

# **Gold : Southern Gold Limited (SAU)**

By : Eagle Research (Keith Goode)	MARCH 2	11 April 2017	
Year Low/High:	\$0.22 - \$0.46	SPEC BUY	
Diluted No. Shares	46.4m	Share Price	\$0.270
Diluted Mkt Cap :	A\$13m	Target Price	> A\$0.40
Net cash (est 31 Mar 2017)	~\$3.8m		
4.9m opns (all out-of -the-money)		www.southerngold.com.au	T:+618 8368 8888

# **Southern Gold Limited (SAU)** – Using Cannon's Cashflow to Advance its Mostly Brownfields Prospects in Australia and South Korea

- Southern Gold's business model has been to identify ideally brownfields prospects or areas that lie proximal to operational haul roads and plants, yet for some reason have been overlooked. Having then acquired or farmed-in to such targets, applied geological techniques to advance them and obtained the required approvals up to production readiness, SAU has then formed an alliance with a company capable of mining & treating the target orebody (thus eliminating the operational risk for SAU), as has occurred at Cannon.
- Cannon, located near Kalgoorlie in WA, has been SAU's first gold mine to follow this route and has been developed in a 50/50 profit share over the open-cut by Westgold (WGX) (originally Metals X (MLX)), with the ore being processed through WGX's SKO mill at Jubilee. Having recouped the development costs, Cannon has generated cashflow to SAU totalling \$7.5m to March 2017, which has enabled it to repay its \$2.7m loan (including interest) to MLX/WGX, and \$1m Convertible Note, leaving \$3.8m over, with further cashflow coming.
- With a bonanza double-digit grade block to be mined near the floor of the Cannon opencut and apparent high grade ore below the pit floor, it has been decided to drive a 50m adit in the SW corner to extract the block and assess an underground operation applying less expensive underground drilling to delineate the depth & extensions of the mineralisation.
- SAU has 3 brownfields projects in WA near its Cannon mine operation, being Glandore, Cowarna and Transfind. Glandore is the most advanced and its Lavaeolus prospect was expected to be drilled in JQ2017, while Cowarna's main focus was expected to be the BIF package extension from SLR's Santa prospect and the potential DCN Mt Morgans parasitic folding look-alikes. Transfind has nearby open-cuts, but the geology seems to be unclear.
- In South Korea, the main focus has been on the ~400koz @ 4 11g/t historic Gubong gold mine, followed by Taechang (high grades, reputedly often >100g/t) and the epithermal region of Weolyu. Exploration expected to focus on the epithermal Yeongdong Project area that includes Weolyu and Kochang, with further drilling of Weolyu South planned for JQ2017, and underground drilling of Weolyu South possibly in DH2017. At Kochang the focus was on exploring the gap between the historically named "gold" and "silver" mines.
- In late March 2017, SAU announced a farm-in by Colin Patterson & Charlie Barclay's LSE listed Bluebird Mining Ventures aiming to fast-track the reopening of Gubong and Taechang, targeting feasibility studies by Bluebird with capex of <US\$10m in a subsequent 50/50JV between Bluebird and SAU.

#### Other Key Points:

- SAU only has 46.4m shares in issue following its 15-1 consolidation in 2015, but has sufficient cashflow from Cannon to meet its exploration requirements, being target expense of ~\$5m in FY 2018.
- SAU may make a dividend payment in 2017 given that it expects to generate up to another ~\$7m to \$8m from Cannon by mid-2017, depending on the results of a possible agreement to mine underground at Cannon.
- South Korea is an advanced country with extensive road, rail and power infrastructure. It prides itself on security of mining tenure, no royalties, investment incentives, a corporate tax rate of ~24%, no govt free carry and annual GDP of ~US\$2trn, with a population of ~50m.
- SAU has built a selected exploration portfolio (at relatively little cost) with material upside potential in both Australia and South Korea, that it can now explore and gradually turn to account.

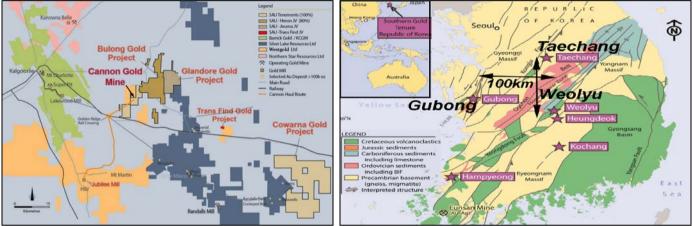
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#### **Corporate Overview**

This is our first report on Southern Gold Ltd (SAU), which listed in April 2005 focusing on uranium in South Australia (SA), with nickel and gold at Bulong South, near Kalgoorlie in WA. SAU secured gold tenure in Cambodia in September 2007, while making progress on Golf Bore near Challenger in SA. However, it was the steady progress of gold intersections at a number of prospects in August **2008** that delivered those initial RC hits of **33m @ 1.85g/tAu** and 23m @ 0.28/gtAu in the old Acacia (AAA) ground at Bulong that resulted in the **discovery of the Cannon** prospect.

In August 2012, SAU sold its Challenger JV to Trafford (now held by Tyranna [TYX]), while intersecting higher grades at depth at Cannon, as reported in September 2012, such as **4.1m @ 53g/t** from 89m, 7.6m @ 21.5g/t from 130.7m & **9.6m @ 16.2g/t from 137.6m** (all in different drillholes). In early December 2013, having received ML approval for Cannon, DMP etc permit applications (taken Cannon up to the pre-mining readiness stage) were submitted by SAU, and in August 2014, SAU entered into a 50/50 profit share with MLX to develop Cannon. In July 2016, deeper drilling at Cannon intersected narrow vein high grade such as 0.42m @ **37.7g/t** from 133.2m (~180RL) and 0.27m @ **76.4g/t** from 188m (~125RL). **Figure 1. Locations of SAU's Projects and Cannon Gold Mine in WA, and Projects in South Korea** 

a. Locations of Projects and Cannon Gold Mine in WA b. Locations of SAU's Projects in South Korea



In June 2015, the Cambodian assets were sold to an unlisted Cambodian based company called Mekong Minerals, with mining of Cannon commencing in August 2015. In April 2016, SAU farmed-in to Glandore and more recently in January 2017 took out an option on Transfind (both in the Cannon region) as shown in Figure 1a. SAU's extensive Cowarna prospects, partly on strike from Silver Lake's (SLRs) Santa BIF mining operation largely resulted from SLR dropping (or failing to renew) some tenements in late 2013.

In July 2016, SAU acquired a number of South Korean gold prospect tenements as shown in Figure 1b, from an unlisted public company. ERA previously visited Cannon in August 2015 on a post Diggers trip, and more recently in a March 2017 visit (that included Glandore and Transfind) as part of writing this report. Both visits included visiting WGX's SKO plant at Jubilee, where recent 3d modelling of the Cannon orebody could be seen. South Korea was not visited for this report, the information was mostly based on visiting SAU's offices in Adelaide that included a skype link-up presentation with SAU personnel in South Korea.

The South Korean tenements can be subdivided into 3 main projects or districts as shown in Figure 1b, being Gubong, Taechang and Weolyu. Gubong and Taechang are orogenic gold (like the Kalgoorlie region of WA) and are the focus of the March 2017 farm-in by LSE listed Bluebird Merchant Ventures to form a 50/50JV, while Weolyu (Kochang although distant is included with Weolyu, with the project area sometimes called Yeongdong probably to reduce confusion) has an epithermal gold distribution (like Pajingo and Cracow in QLD).

In October 2015, SAU undertook a 15-for-1 capital reduction that reduced its ~527m fpo shares to 35m shares on issue, and in September 2016 placed 3.43m shares @ 35c raising \$1.2m, to result in the current 46.4m fpo shares on issue. There are also 4.9m options that are all out-of-the-money and of which the lowest prices ones of 32c and 40c expire on 30 June 2017.

Financing Cannon and SAU's operations were aided by a \$1m Convertible Note that was issued in April 2016 (to deep drill Cannon and explore Glandore), which was repaid in February 2017, and a loan from MLX/WGX of \$2.5m that had increased to \$2.7m with the 8%pa interest by the time it was repaid. Four distributions had been received by SAU to March 2017, being \$2m (of which \$1.5m reduced the WGX loan), \$1.5m in Jan 2017 (of which \$1.2m completed the WGX loan repayment), and \$2m in each of Feb & Mar 2017 of which \$1m repaid the Convertible Note, **to leave \$3.8m** (\$0.5+0.3+1.0+2.0) less costs.

SAU had estimated that it could receive a further ~\$10m (now \$7m - \$8m) by mid-17 based on the current open-cut at Cannon, but underground appears to be possible. Such estimates have been aided by the recent forward sale hedge through Sumitomo of 2,500oz @ A\$1621/oz to be exercised by 30 June 2017.

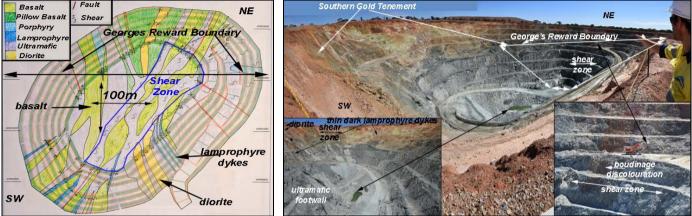
#### Geology of Cannon (SAU 50% : WGX 50% over the open-cut)

The Cannon orebody consists of a package of ultramafic and mafic rocks, being mostly boudinaged (sausage-like) basalt in ultramafic, with the mineralisation contained within a NE/SW trending shear zone as shown in Figure 2a at the 295mRL. There has been speculation over the influence of the light-coloured diorite dykes, and dark-coloured lamprophyre dykes on the mineralisation, both of which are clearly visible in the open-cut views shown in Figure 2b. The orebody dips steeply to the NW, as does the shear zone with the eastern ultramafic footwall weaker than the western hangingwall.

 Figure 2. Geological Plan of Cannon @ 295mRL, and Main View of the Cannon Pit looking North

 a. Geological Plan of Cannon @ 295mRL

 b. Main View of the Cannon Pit looking North

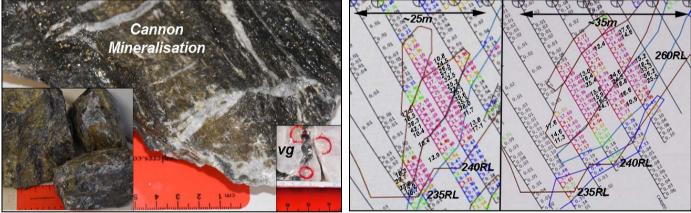


The Cannon mineralisation in the sheared/altered basalt appears to be visually distinctive often with albite alteration as shown in Figure 3a, while the Cannon orebody itself has surpassed all expectations with increasing grades at depth as illustrated by the grade control near the current planned floor of the pit as shown in Figure 3b. Visible gold has been rare, even in the double-digit grades as shown inset in Figure 3a of an example in semi-bucky white to laminated quartz encountered in drill core.

 Figure 3. Cannon Mineralisation Ore Specimens, and Grade Control near Current Planned Pit Floor

 a. Cannon Mineralisation Ore Specimens

 b. Grade Control near Current Planned Pit Floor

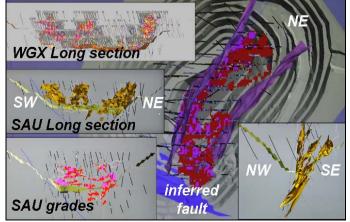


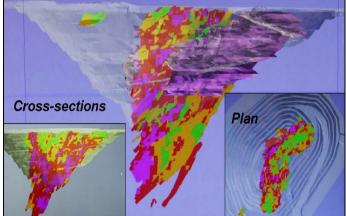
The geological model has changed (and appears to still be evolving at depth) with initial thoughts in 2015 that the mineralisation plunged NE into WGX's Georges Reward ground, but was later determined to plunge deeper SW into SAU ground.

 Figure 4. Schematic Section and Plan Grade Models of Cannon, and Schematic Block Model Sections

 a. Schematic Section and Plan Grade Models of Cannon

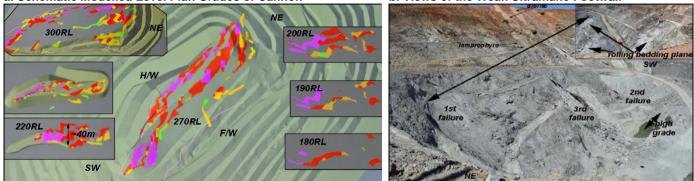
 b. Schematic Block Model Sections and Plan





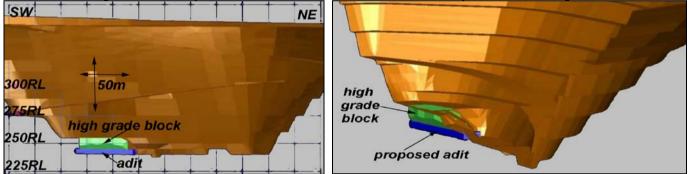
Both WGX and SAU models show three ore shoots in the Figure 4a long sections, with the higher grades (coloured red and purple) extending below the planned pit floor. It was initially thought that the shear zone pinches smaller with depth in cross-section whereas instead its width seems to pinch and swell vertically too, with the inferred fault below the base of the planned pit, also open to interpretation. In July 2016, SAU reported some narrow high grade intersections at depth below this inferred fault position such as 0.27m @**76.4g/t** at the ~125mRL & 0.4m@**37.7g/t** at the ~180mRL (the current designed floor being ~235mRL).

Figure 5. Schematic Modelled Level Plan Grades of Cannon, and Views of the Weak Ultramafic Footwalla. Schematic Modelled Level Plan Grades of Cannonb. Views of the Weak Ultramafic Footwall



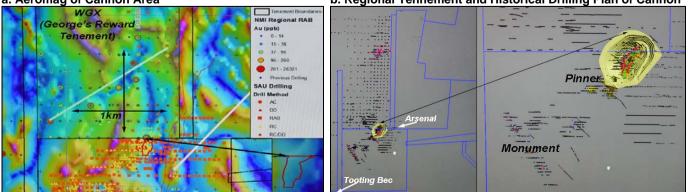
As shown in Figure 5a, the high grade appears to hug the hangingwall side of the shear zone, which is good as the ultramafic appears weaker on the footwall. The recent heavy rainfall in early 2017 in the Kalgoorlie region caused the SE wall corner to fail to a rolling bedding plane on the footwall as shown in Figure 5b. On 28 March 2017, SAU reported that it has been decided to drive a ~50m long adit into the SW corner of the pit, as shown in Figures 6a and 6b, to extract the possibly >8g/t high grade block during May 2017, and process the ore in June 2017.

Figure 6. Schematic Cannon Long Section, and 3d Schematic of Proposed Adit and High Grade Block a. Schematic Long Section of Proposed Adit & Block b. 3d Schematic of Proposed Adit and High Grade Block



The current orebody delineation is restricted by drillhole density which would be cheaper if drilled from underground, after all such high double-digit grades have to come from somewhere, and part of the new approach involves assessing the economics of a larger scale underground operation with diamond drilling targeting extensions of the deposit laterally and at depth. Should an underground operation occur, then possibly the 50/50JV applying to the open-cut could be extended underground, especially as the mineralisation appears to mostly be on the SAU side, and those double-digit grades in Figure 3b are obviously encouraging.

One of the underground considerations could be twin portal access, logically perhaps into the NW hangingwall in SAU ground to fan drill back across the orebody and then perhaps into the more competent NE corner at the current end of the ramp, heading into WGX's George's Reward ground. **Figure 7.** Aeromag of Cannon Area, and Regional Tenement and Historical Drilling Plan of Cannon a. Aeromag of Cannon Area b. Regional Tennement and Historical Drilling Plan of Cannon



Outside of Cannon, the mineralisation may still extend at depth into WGX's ground, following the perceived broad NE/SW channel shown in Figure 7a across WGX ground (washed light-green) and possibly back later NE into SAU ground. As shown inset in the aeromag, Cannon does not lie on an obvious feature. While nearer to Cannon, on its SW corner there is that inferred fault and the offset lower grade Pinner mineralisation near surface (that near surface, does not resemble Cannon-style mineralisation, but may improve at depth [not yet drilled]). The Monument prospect was regarded as promising, and resembled Cannon style mineralisation, but has not yet had those high Cannon grades.

#### Mining and Treatment of Cannon

Having taken Cannon through its approvals to mineable readiness, Southern Gold entered into a profit share agreement with Metals X (now Westgold), such that WGX mined and treated the ore at its SKO Jubilee plant, and after recouping its costs pays distributions on a 50/50 basis to SAU, which has far resulted in SAU receiving \$7.5m, out of an estimated amount (by SAU) of ~\$15m (which does appear possible [ERA estimates], depending on underground expenditure). MLX also loaned some money/finance to SAU at an interest rate of 8%, which has since been repaid.

Operational detail has mostly been reported by MLX/WGX in its quarterlies as shown in Table 1, while SAU has reported the treatment campaigns, that obviously lag the mining, transport, stockpiling at Cannon and Jubilee and then treatment on a campaign basis through Jubilee, with ore from George's Reward accounted separately too.

#### Table 1. Cannon Production Satistics as reported by MLX/WGX (with 2017 by SAU)

	Mined			1	Treated			AIC Stockpiled				
	kt	g/t	OZ	kt	g/t	OZ	Recovery	Produced	A\$/oz	kt	g/t	OZ
Year to June 2016	203.7	2.56	16797	163.8	2.50	13160	91.7%	12074	1901	39.9	2.83	3637
SQ16	136.4	2.75	12063	73.8	2.57	6094	91.7%	5588	1040	102.6	2.91	9606
DQ16	133.1	3.62	15496	140.6	3.08	13926	90.9%	12658	743	95.1	3.65	11176
Treated Jan / Feb 2017				136.8	3.59	15787	90.7%	14314				

The latest distribution to SAU was to end March 2017, and the latest (8<sup>th</sup>) processing campaign commenced in the last week of March 2017 and was expected to treat ~40kt for ~3.5koz by early April 2017, although the saleable gold may be higher due to the stockpiles. A clearer picture of the statistics should occur in WGX's MQ2017 report (provided it retains its reporting format). Reconciliations to the model have so far been impressive at 104% to modelled tonnage and 97-98% to modelled oz. AIC has been falling as the SR (strip ratio) reduces.

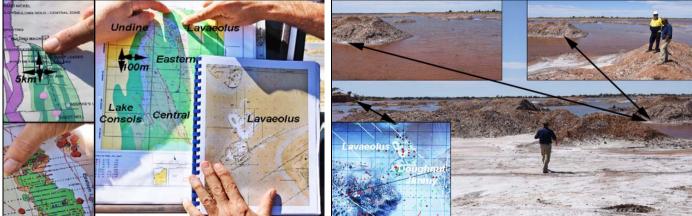
#### Glandore Project (SAU : 50%, possibly increasing to 75% or 90%)

The location of SAU's Glandore Project is shown in Figure 1a, and SAU has already lodged applications for access roads, and expected to drill its Lavaeolus prospect in JQ 2017. SAU has been farming-in to Aruma Resources' (AAJ's) Glandore Area since April 2016, and was required to spend \$0.3m by April 2017 for a 50% interest, followed by a further \$0.4m by April 2018 for 75%, at which it can become a 75/25JV or a further \$0.5m can be spent by April 2019 (or earlier) to earn 90% (being a total of \$1.2m, at which point AAJ can retain 10% or convert the 10% into a 1.25%NSR on all products).

 Figure 8. The Glandore Tenement Package, and Views Across Lavaeolus and Proposed Drillhole Plan

 a. The Glandore Tenement Package

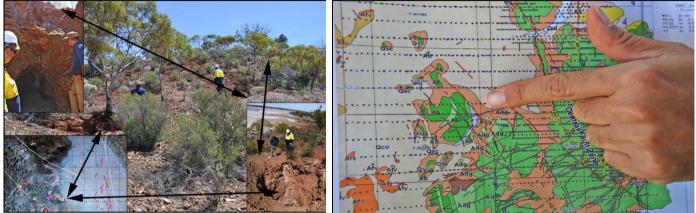
 b. Views Across Lavaeolus and Proposed Drillhole Plan



The Glandore package of tenements is shown in Figure 8a, and covers the Glandore anticline of basalt, dolerite, gabbro and ultramafic rocks, on which there has been a number of small historical mines. The area has been explored by a number of different companies starting with Lynas in 1986, followed by various campaigns including WMC (464 AC & RC drillholes, plus 8.5km of 51 diamond drillholes), and Anglogold : (RAB, RC, AC and diamond), before AAJ from 2010. AAJ drilled AC, RC and one diamond hole ~1209m long across the system, that seemed to miss most of the potential mineralisation.

Consequently there are a number of encouraging intercepts at various depths, such as at **Lavaeolus** with **10.25m@10.3g/t from 58m & 2m@37g/t from 103m**. However, the prospect lies under a shallow salt lake that was not expected to need completely drying out because the water depth is apparently mostly <1m as shown in Figure 8b. The adjacent (to the west) and off the salt lake, **the Undine** prospect consists of mostly narrow NW/SE striking veins (as shown by the red lines in Figure 8a), which could have been high grade (or that's what the mined conditions resemble) as shown in Figure 9a. Possibly the ground conditions were too hard, as there can be seen to be almost no cover.

Figure 9. Views of one of the Undine Prospect's Veins, and Geological Plan of the Lake Consols Areaa. Views of one of the Undine Prospect's Veinsb. Geological Plan of the Lake Consols Area



Surprisingly little focus (apart from SAU) appears to have occurred at the **Lake Consols** old workings shown in the geological plan of Figure 9b, which does not appear to have had follow-up assaying, and in ERA's view that does not do the degree of old workings justice. Perhaps that is why there are also few signs of drillholes. There are clear structures linking a number of historical shafts as shown in Figure 10a, with visibly connecting drives, and possibly NW plunging ore shoots. There is also a material stope where two of the structures meet – which does not appear that clear on the historical plans shown overlain on topography in Figure 10b – with the trees lining up (as usual) along structures.

 Figure 10. Views of the Lake Consols Area, & Topog and Historical Shaft Position Plans of Lake Consols

 a. Views of the Lake Consols Area
 b. Topog and Historical Shaft Position Plans of Lake Consols



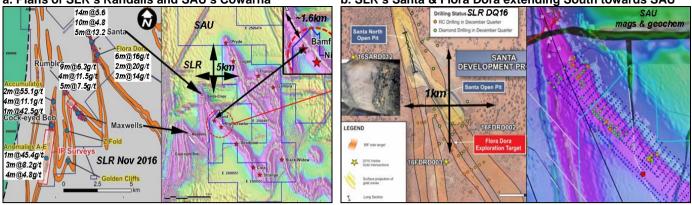
Although quartz veins have been mined, there appeared to be little surface quartz lying around, and the spoil heap at the vein junction and large stope appeared to be too small, inferring that material was transported away, possibly to a stamp battery. Clearly there has been reasonably extensive exploration within the Glandore tenements, however, the historical exploration appears to have focused on too many targets, instead of homing in on one or two areas.

#### Cowarna (SAU : 100%)

SAU struck lucky in 2013 when a monitoring group notified SAU that Silver Lake (SLR) had either dropped or failed to renew a package of tenements near its existing Cowarna tenement area, that resulted in potentially materially enhancing SAU's ground holdings being the extension of the BIF package south of SLR's Santa operation as shown in Figure 11a.

The chevron pattern shown consists of a series of north peaking anticlines & south peaking synclines, of which the main historical exploration focus has been on the anticlinal peaks such as Accumulator, Rumbles and Santa as shown by the SLR plan in Figure 11a. Although, the open-cuts (which have since gone underground) have been on the limbs such as Cock-eyed Bob (CEB), Maxwells and Santa. ERA did not visit SAU's Cowarna for this report, the information is based on presentations and reports by SAU and SLR and ERA's 2013 report on SLR available at : <a href="http://www.eagleres.com.au/reports/item/oct-2013-silver-lake-res">http://www.eagleres.com.au/reports/item/oct-2013-silver-lake-res</a>.

Figure 11. Plans of SLR's Randalls & SAU's Cowarna, & SLR's Santa & Flora Dora extending South to SAU a. Plans of SLR's Randalls and SAU's Cowarna b. SLR's Santa & Flora Dora extending South towards SAU



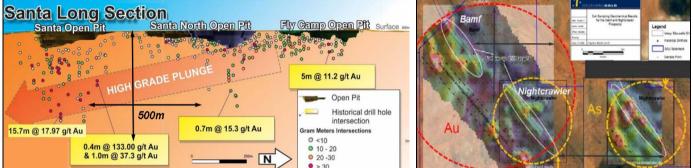
The chevron pattern consists of two main BIF (banded iron formation) limbs called east and west by SLR, with the Maxwells pit on the western or inner limb, and Santa and CEB on the eastern or outer limb. SLR are focusing on Santa and Flora Dora according to their December 2016 releases and planned MQ 2017 exploration, with the SE end of the Santa pits **only ~ 1.6km from the tenement boundary with SAU**.

1.6km is actually not that far, particularly if placed in the context of Dacian's Mt Morgans' BIFs which extends ~3km on strike (as shown in Figures 11a and 12 on page 7 of ERA's 2015 DCN report available at : http://www.eagleres.com.au/images/pdfs/reports/2015/dcn30jul15.pdf).

 Figure 12. Long Sections of SLR's Santa Pits & Mineralisation, and Geochem of SAU's Bamf & Nightcrawler

 a. Long Section of SLR's Santa Pits & Mineralisation (Nov 2016)

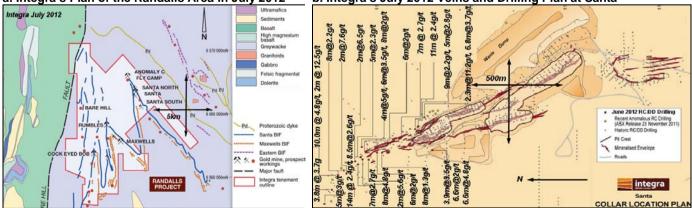
 b. Geochem of SAU's bamf and Nightcrawler



SLR showed the southerly plunging nature of the mineralisation in their November 2016 presentation as shown in Figure 12a. The southerly plunge appears to be fairly consistent over the area, since the higher grades at both CEB and Maxwells have also been observed to plunge South. SLR are now mining underground at both Maxwells and CEB, and clearly expect to do so at Santa too.

Southern Gold has identified its **Bamf** and **Nightcrawler** prospects using coincident geochem of gold (Au) and arsenic (As) as shown in Figure 12b. On the August 2013 ERA visit to CEB it was noted that crystalline arsenopyrite appeared to be common, but like Trident at Higginsville and a number of other mines where crystalline arsenopyrite has been found, does not appear to have any impact on recoveries.

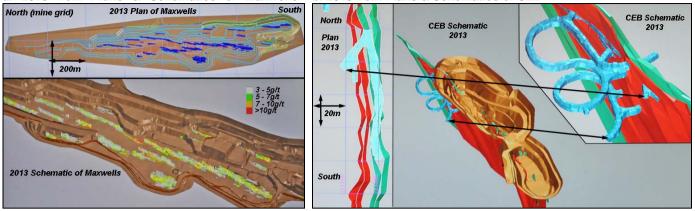
Figure 13. Integra's July 2012 Plans of the Randall's Area in July 2012, and Veins and Drilling at Santa a. Integra's Plan of the Randalls Area in July 2012 b. Integra's July 2012 Veins and Drilling Plan at Santa



Integra (IGR) had a more disjointed plan of the parallel BIFs in 2012 as shown in Figure 13a, that showed (by red dots) historical workings in the Bamf and Nightcrawler target areas, with detailed interpreted multiple lode/vein mineralisation of the Santa pits extending south in Figure 13b. Santa South appears to have since been renamed Flora Dora.

It should be recognised that each limb actually consists of a number of parallel veins of mineralisation, based on ERA's 2013 SLR Report, as shown in Figures 14a of Maxwells, and 14b of CEB.

Figure 14. 2013 Vein Plans and Schematics of SLR's Maxwells, and Cock-eyed Bob (CEB) a. 2013 Vein Plans & Schematics of Maxwells b. 2013 Vein Plans & Schematics of CEB



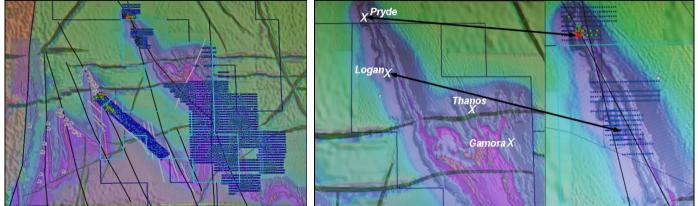
The question of course is whether the BIF package can be simplified and identified by a discoloured sequence in the same way as has been achieved by DCN at Mount Morgan, (available at : <u>http://www.eagleres.com.au/paydirt/item/aug-2016-buyer-or-finder</u>). The discoloured BIFs (dipping east) and their influence at CEB in enhancing the grade of the quartz veins that crossed them are shown in Figures 15a and 15b, in 2013.

Figure 15. SLR Underground at CEB : 407 Level North and 396 Level South, in 2013 a. SLR Underground CEB : 407 Level North (2013) b. SLR Underground CEB : 396 Level South



Geochem has been undertaken over most of SAU's tenement package as shown in Figure 16a, with the richer colours pointing to higher values, clearly shown. There were historical mines (according to IGR) based on the red dots shown in Figure 13a.

Figure 16. Geochem Coverage of SAU's Tenement Package, and SAU's Parasitic Folded Pryde to Thanos a. Geochem Coverage of SAU's Tenement Package b. SAU's Parasitic Folded Pryde to Thanos Prospects



However, it may be the poorly covered area that could also be of most interest, because it appears to be parasitically or multiple folded in the Pryde-Logan limb, and in the area east of Thanos. Such parasitic folding **may be similar to** the historically avoided area of **Dacian's Morgans Underground** between Morgans North and Westralia, at Mount Morgans, representing multiple folding and repetition (and possibly similarly historically avoided). It has been speculated that the Pryde-Logan limb shown in Figure 16b, contains the western or inner limb at >100m depth between the tightly anticlinal folded eastern or outer limbs. Although IGR named it the Eastern BIF in Figure 13a, which could infer that it may be different to the chevron BIFs.

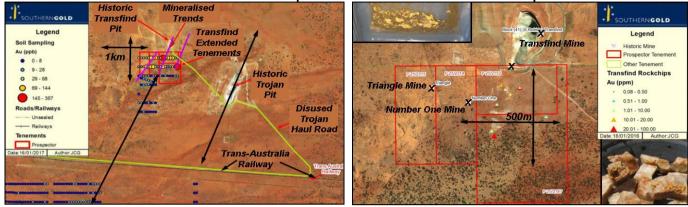
# Transfind Extended Project (SAU : two year option to 31 January 2019)

On 18 January 2017, SAU reported that it had paid \$50k to 2 prospectors and hence executed a binding term sheet to secure a 2-year option from 1 Feb 2017 to 31 Jan 2019 to purchase the Transfind Extended Project consisting of the prospective licences shown outlined in red in Figures 17a and 17b, and conduct a minimum of 2km of RC or diamond drilling. On exercising the option, SAU pays \$200k and a \$1.80/t royalty on all production from the tenements. Some visible gold in surface rock chips, and nuggets have been found by the prospectors and SAU in guartz/sediments as shown inset in Figure 17b.

#### Figure 17. Location Geochem Plans of SAU's Transfind Prospects, and Visible Gold

a. Location Geochem Plan of SAU's Transfind Prospects

b. Plan of SAU's Transfind Prospects and Visible Gold



The prospective area lies south of the Transfind open-pit which apparently mined ~31kt @ 4.9g/t (~5koz) in early 2000 based on geochem undertaken in 1992 and 1997, with further geochem in 2017 and broad NE/SW trends estimated based on the strike of the old pits and some of the regional geochem. Alas the prospectors have been dozing the old workings and shafts in a mixture of prospecting and rehab, which has destroyed the information that could have been gleaned from them.

 Figure 18. View of NE Wall of Transfind Open-pit, and Views of the Trojan Pit, east of Transfind

 a. View of NE Wall of Transfind Open-pit

 b. Views of the Trojan Pit east of Transfind



Both the Transfind and Trojan pits are not on SAU's prospects but were examined for geological clues. There was still an old windlass shaft on the southern end of the Transfind pit, shown inset in Figure 18a, however it actually strikes more north-south than NE/SW. It would appear that the Transfind and Trojan pits may have been designed on the geochem shown inset in Figure 18a, but when mined found that the geology was not obvious as seen in the open-pit, which could be why the Transfind pit stopped.

As for Trojan, it mined a structure in a red coloured unit host on the plan inset in Figure 18a, although the unit does not appear to be a granite or granitoid, but there were a few fragments of a red/pink coloured granite lying around on surface. Trojan does appear to have some NW/SE striking cross-cutting structures (dykes?) that may account for the embayed plan view of the open-pit, but the main structure of the pit is obscured by scree at the north end and backfill at the south. **Exploration over the prospect tenements appears to be at an early stage**, with the nearby geology possibly needing to be partly redrawn.

#### **Other Prospects**

Southern Gold does have a number of other prospects at relatively early stages of exploration, such as the Bulong JV shown in Figure 1a, that is situated between the Cannon tenements and the Glandore Project. This area arose from a farm-in during 2011, that enabled SAU to earn an 80% interest over gold in the tenements from Heron (HRR) by paying up to \$1m on exploration within 21 months, which SAU has done. However, although some targets have been identified, exploration appears to be still at a fairly early stage. Plus there is Tooting Bec in the vicinity of a granodiorite intrusion (referred to in SQ 2016) off the SW corner of the Cannon tenement, and perhaps Arsenal off the NW corner of the Cannon tenement.

#### South Korea (SAU : 100% of a number of prospects and projects)

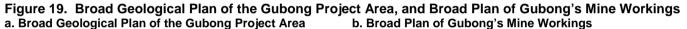
South Korea appears to be a 21<sup>st</sup> Century country with material road, rail, and electricity infrastructure (based partly on Google Earth). It is regarded as having a low operating cost base with no royalties, no government free carry, corporate tax of 24.2%, and available government funding, including its own targeted exploration under KORES (seemingly on anyone's property), or ~60% to 90% of co-funding.

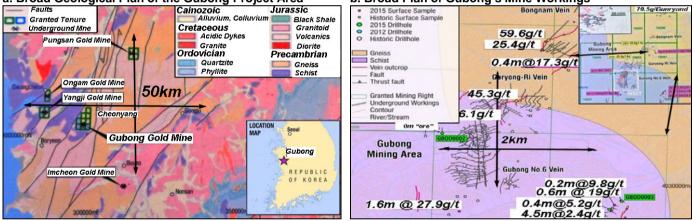
In July 2016 SAU acquired 44 granted tenements across 17 project areas covering historic orogenic and epithermal gold systems, some of which had sizeable (up to ~400koz) historic gold mines, for 6.3m SAU shares, \$116k in cash and the assumption of \$70k debt from an established unlisted public company called Asiatic Gold Ltd. The prospects have been grouped into the 3 main project areas of Gubong, Taechang and Weolyu, as shown in Figure 1b.

In March 2017, SAU announced a farm-in by Colin Patterson & Charlie Barclay's LSE listed Bluebird Merchant Ventures to earn and subsequently form a 50/50JV over the orogenic (Kalgoorlie district-like) areas of Gubong and Taechang. Applying its Asian experience, Bluebird is to spend US\$0.5m on each project (or a total of US\$1.0m) to investigate the feasibility of re-opening the historic mines targeting a capex start-up of <US\$10m. Bluebird then subscribes for \$0.5m SAU shares @ ~38.6c and then the 50/50JV forms within 12 months with Bluebird as manager using its skilled executive mining team.

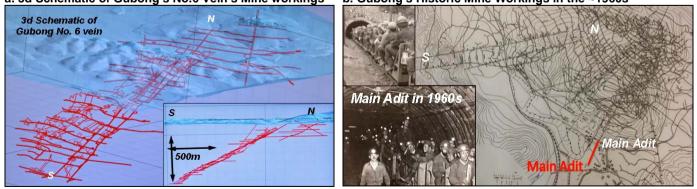
# Gubong Project (SAU : 100%, possibly forming a 50/50 JV with Bluebird)

Comparisons have been drawn between South Korea and China's Jiaodong Peninsular, however, the mineralisation in the Jiaodong Peninsular appears to be mostly gold in pyrite in quartz in various granites, and floated into cons (based on what ERA has seen, viz : http://www.eagleres.com.au/images/pdfs/reports/2004/MIC30AUG04.pdf). Although a paper submitted in 2005, projected an alternative possible geological model theoretically correlating the eastern end of the Jiaodong Peninsula with the northern end of South Korea.





Gubong is located ~135km due south of Seoul, with its main mine located mostly in Archean gneiss & schist as shown in the geological plan of the Gubong Project area in Figure 19a. The mine exploited 6 reputedly high grade quartz veins of which most of the workings were on the No. 6 vein shown in Fig 19b. Figure 20. 3d Schematic of Gubong's No. 6 Vein Mine workings, and its Historic Workings in the ~1960s a. 3d Schematic of Gubong's No.6 Vein's Mine workings b. Gubong's Historic Mine Workings in the ~1960s



The mine operated up to the 1970s and apparently mined ~400koz @ ~4g/t to 11g/t to a depth of ~600m below surface, as shown in Figure 20a, using a number of inclined shafts, adits etc. Some of the adits were sizeable (based on the inset historic photos in Figure 20b) and could be capable of using mechanised equipment. Figure 20b may be an earlier plan showing the extensive workings of the upper levels. It is also thought that the No 6 orebody may not have been mined to its lateral limits (especially west, but possibly also east - based on the stope shapes).

# Taechang Project (SAU : 100%, possibly forming a 50/50 JV with Bluebird)

Taechang is located ~85km SE of Seoul, and ~115km NE of Gubong. Mineralisation consists of narrow shallow dipping (possibly only ~10° to 20°) quartz veins in gneiss, generally >16g/t, but ranging from ~4g/t to >100g/t as shown in Figures 21a and 21b. Ground conditions appear to be competent based on the stope shown inset in Figure 21b, and the adit could be large enough to allow trackless mining. There is a possibility of remnant mining and possible ore sorting, which may be able to generate early cashflow.

 Figure 21. Geological and Mine Plans of Taechang, and 3d Schematics and Underground Stope at Taechang

 a. Geological and Mine Plans of Taechang

 b. 3d Schematics and Underground Stope at Taechang

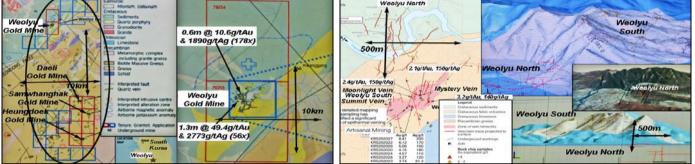


#### Weolyu Project (SAU : 100%)

The Weolyu Project is located ~170km SE of Seoul as shown in Figure 1b, and consists of the 4 historic gold mines of Weolyu, Daeli, Samwhanghak and Heungdeok within an elliptical circle ~25km long x 10km wide as shown in Figure 22a, of which the most prolific mine was Weolyu, lying mostly within Cretaceous sediments and felsic porphyry. Weolyu has some **mega bonanza grades** in both gold and silver such as **1.3m @ 49.4g/tAu & 2,773g/tAg**. Like many historical mines in South Korea, actual mine statistics appear to be sketchy, although Weolyu apparently produced 180kgAu & 1811kgAg (~10x) from 1960 to 1968 from the ~6 near vertical reputedly ~200m to >300m long veins of Weolyu North (below the plain).

 Figure 22. Geological and Mine Plans of Weolyu, and Schematics of Woelyu and Mine Workings & Veins
 a. Geological and Mine Plans of Weolyu

 b. Schematics of Weolyu and Mine Workings and Veins



Weolyu South as shown in Figure 22b lies south of the ridge line and appears to be extensive but is apparently only recorded as artisanal. Rock specimens from the area display the classic epithermal textures of ginguro (resembles thin black bands), conchoidal/concentric patterns and brecciation in quartz.

#### Kochang and Heungdeok (SAU : 100%)

Kochang is often included in the Weolyu epithermal field although it does lie a further ~60km south of Weolyu. The target at Kochang is under and between the historic "gold" and "silver" mines shown in Figure 23a, while Heungdeok consists of a multiple stacked lode system as shown in Figure 23b.

 Figure 23. Geological Plan and Section of Kochang, and Heungdeok Mine Plan and 3d Schematic

 a. Geological Plan and Section of Kochang

 b. Heungdeok Mine Plan and 3d Schematic



There are also other target areas such as Hampyeong in SE South Korea, which has been described as a pull-apart (and hence may be analogous to Carbine [CRB]'s Mount Morgans in QLD). Southern Gold's South Korean package *appears to contain too many potentially promising prospects* in both orogenic and epithermal styles of mineralisation, that it becomes a case of prioritising to try and deliver early cashflow (hence the Bluebird JV) to finance ongoing exploration.

### **Financial Considerations and Share Price Target**

Southern Gold is clearly generating material cashflow from its 50% of the Cannon open-cut, and could have a war chest of ~\$10m by mid-2017, which is close to its current market cap of \$12.5m (@27cps). With expected exploration expense of ~\$5m in the coming 2017/2018 year, SAU may pay a dividend - a **5% yield on 27c could be ~1.5c** which could cost ~\$700k. SAU is clearly well undervalued and in ERA's view should be capable of rising by at least 50% to ~40.5c, hence ERA's current target of >40c.

#### Management

#### **Board of Directors**

**Greg Boulton – Non-Executive Chairman** since 2008. Greg is a Chartered Accountant with over 40 years' experience as a CEO and Non-Executive Director for many public and private companies. Greg holds and has held other directorship positions.

Simon Mitchell – Managing Director since 2015. Simon is a geologist and finance executive with over 25 years' resource industry experience in a range of countries including Australia, PNG, Indonesia, South Korea, Bolivia, Chile and Peru. Simon also worked for ~6 years in project finance at CBA and was last MD of Asiatic Gold Ltd which had the gold exploration projects in South Korea that were taken over by SAU.

**David Turvey – Non-Executive Director** since 2010. David is a geologist with over 30 years' experience in the Australian and Asian mining industries having held a number of key managerial roles and consulting assignments with extensive experience in corporate finance and M & A. David has held MD and Non-executive directorship positions in other companies.

**Mick Billing - Non-Executive Director** since 2004. Mick is a Chartered Accountant with over 40 years' of mining industry experience in CEO, senior commercial and CFO roles. Mick has worked extensively with junior resource companies since the late 1990s, and currently holds and has held other Chairman and director positions.

**Company Secretary – Dan Hill** since 2013. Dan is a Chartered Accountant with over 15 years' experience in finance and accounting practice. Dan has held other financial roles, and currently holds other company secretary and private company directorship positions.

#### Senior Management

**Ian Blucher – Project Development Manager** since 2011. Ian is a geologist with over 40 years' experience in the processes and procedures of start-up mining activities through to the development and implementation of geological and geotech processes, involving ore reserve modelling, project evalution through to scoping and feasibility studies. Ian held senior mining and exploration positions in Normandy, GCM and Jabiru.

Chris Bowden – Exploration Manager – South Korea since 2016. Chris is a geologist with over 20 years' in private and public exploration and mining companies operating in Africa, Australasia and South Korea. Chris has been involved in a number of discoveries such as the 2moz Dish Mountain in Ethiopia, the Kharmagtai porphyry Cu-Au project in Mongolia and the discovery of the now producing of the Eunsan & Moisan gold mines in South Korea.

**Justin Gum – Principal Geologist** since 2015. Justin is a geologist with over 25 years' experience in the mineral exploration industry, and has focused on orogenic gold and magmatic suphide mineralisation mostly in NT and SA. Justin is credited with having led the exploration team that the discovered the world class Callie mega gold mine.

**Ray Ridge – CFO** since 2015. Ray is a Chartered Accountant with over 20 years' experience having held senior management positions in finance, compliance and commerce across a range of industries. Ray holds and has held other CFO and Company Secretary positions.

Joseph Lee – Representative Director – South Korea since 2016. Joseph is a lawyer with an Applied Finance degree who has over 12 years' experience in corporate finance in the resources sector. Joseph has held directorships in a Korean Government supported Mongolian gold-copper exploration company, and is additionally a partner in a Hong Kong based private equity fund focusing on mining and agribusiness.

# Chart of Southern Gold Limited (April 2016 to April 2017) (Source : www.yahoo.com)

# SAU's share price has been trading sideways

...between ~27c and ~33c...

...as it waits for a catalyst (discovery or WGX report ?) to move higher

Southern Gol	d Limited (SAU.AX) 0.27	
Close 0.2700 Low 0.2700 High 0.2850 Vol 33.19K 56 Cho -3.57%	A A .	0.425
- 76 Chg -3.5799	IN W MAR	0.375
k	FIN	IAN AL 0.325
JW Y	MM	0.30 0.20 0.20
V	3	Oot 16

#### Disclosure

Southern 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 Southern Gold Limited. At the date of this report, Taylor Collison Limited or their associates within the meaning of the Corporations Act, may hold interests in shares issued by Southern Gold Limited.

#### Disclaimer

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