW of Carbine Northa. Location of PXG's Carbine North and Mineralisationb. View looking NW of Carbine North and Section 1786N



PXG's Carbine North was discovered by Samantha and later taken over by Resolute, who defined the non-JORC mineralisation NW/SE trend shown in Figure 9a. As shown in Figure 9b, there is little to see, no signs of old workings, and it apparently lies within a flood plain, which often limits access. The vehicle in Figure 9b was on the orebody on line of strike with the front of the vehicle pointing NW.

Figure 10. Cross Sections Through Carbine North, and Views of Old Workings at Great Ora Bandaa. Cross Section Looking NW on Carbine North on 1911Nb. Views of Old Workings at Great Ora Banda



The host rock package passes from dolerite in the west through ultramafic to sediments in the east, with a possible supergene zone at ~25m deep as shown inset in Fig 19b. Apparently the first 20m of cover was expected to be barren, so it was partly assayed.

Some sections have higher grades as in Figure 10a. Infill drilling east to west to greater depth was planned, along with testing a geophysical anomaly to the south.

# **Ora Banda - Grants Patch Structure**

## Old Ora Banda

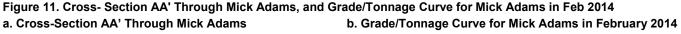
Old Ora Banda lies within the Ora Banda - Grants Patch structural zone and is the location of the original Ora Banda gold mine before the current Ora Banda was discovered and the town relocated there. It consists of extensive old workings, NW/SE striking shafts, stopes, battery foundations, and ~1g/t tailings, as in Figure 10b, with Fe-stained laterite cover in some places etc, and yet only 2 drillholes. It still appears to be the same as when we/ERA first saw it in 2011. A program to drill Old Ora Banda was submitted for the past 3 consecutive years, but it has remained unexplored in favour of Castle Hill/Kintore.

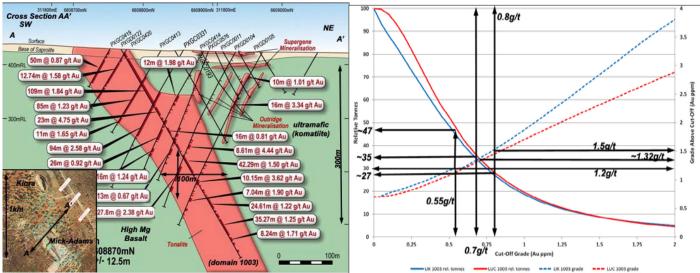
#### **Grants Patch**

Little seems to have been written about Grants Patch or its prospectivity, since it has remained unmined for so long. We/ERA can recall standing in a trench in the early1990s and being shown an alteration zone, but little seems to have happened since then. Possibly a xtem survey (as has been achieved by Gold Road at Yamarna) can be flown to identify the palaeochannels as the Grants Patch area was once recognised for its orebodies located typically at the beginning or end of a palaeochannel system. In our/ERA 2011 report we referred to **Backflip** (shown in Figure 8b) which was discovered by Placer in 2002 with intersections such as 6m @ 45g/t from 351m, and later intersections by Cazaly and Phoenix of 3m @ 9.8g/t, 19m @ 13.2g/t and 9m @ 16g/t, but little further exploration appears to have taken place.

## Upside Potential (as in possible size of Castle Hill to Kintore)

One of the major as yet unanswered questions for PXG is just how big Castle Hill to Kintore could become and just how comparable is it to Gold Road's (with its ~\$265m market cap) Gruyere. The cross section shown in Figure 11a is certainly encouraging and that is just through Mick Adams to a depth ~350m. (It should be noted that Kiora and Wadi have a number of higher grade intercepts, reduced significantly to average <2g/t by domained top-cuts).





In August 2014, Gruyere had a measured and indicated resource to a depth of ~150m below surface of 40mt @ 1.2g/t on a 0.7g/t COG. Looking at the grade/tonnage curve in Figure 11b, for Mick Adams that was in the February 2014 study to ~200m deep, at a 0.7g/t COG its resource appears to be ~35mt @ ~1.32g/t; & at a 0.55g/t COG, its resource appears to be ~47mt @ 1.2g/t - *which possibly could be comparable to Gruyere.* Castle Hill has not been looked at that way or drilled much beyond ~200m.

#### Conclusion

With Castle Hill to Kintore apparently mineable at possibly a similar grade to GOR's Gruyere, possible future pits and/or underground operations on the Kunanalling and Zuleika Shear Zones and Grants Patch/Ora Banda structure, PXG appears to have significantly greater potential share price value than 10c or 12c. *Our/ERA recommendation for PXG at a current price of ~12c, with EVN (Evolution) offering ~12c and Zijin 10c in cash, is a SPEC BUY with a target of >15c.* 

**Disclosure** Phoenix Gold Limited commissioned Keith Goode (who is a Financial Services Representative with Taylor Collison Ltd ACN 008 172 450, and is a consultant with Eagle Research Advisory Pty Ltd ACN 098 051 677) to compile this report, for which Eagle Research Advisory Pty Ltd has received a consultancy fee. At the date of this report Keith Goode and his associates held interests in shares issued by Phoenix Gold Limited. At the date of this report, Taylor Collison Limited or

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