# Cannon Mine Go Ahead Approved

## Southern Gold and Metals X joint operating committee approve mine schedule and budget

The Directors of Southern Gold ("the Company", ASX Code "SAU") are pleased to announce the formal approval of the Stage 1 Open Pit mine schedule and budget with operations at Cannon, 30km east of Kalgoorlie, Western Australia, to commence imminently.

- Detailed tender process completed and definitive costings results in projected All-In Sustaining Cost (AISC) of **A$1084/Oz Au (US$841/Oz*)**
- Stage 1 Open Pit to mine 152kt ore at a fully diluted run of mine grade of 3.1g/t Au containing 15koz of gold, with **13.5koz gold recovered with a C1 operating cost of A$1053/Oz Au (US$817/Oz*)**
- Mobilisation of contractors to begin after mine contract awarded in June for an 8 month mine schedule with **total upfront capital costs of A$895,000** and cash flow from operations expected in December 2015
- All **upfront capital and operating costs to be financed by Metals X** with full repayment from project cash flow and net distribution of cash to Southern Gold expected in second quarter CY2016

### Cannon Mine Schedule and Budget

- A detailed mine schedule for the Stage 1 Open Pit has been developed from a new block model and optimised pit design based on recent grade control drilling
- Metals X has undertaken an extensive tender process for mining, drill and blast and haulage services
- A detailed financial model for the Stage 1 Open Pit has been built using these definitive costings

Conservative assumptions include using A$1400/Oz gold price ($1086/Oz on current exchange rates*) on the open pit design when the current gold price is A$1529/Oz (US$1187/Oz*), high mine dilution factors assuming zero grade waste and 89% metallurgical recovery.

### JORC Resource Update

- Updated gold resource, defined in accordance with the JORC code, completed: **753,207t @ 3.75g/t Au for 90,927oz** gold in the JORC **Measured and Indicated** categories (see pages 4-5 for details)

With all key regulatory approvals in place (and pastoral lease access agreement imminent), mine schedule and budget agreed, and with the formal approval of the joint Southern Gold and Metals X Operations Committee, the Cannon Gold Resource will now proceed to mining.

ASX Code: SAU

Issued Shares: 527.6M

ABN: 30 107 424 519

Directors

Greg Boulton AM

Simon Mitchell (MD)

Michael Billing

David Turvey

Top Shareholders

Silver Lake Resources Ltd 8.20%

G B Branch 4.45%

PS Super Nominee 3.79%

JP Morgan Nominees 3.44%

G Boulton 2.07%

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** Current AUD: USD exchange rate US$0.776 and assumed in AUD/USD equivalents in this release.*

## Cannon Mine Go Ahead Approval

Cannon is currently under co-development with Metals X Ltd ("Metals X", ASX Code "MLX") 30km east of Kalgoorlie, Western Australia and approximately 35km to the north-east of Metal X's South Kalgoorlie Operations (Figure 1). Metals X has been engaged to finance and operate the project under the Mine Finance and Profit Share Agreement (ASX announcement 11 November 2014). Ore is to be processed at Metals X's South Kalgoorlie Operations Jubilee Mill (Figure 1) on a batched, unblended basis.

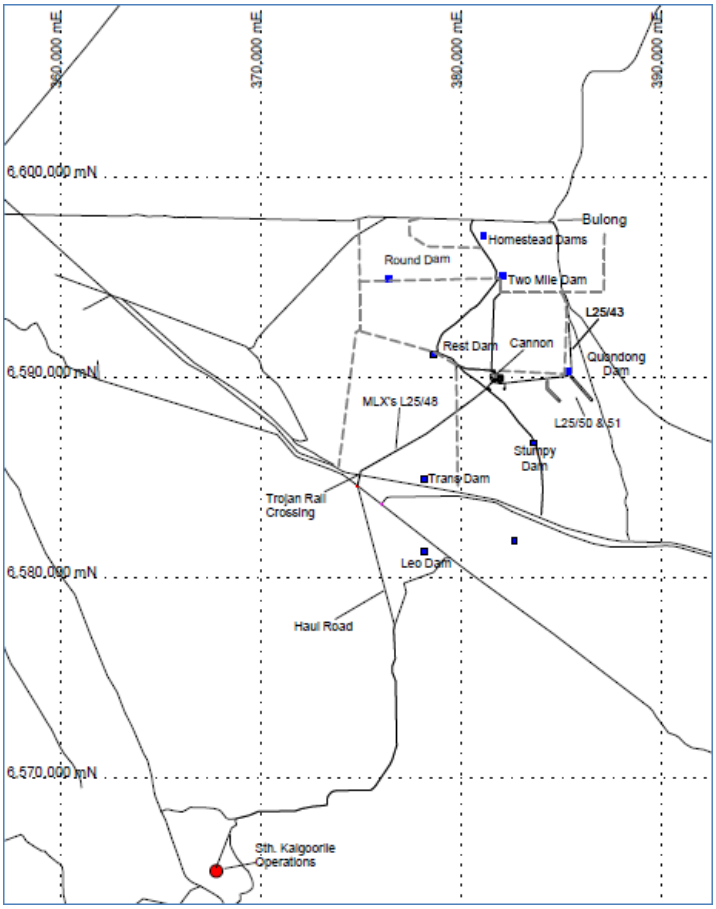


**Figure 1: Cannon Mine Location with respect to Metals X South Kalgoorlie Operations**

As announced in a previous release "Cannon Mine Pre-Development Update" (see ASX release 27 April 2015) the recent receipt of regulatory approvals and the grant of miscellaneous license L25/43 confirmed the **Cannon Mine Development as fully permitted.** It was stated in this ASX release that on-ground activities would commence as soon as the financial model was completed, the start of operations approved by the Operations Committee and contractor selection was finalised. This ASX release confirms that **on ground activity will commence at the Cannon Gold Mine as soon as contractor selection is finalised**.

The Operations Committee has approved the Mine Schedule and Budget which provides an operations and financial framework for the management of the Cannon mine going forward (Table 1 and Table 2). With this approval Metals X will now proceed to the formal selection of the mine contractor and begin on site construction activities. Mining will commence once the final access agreement with the pastoral lease holder is executed and the mine contractor has been mobilised to site, expected in the next 4-6 weeks (Table 3).

**Table 1: Stage 1 Open Pit Physicals, including estimated recovered gold**

| Stage 1 Open Pit Physicals | |
|---|---|
| Ore, t | 152,352 |
| Grade, g/t Au | 3.1 |
| Contained Gold, Oz au | 15,209 |
| Metallurgical Recovery (1) | 89% |
| **Recovered Gold, Oz au** | **13,495** |

**Note (1): Recovery figure is tonnes weighted average recovery for oxide, transitional and fresh ore**

**Table 2: Stage 1 Cannon Open Pit Cost Structure**

| Stage 1 Open Pit Cost Structure | A$m | A$/Oz |
|---|---|---|
| Mining | $6.78m | $502 |
| Grade Control | $0.56m | $42 |
| Ore Transport | $1.25m | $93 |
| Milling | $4.42m | $327 |
| Rehabilitation | $0.21m | $16 |
| Site Overheads | $0.99m | $73 |
| **Total C1 Op Cost** | | **$1053** |
| Royalties | $0.41m | $31 |
| Sustaining Capital | n/a | n/a |
| **All in sustaining cost (AISC)** | | **$1084** |
| Capital Costs | $0.89m | $66 |
| **Total Cost per recovered Au ounce** | | **$1150** |

**Table 3: Stage 1 Cannon Open Pit Key Production Milestones**

| Stage 1 Open Pit Key Milestones | Date/ Timeframe |
|---|---|
| Mine Contract Awarded | June 2015 |
| Site construction activity | July 2015 |
| Mining | July/ August 2015 |
| Haulage Commencement | October 2015 |
| **First Pour and First Cash Flow** | **December 2015** |

All mining, haulage and processing costs will be recovered by Metals X through project operating cash flow with net profit distributed 50/50 to each party in the second quarter CY2016. The $0.5 million loan from Metals X will be repaid in full at this time.

The near term work tasks for the Cannon Mine include:

- Follow up grade control drilling designed to close off mineralisation defined in the pit shell;
- Finalise installation of railway signaling infrastructure at Golden Ridge to the south-west of Cannon;
- Construction of light and heavy vehicle access, and
- Undertaking preliminary water bore field works.

With a cash margin of in excess of A$350 per ounce after all costs, the Stage 1 pit will generate Southern Gold's first positive cash flow. From this modest production start, the management of Southern Gold will build a more significant production base going forward and look to leverage these cash flows into growing the business, including the potential to extend the stage 1 pit then transition to underground operations at Cannon or develop other satellite deposits as they become better defined.

## Stage 2 Underground

With the Stage 1 Open Cut approved and proceeding, Southern Gold will begin assessing the next stage underground operation. Southern Gold completed a Pre-Feasibility level study into the underground option and concluded a small operation was viable at current gold prices.

Although the gold price in US Dollar terms has retraced slightly in recent times (currently trading at US$1177/oz) it has been very stable in Australian Dollar terms trading in excess of A$1500/oz for the past six months (and currently trading at A$1530/oz). As an Australian producer, Southern Gold receives the Australian dollar gold price and there is still a significant margin on this basis.

Southern Gold will update the market on conclusion of additional studies completed with the assistance of Metals X on the potential development of the underground stage.

## JORC Resource Update

The Cannon Gold Resource has been redefined based off the new information provided from the grade control drilling. While the drilling confirmed the broad geological interpretation some local scale variations were evident and a more detailed definition of the gold bearing lodes is now possible. The new resource is based on a global 0.7g/t cut-off (in line with Metals X's methodology) and now includes a significant proportion of Measured Resources (Table 4 & 5).

**Table 4: Cannon Mineral Resource Estimate, Measured, Indicated and Inferred (0.7g/t Au Cut-off)**

| Deposit & Weathering Type | Measured | | | Indicated | | | Inferred | | |
|---|---|---|---|---|---|---|---|---|---|
| | Tonnes t | Au g/t | Au Ounces | Tonnes t | Au g/t | Au Ounces | Tonnes t | Au g/t | Au Ounces |
| Oxide | 16,220 | 3.42 | 1,783 | 423 | 1.92 | 26 | - | - | - |
| Transitional | 90,687 | 2.98 | 8,689 | 73,473 | 2.41 | 5,693 | 13,124 | 1.65 | 696 |
| Fresh | 2,331 | 4.31 | 323 | 570,073 | 4.06 | 74,413 | 79,929 | 2.11 | 5,422 |
| **Total:** | **109,238** | **3.07** | **10,795** | **643,969** | **3.87** | **80,132** | **93,053** | **2.05** | **6,118** |

**Table 5: Cannon Mineral Resource Estimate, Total All Categories (0.7g/t Au Cut-off)**

| Category | Total Resource | | | |
|---|---|---|---|---|
| | Tonnes t | Au g/t | Au Ounces | % Au Ounces |
| Measured | 109,238 | 3.07 | 10,795 | 11% |
| Indicated | 643,969 | 3.87 | 80,132 | 83% |
| **Total M&I** | **753,207** | **3.75** | **90,927** | **94%** |
| Inferred | 93,053 | 2.05 | 6,118 | 6% |
| **Total All Categories** | **846,260** | **3.57** | **97,045** | |

**Table 6: Cannon Mineral Resource Estimate, comparison with previous estimate, Total All Categories**

| Category | Total Resource | | |
|---|---|---|---|
| | Tonnes t | Au g/t | Au Ounces |
| Total All Categories – 10 June 2015 @ 0.7g/t Au cut-off | 846,260 | 3.57 | 97,045 |
| Total All Categories – 31 January 2014@ 1.0g/t Au cut-off | 812,200 | 3.90 | 100,400 |
| **Difference** | **+34,060** | | **-3,355** |
| **Difference %** | **+4.2%** | | **-3.3%** |

As expected the new total resource figure (Table 6) has not varied a great deal when compared to the previously announced JORC resource (as per the 31/01/14 release) as the grade control drilling is designed to lift confidence in the resource rather than extend it. Confidence in the resource has been enhanced with 11% of the global resource figure now in the JORC Measured category while total JORC Measured and Indicated Resources now sit at 94% of the global resource figure.

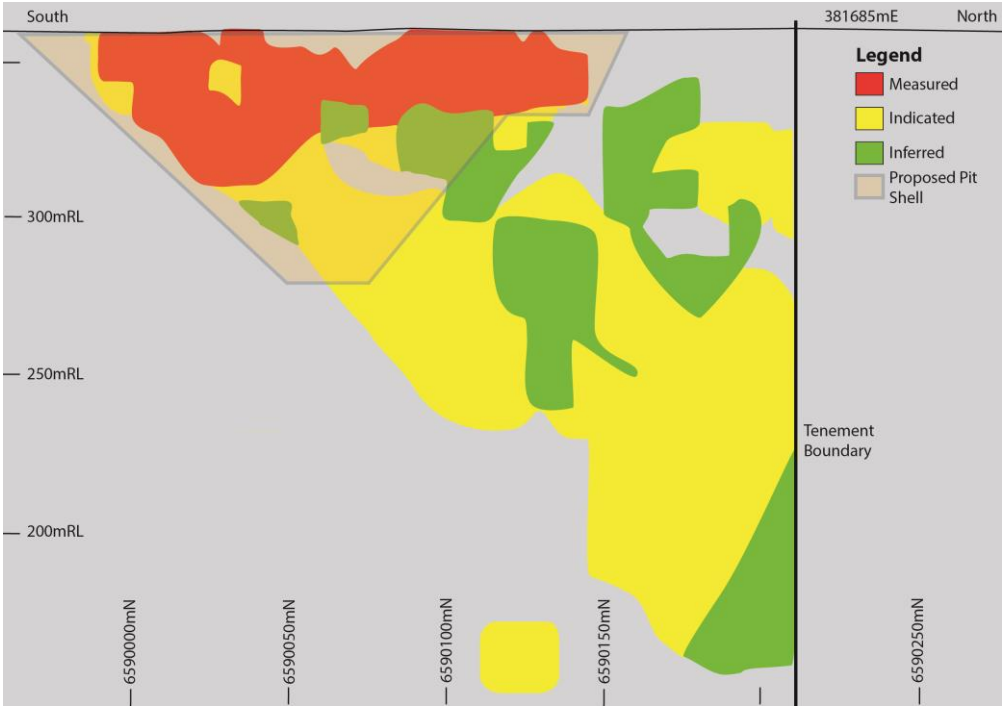


**Figure 2: Long Section (looking west) of Cannon Resource by Category on Section 381685mE with pit shell**

The distribution of the Measured Resource mirrors the zone of grade control drilling that tested the first 25m of the open pit (Figure 2). Grade control drilling will continue as the pit is developed and progressively move the Measured portion of the resource to deeper parts of the pit in time.

With the lower cut-off grade the average resource grade is now 3.57g/t Au while the run of mine ore grade is estimated at 3.1g/t Au (assuming some conservative mining assumptions), a relatively high grade for a Kalgoorlie goldfields open pit operation. Note that a higher grade (>5g/t) portion of the resource is sitting below the pit and will be the focus of the Stage 2 underground assessment (Figure 3).


**Figure 3: Long Section (looking west) of Cannon Resource by Au Grade on Section 381685mE with pit shell**

The Managing Director of Southern Gold, Mr Simon Mitchell, commented: "the decision by the operations committee to proceed with the Cannon Mine on the basis of the agreed mine schedule and budget is an important milestone for the company. We now have a definitive framework to extract economic value from our first, relatively modest scale open pit and we obviously have an eye on the possibility of additional open pits in our near mine exploration area as well as extending the zone of wide-high grade intersections below the Cannon pit itself. It is an exciting time for the company, and, given our current market capitalisation, a potentially very rewarding period for our shareholders."

## CONTACT

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## Competent Person's Statements

*The information in this report that relates to Exploration Results has been compiled under the supervision of Mr. Ian Blucher (MAusIMM). Mr Blucher, who is a full time employees of Southern Gold Limited and a Member of the Australian Institute of Mining and Metallurgy, has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Mineral Resources and Ore Reserves. Mr Blucher consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.*

*The information in this report that relates to Cannon Mineral Resources is based on information compiled by Mr Ian Blucher (MAusIMM). Mr Blucher is a full time employee of Southern Gold Limited and has sufficient experience that is relevant to the style of mineralisation, type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC, 2012). Mr Blucher consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.*

# JORC Code, 2012 Edition – Table 1 report

## Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Sampling techniques* | • *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.* | ***Exploration and Resource Definition Drilling***<br>• **The mineralisation of the Cannon deposit was sampled using face sampling reverse circulation (RC) percussion and diamond core drilling techniques.**<br>• **RC drill holes and RC pre-collars were sampled at 1m intervals followed by riffle splitting and collection into plastic bags for non-pre-collared holes or as four meter, spear sampled, composite samples for RC precollars. Individual 1m samples from RC composites returning anomalous gold values were subsequently re-split by riffle splitter and assayed.**<br>• **Individual RC drilling samples riffle split from the drill rig were collected into pre-numbered calico bags.**<br>• **Diamond core was sampled as half core at intervals not less than 0.1m and no greater than 1.3m lithological boundaries. Sampling intervals were controlled by geological boundaries.**<br><br>***Grade Control Drilling***<br>• **Grade control drilling was sampled using face sampling RC percussion techniques.**<br>• **RC drill holes were sampled at 1m intervals followed from the cyclone into pre-numbered calico bags to provide a sample of approximately 2kg.**<br>• **Each sample was completely pulverised to produce a 50 g charge for fire assay.** |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Drilling techniques* | • *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).* | ***Exploration and Resource Definition Drilling***<br>• **Diamond or face sampling reverse circulation percussion drilling were the primary drilling techniques used to evaluate the Cannon resource.**<br>• **The Cannon resource has been estimated using 57 RC holes, four diamond holes drilled from surface and 15 RC pre-collared holes with diamond tails.**<br>• **RC percussion drilling downhole depths range from 34m to 240m.**<br>• **Diamond drill holes and diamond tails to RC pre-collars downhole depths range from 78m to 225m.**<br>• **RC drilling was undertaken by Ausdrill, Strange Drilling and Andrews Drilling, all of Kalgoorlie, using 5½ inch diameter face sampling hammers.**<br>• **Diamond core drilling was undertaken by Ausdrill Ltd. Diamond tails were drilled as NQ (47.6mm diameter) and NQ2 (50.8mm diameter). Drill holes used for geotechnical or metallurgical data acquisition were drilled using triple tubed HQ3 core with a diameter of 61.1mm).**<br>• **All cored holes were routinely orientated using an ACE electronic tool.**<br><br>***Grade Control Drilling***<br>• **Face sampling RC percussion drilling was undertaken from surface to depths ranging from 6 to 55 m .**<br>• **Grade control RC drilling was undertaken by Blue Spec Mining of Kalgoorlie.**<br>• **Downhole orientation of drill holes was determined by open hole EMS survey (Reflex EZ Shot) by Gyro Australia for the majority of holes. One hole (CAGC066) was surveyed by ESS tool (Reflex EZ Shot) in the rod stream by Blue Spec Mining and four holes (CAGC034, 042-044) were surveyed down the rod stream by Gyroinclinometer by Gyro Australia.** |
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.* | ***Exploration and Resource Definition Drilling***<br>• **Sampling intervals during RC drilling were routinely checked by comparing the position of the drill rod against the sample bag being filled.**<br>• **Cored hole depths were measured by Company geologists and reconciled with core markers prepared by the driller.**<br>• **Drilled cored meters compared well to recovered meters. Overall recoveries are estimated at 98% for core drilling.**<br>• **Drilling of core and RC holes were conducted with machinery and using drilling techniques appropriate to the terrain and with drillers experienced in the area.**<br>• **Core and RC sample loss was kept to a minimum by good sampling practices.**<br>• **Riffle splitting of RC samples and sampling of half core from diamond holes provided good representation of the intervals sampled.**<br>• **No recovery issues were identified with the RC drilling. Loss of fines at the cyclone was minimal and is not considered to have had a significant effect on sample recovery.**<br>• **No relationship has been noted between sample recovery and grade. Overall, sample recoveries were very high and did not present a problem.**<br><br>***Grade Control Drilling***<br>• **Grade control drilling sample recovery attributes were the same as for exploration RC drilling.**<br>• **No relationship has been noted between sample recovery and grade. Overall, sample recoveries were very high.** |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Logging* | • *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | ***Exploration and Resource Definition Drilling***<br>• **All drill holes have been geologically logged by Company geologists using a standard format over the whole length of each hole. Features for each sample or geological interval recorded included weathering, lithology, alteration mineralogy, structural information, mineralisation mineralogy, veining, vein mineralogy and orientation and proportions of non-economic minerals. This level of detail is considered appropriate to support the 2015 Mineral Resource estimate.**<br>• **Geological logging recorded factual data (e.g. colour, grain size, percentage of identifiable minerals present) and interpretative data (e.g. lithology).**<br>• **A subsample of washed and sieved RC chips from each metre was collected and stored sequentially in numbered plastic chip trays. Chips trays representing each RC drill hole are stored in the Company's head office in Adelaide.**<br>• **All drill core has been photographed. Detailed geotechnical logging and geotechnical tests were undertaken on three holes drilled to provide open pit design parameters and preliminary underground design parameters.**<br>• **All intervals used in the 2015 Mineral Resource estimate have been fully logged.**<br>• **The level of detail recorded during logging is sufficiently detailed to support appropriate 2015 Mineral Resource estimation, mining studies and metallurgical studies.**<br><br>***Grade Control Drilling***<br>• **All grade control holes have been geologically logged by Company geologists using a standard format over the whole length of each hole. Features for each sample interval recorded, where observable, included weathering, lithology, alteration mineralogy, mineralisation mineralogy, veining, vein mineralogy and proportions of non-economic minerals.**<br>• **Geological logging recorded factual data (e.g. colour, grain size, percentage of identifiable minerals present) and interpretative data (e.g. lithology).** |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Sub-sampling techniques and sample preparation* | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | ***Exploration and Resource Definition Drilling***<br>• **RC samples were riffle split at 1m intervals and rejects collected into green plastic bags.**<br>• **Riffle split samples were taken dry. On rare occasions when a moist or wet sample was returned, a PVC spear or scoop was used to avoid contamination of the riffle splitter (three samples). This was noted in the sample register and subsequently entered into the Company's database.**<br>• **Composite RC samples were taken from the plastic bags using a PVC spear. Re-splitting into 1m riffle split samples was subsequently undertaken and the new samples submitted for assay if initial composite analyses were considered anomalous.**<br>• **All mineralised intervals of diamond drill core were sampled as half core with intervals ranging from 0.3m to 1.3m. A minimum of three meters either side of mineralised intervals was also sampled. Sampling intervals were controlled by geological boundaries.**<br>• **Sample size presented for analysis was typically 1 to 3kg.**<br>• **Preparation and analysis of RC and diamond core samples was undertaken by crushing and pulverizing at Intertek Genalysis' Kalgoorlie laboratory, followed by analysis at Intertek Genalysis' facility in Perth.**<br>• **Samples were pulverised to 85% passing 75 micron. Consultation between the Company and the lab concluded this particle size was suitable for the Cannon samples.**<br>• **Field duplicates were collected every 20th sample from 2010 onwards and results obtained compared well with the original sample.**<br>• **Sampling procedures utilised for the Cannon exploration and resource definition drilling were reviewed previously by external consultant RungePincockMinarco (Runge, 2010, 2011 and RPM 2012) and are considered to be of a high standard.**<br><br>***Grade Control Drilling***<br>• **Grade control RC samples were sampled from a cone splitter attached to the drill rig at 1m intervals and rejects collected placed in sequential order on the ground adjacent to the drill rig.**<br>• **Samples were taken dry.**<br>• **Sample size presented for analysis was approximately 2kg.**<br>• **Preparation and analysis of grade control samples was undertaken by crushing and pulverizing at Intertek Genalysis' Kalgoorlie laboratory, followed by analysis at Intertek Genalysis' facility in Perth.**<br>• **Samples were pulverised to 85% passing 75 micron.**<br>• **Field duplicates were collected every 34$^{th}$ sample and results obtained compared well with the original sample.** |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Quality of assay data and laboratory tests* | • *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*<br>• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*<br>• *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.* | ***Exploration and Resource Definition Drilling***<br>• **The analytical method used for samples used in the resource estimation was Genalysis method FA25/AA, consisting of a 25 g charge fire assay with detection by atomic absorption at a detection limit of 0.01ppm Au (gold).Fire assay is considered the most appropriate analysis method for the deposit and is a total digest technique. No strong nugget effect was observed in repeated assays and screening of samples prior to fire assay was not considered necessary.**<br>• **No assay data from geophysical tools were used in the 2015 Mineral Resource estimate.**<br>• **The QAQC protocol used for drilling undertaken in 2009 consisted of certified standards inserted at a rate of approximately 1 in 100, a small number of blanks and laboratory repeats.**<br>• **The QAQC protocol used for drilling undertaken in 2010 consisted of certified standards plus blanks inserted at a rate of 1 in 15. Duplicate sampling was also undertaken.**<br>• **The QAQC protocol used for drilling undertaken in 2012 drilling consisted of certified standards plus blanks inserted at a rate of approximately 1:20.**<br>• **Field duplicates were collected every 20th sample from 2010 onwards and results compared well.**<br>• **Results from QAQC monitoring of the accuracy and precision of the analytical methods employed which were at variance with accepted values were discussed with the analysing laboratory and resolved to the satisfaction of the Company.**<br>• **A review of the analytical performance of the external standards and blanks used in exploration and resource definition drilling was previously assessed (Runge, 2010, 2011 and RPM 2012) which indicated that the these results were acceptable in the majority of samples and that the assay data was considered acceptable for resource estimation purposes.**<br><br>***Grade Control Drilling***<br>• **The analytical method used for grade control samples was Genalysis method FA50/OE, consisting of a 50 g charge fire assay with detection by optical emission spectroscopy at a detection limit of 0.005ppm Au (gold). No strong nugget effect was observed in repeated assays and screening of samples prior to fire assay was not considered necessary.**<br>• **No data from geophysical tools were used to determine grade control assay results.**<br>• **The QAQC protocol used for grade control drilling consisted of certified standards plus blanks inserted at a rate of 1:10.**<br>• **Field duplicates were collected every 34th sample and results compared well.**<br>• **Results from QAQC monitoring of the accuracy and precision of the analytical methods employed which were at variance with accepted values were discussed with the analysing laboratory and resolved to the satisfaction of the Company.**<br>• **A review of the analytical performance of the external standards and blanks by Southern Gold staff indicated that the results were acceptable in the majority of samples.** |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | ***Exploration and Resource Definition Drilling***<br>• **Significant intersections were visually inspected and verified by the Competent Person (Mr Ian Blucher).**<br>• **A total of 361 samples were submitted to an umpire laboratory (ALS Kalgoorlie) for sample preparation and analysis at the Perth ALS laboratory in 2010 with results comparing well.**<br>• **Twinned holes have not been drilled.**<br>• **All sampling data is recorded by hand onto logging sheets and re-checked before submission to the lab. Data is then entered into digital form and stored on the Company database after validation. Original logging sheets are filed in the Company's Head Office in Adelaide.**<br>• **The assay database is stored securely on the Company's server which is backed up routinely both on and offsite.**<br>• **No adjustments are made to the assay data after review of QAQC measures as stated above.**<br><br>***Grade Control Drilling***<br>• **Spoil piles of significant intersections were visually inspected and verified by the Competent Person (Mr Ian Blucher). Twinned holes have not been drilled.**<br>• **All sampling data is recorded digitally using for-purpose software. Data is transferred to and stored on the Company database after validation.**<br>• **The assay database is stored securely on the Company's server which is backed up routinely both on and offsite.** |
| *Location of data points* | • *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | ***Exploration and Resource Definition Drilling***<br>• **Drill hole collar positions have been accurately surveyed by registered surveyors utilising DPGS survey equipment to an accuracy of +/- 0.01m.**<br>• **71% of holes were surveyed downhole by Gyro Inclinometer with the remaining 29% by electronic multi-shot tool.**<br>• **The grid system used for locating the collar positions of drill holes is the Geocentric Datum of Australia (GDA94), Zone 51 (MGA Projection). Elevations are recorded in Australian Height Datum (AHD).**<br>• **Topographic control in the immediate vicinity of the Cannon resource is provided by topographic mapping undertaken by Whelans of Kalgoorlie with an estimated RMS accuracy of 0.05m horizontal and 0.05m vertical.**<br><br>***Grade Control Drilling***<br>• **The grid system and topographic control used are the same as used for exploration and resource drilling. The position of each drill collar was laid out under survey control. Following drilling, collar positions were surveyed using Real-Time Kinematic GPS equipment.** |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.*<br>• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*<br>• *Whether sample compositing has been applied.* | ***Exploration and Resource Definition Drilling***<br>• **The average drill hole spacing in the main portion of the resource is approximately 20m along strike and 20m down dip. With the good continuity of structure evident at the deposit, this spacing is considered adequate to allow some parts of the deposit to be classified as an Indicated Mineral Resource. The portions of the deposit drilled at spacings of greater than 20m, or where continuity of structure is uncertain, have been classified as Inferred Mineral Resource.**<br>• **The Cannon deposit shows reasonable continuity of the main mineralised zones allowing the drill hole intersections to be modelled into coherent, geologically robust wireframes. Reasonable consistency is evident in the thickness of the structure, and the distribution of grade appears to be reasonable along strike and down plunge.**<br>• **Samples were composited to 1m intervals for use in the 2015 Mineral Resource Estimation.**<br><br>***Grade Control Drilling***<br>• **The average drill hole spacing used was 10 m grid east west and 5 m grid north – south. This spacing provides information to infill between existing resource drilling and is considered adequate to inform the mining process.**<br>• **Compositing of samples reported has not been applied.** |
| *Orientation of data in relation to geological structure* | • *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*<br>• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.* | ***Exploration and Resource Definition Drilling***<br>• **The orientation of the drilling direction is to the east, which is approximately perpendicular to the general strike of structures controlling mineralisation which dip to the west. A number of holes have been drilled at a close angle to the dip due to the steep nature of the lodes and varying strike of the mineralisation.**<br>• **The majority of holes have been drilled to the east, with one scissor hole drilled to the west. Three geotechnical holes drilled for mine design purposes were drilled at bearings of 120, 235 and 300 magnetic. Data obtained from these holes has also been incorporated in the 2015 Mineral Resource estimate.**<br>• **The relationship between the orientation of drilling and orientation of mineralised structures is not considered to have introduced a sampling bias.**<br><br>***Grade Control Drilling***<br>• **All drilling was undertaken to the east, parallel to the majority of the Cannon resource drilling.**<br>• **No twinned-holes were drilled.** |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Sample security* | • *The measures taken to ensure sample security.* | ***Exploration and Resource Definition Drilling***<br>• **RC drilling samples are placed into pre-numbered calico bags directly from the splitter under the supervision of the rig geologist.**<br>• **Diamond core is transported from site by Company personnel to a secure facility in Kalgoorlie where it is logged and sampled then stored.**<br>• **The rig geologist places the calicos bags containing the samples into polyweave bags and transports them to the sample preparation laboratory where a sample submission form is completed. The details entered onto the sample submission form are the means by which the samples are tracked through the laboratory.**<br>• **Samples are transported by internal courier from the preparation facility to the analytical laboratory.**<br>• **The laboratory provides the Company with a reconciliation of samples submitted compared to samples received.**<br><br>***Grade Control Drilling***<br>• **Security measures employed for grade control samples were the same as for the exploration and resource drilling.** |
| *Audits or reviews* | • *The results of any audits or reviews of sampling techniques and data.* | ***Exploration and Resource Definition Drilling***<br>• **A site visit was conducted in June 2010 (Runge, 2010) to review the project and deposit geology, drilling, sampling and site procedures. Runge (2010) reported that Company procedures and protocols were operating at a high level.**<br>• **The exploration and resource definition drilling data was audited previously in Surpac by Runge (2010 and 2011) and RPM (2012), with no major issues identified.**<br>• **An internal review of bulk density data was undertaken by Company geologists in Dec 2012.**<br><br>***Grade Control Drilling***<br>• **No audits or reviews of grade control sampling techniques have been undertaken.** |

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Mineral tenement and land tenure status* | • *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*<br>• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.* | • The Cannon resource is secured by M25/333, located ca. 30km ESE of Kalgoorlie, WA.<br>• The Cannon Mineral Resource is owned 100% by Southern Gold Limited.<br>• There are no material issues with third parties.<br>• There are no known impediments to obtaining a licence to operate. |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | Exploration prior to 2005 was undertaken by a number of companies and prospectors including Cyprus Gold Limited and Roebuck Resources. Work by Roebuck Resources in 1994 identified a number of surface lag sample anomalies. A 1994 bedrock geochemical RAB drilling program resulted in the identification of at least three areas of significantly anomalous gold anomalous intersections which were not followed up at the time. |
| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | • Mineralisation is considered to be a mesothermal, vein and alteration style deposit similar to many other deposits in the Kalgoorlie district. The interpretation used for this estimate is based on work completed by Company personnel who logged the holes and mapped the area.<br>• The Cannon gold mineralisation is structurally controlled strikes north-easterly and dips to the west. High grade mineralised zones within the resource appear to be controlled by local scale dilational structures.<br>• Mineralisation is associated with chlorite-biotite-albite-quartz-carbonate-pyrite alteration. The bulk of the gold mineralisation is hosted in a pillowed basalt unit. Other lithologies present include dioritic intrusives, high magnesium basalts and komatiites. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Drill hole Information* | • *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*<br>  ○ *easting and northing of the drill hole collar*<br>  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>  ○ *dip and azimuth of the hole*<br>  ○ *down hole length and interception depth*<br>  ○ *hole length.*<br>• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.* | ***Exploration and Resource Definition Drilling***<br>• A selection of exploration results used in the compilation of the 2015 Mineral Resource Estimate showing the range of downhole intercept widths and associated grades is shown in Table 1 and Figures 1, 2, 3 and 4 of the Southern Gold ASX announcement dated 29 January 2013.<br>• Drilling information relevant to the 2015 Mineral Resource Estimate is noted in Section 1 – Sampling Techniques & Data.<br>• The listing of holes used in the resource estimation (Shown in Table 1 of the Southern Gold ASX announcement dated 29 January 2013) is incomplete as it excludes commercially sensitive information<br><br>***Grade Control Drilling***<br>• A selection of grade control results used in the compilation of this announcement showing the range of downhole intercept widths and associated grades is shown in Table 1 and Figures 1, 2, 3 and 4 of this report.<br>• Drilling information relevant to the grade control drilling is noted in Section 1 – Sampling Techniques & Data.<br>• The variation of grades and widths intersected in grade control holes and the relationship to the resource drilling results is shown in Table 1 and Figures 1, 2, 3 and 4 of the Southern Gold ASX announcement dated 10 March 2015. |
| *Data aggregation methods* | • *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*<br>• *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • No weighting average techniques or grade aggregations have been reported in this release in relation to Exploration or grade control results.<br>• No metal equivalent values have been reported. |
| *Relationship between mineralisation widths and intercept lengths* | • *These relationships are particularly important in the reporting of Exploration Results.* | ***Exploration and Resource Definition Drilling***<br>• The range of variation in down hole widths and grades and the nature of the continuity established is shown in Table 1 and Figures 1,2, 3 and 4 Table 1 of the Southern Gold ASX announcement dated 29 January 2013. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').* | ***Grade Control Drilling***<br>• The range of variation in down hole widths and grades and the nature of the continuity established is shown in Table 1 and Figures 1, 2, 3 and 4 of the Southern Gold ASX announcement dated 10 March 2015. |
| *Diagrams* | • *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.* | ***Exploration and Resource Definition Drilling***<br>• Figures 1, 2, 3 and 4 of the Southern Gold ASX announcement dated 29 January 2013 show a typical range of downhole intercept widths and associated grades that may be found within the Cannon mineralisation.<br><br>***Grade Control Drilling***<br>• Figures 1, 2, 3 and 4 of the Southern Gold ASX announcement dated 10 March 2015 show a typical range of downhole intercept widths and associated grades that may be found within the Cannon mineralisation and their relationship to existing drilling. |
| *Balanced reporting* | • *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.* | ***Exploration and Resource Definition Drilling***<br>• The range of gold grades and down hole intersection widths shown in Figures 1,2, 3 and 4 and Table 1 of the Southern Gold ASX announcement dated 29 January 2013 is considered to be representative of the variation present in the Cannon Mineral Resource.<br><br>***Grade Control Drilling***<br>• The range of gold grades and down hole intersection widths shown in Figures 1,2, 3 and 4 and Table 1 of the Southern Gold ASX announcement dated 10 March 2015 is considered to be representative of the variation present in the grade control drilling. |
| *Other substantive exploration data* | • *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.* | • Other than the exploration undertaken by other parties documented above, no other substantive exploration data for the 2015 Cannon Mineral Resource exists.<br>• Drilling to obtain both geotechnical and metallurgical information has been undertaken. Where present, intersections of gold mineralisation and associated grades has been utilised in the modelling of the 2015 Mineral Resource. |
| *Further work* | • *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* | • The 2015 Cannon Mineral Resource Estimate has been utilised to develop open pit and underground mine designs and associated mining schedules. These data have been incorporated into financial models along with other relevant data. |

| Criteria | JORC Code explanation | Commentary |
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| | • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • Information relating to possible extensions of the Cannon Resource is not shown as the information is commercially sensitive. |

## Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Database integrity* | • *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*<br>• *Data validation procedures used.* | • All logging data recorded on filed logs was input to a digital template.<br>• All digital data has been validated using standard database checks.<br>• Data validation was conducted at the time of transfer of information from log sheets to digital files and again on entry of the digital data into the database.<br>• Assay data is imported directly from the lab CSV files into the database with no manual keying of data involved.<br>• Data quality and integrity of the exploration and resource definition drilling sampling database was reviewed previously by Runge (2010 & 2011) and RPM (2012) with no major issues identified. |
| *Site visits* | • *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.*<br>• *If no site visits have been undertaken indicate why this is the case.* | • The Competent Person (Mr Ian Blucher) visited the site a number of times whilst exploration and grade control drilling activities were underway. Based on observations made during these visits, it was concluded that Company's procedures relating to geological logging and sampling was of an adequate standard.<br>• A site visit was not undertaken by Cube as their role has been limited to re-estimating the resource following the integration of near-surface grade control data into the existing wireframe model. |
| *Geological interpretation* | • *Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.*<br>• *Nature of the data used and of any assumptions made.*<br>• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*<br>• *The use of geology in guiding and controlling Mineral Resource estimation.*<br>• *The factors affecting continuity both of grade and geology.* | • Confidence in the geological interpretation is considered to be high due to the closely spaced drilling, continuity of geological units and local structures.<br>• The data used for the interpretation include geological observations on core and RC drill cuttings, structural measurements on oriented core and geochemical data from laboratory assays and handheld XRF analyses.<br>• The strong structural control on mineralisation, which has been defined to an acceptable level of confidence from measurements on oriented core, eliminates to a large extent any possible changes resulting from alternative lithological models.<br>• Geological and structural data were taken into account when constructing the mineralisation wireframes used in the 2015 Mineral Resource Estimate.<br>• Factors affecting continuity of grade and geology include continuity of structure and thickness of host/favourable lithological units. |
| *Dimensions* | • *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.* | • The 2015 Cannon Mineral Resource has been estimated over a strike length of 200m (from 6,590,000mN - 6,590,200mN) and a vertical interval of 220m from the surface at 360mRL to 140mRL.<br>• Mineralisation varies in thickness from 4m to 15m with a typical thickness of 5 to 10m. |

| | | |
|---|---|---|
| *Estimation and modelling techniques* | • *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*<br>• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*<br>• *The assumptions made regarding recovery of by-products.*<br>• *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).*<br>• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*<br>• *Any assumptions behind modelling of selective mining units.*<br>• *Any assumptions about correlation between variables.*<br>• *Description of how the geological interpretation was used to control the resource estimates.*<br>• *Discussion of basis for using or not using grade cutting or capping.*<br>• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.* | • The geostatistical modelling for the 2015 resource estimate was undertaken by external consultants Cube Consulting (Cube) under the supervision of the competent person (Ian Blucher). The information compiled below for this section summarises the processes and techniques used.<br>• Ordinary Kriging ("OK") interpolation with an oriented 'ellipsoid' search was used for the estimate. Surpac software was used for the estimations.<br>• Three dimensional mineralised wireframes were used to domain the mineralised data. Sample data was composited to 1m down hole lengths using the 'best fit' method. Intervals with no assays were excluded from the estimates.<br>• The influence of extreme grade values was addressed by reducing high outlier values by applying high grade cuts to the data. These cut values were determined through statistical analysis (histograms, log probability plots, coefficients of variation) as well as spatial graphical analysis) using Geoacess and Surpac software.<br>• An orientated 'ellipsoid' search was used to select data for each domain and was based on the observed individual lode geometry. The search ellipses were orientated to the average strike, plunge, and dip of each lode domain.<br>• Previous Mineral Resource modelling is reported in the references documented below.<br>• As production has not yet started, no reconciliation with mine records is possible.<br>• No assumptions were made regarding the recovery of by-products.<br>• Construction of mineralised wireframes was based on a combination of gold grades, lithological units and geological structures. Where grade continuity was unclear, geological and structural data was used to guide the wire-framing.<br>• Variographic analysis was completed on the best informed domains using Geovariance's Isatis software. Variogram parameters for the less informed domains were adopted from the better informed domains of similar grade distribution. Orientations were modified to align with each individual domain lode.<br>• Ordinary Kriging interpolation was used to estimate average block grades in generally two passes using Surpac software. Optimal first pass search parameters with a radius of up to 40m and minimum & maximum number of composites per estimate of 6 & 16 respectively, was adopted, followed by a second pass estimate of 1.5 to 2 times the 1st pass search radius lowering the minimum number of composites per estimate to 4. The 1st pass search dimensions approximated the ranges of the interpreted variograms, whilst the 2nd pass searches were implemented to fill the un-estimated blocks if they were not estimated during the 1st pass searches. A limit of 6 composites per drill hole was also utilised for each block estimate.<br>• All estimation domain boundaries were treated as hard boundaries.<br>• A block model was generated in Surpac v6.3.2 using topographic and oxidation surfaces & mineralised domain wireframes as constraints. Two different block dimensions were used to account for the difference in the drill hole spacing (5m (X) x 5m (Y) x 5m (Z) & 5m (X) x 10m (Y) x 5m (Z)) between the grade control & resource drilling. The final model is a combination of the different block dimensions. No assumptions were made on selective mining units.<br>• High grade cuts were used in the estimation of the Cannon resource due to the presence of outliers from in the gold assays. Statistical analysis of the 1m composite data determined that high grade cuts of between 4g/t Au and 40g/t Au were appropriate for individual wireframes. No high grade cuts were applied to the minor wireframe objects.<br>• The modelled data was validated by:<br>- A qualitative assessment was completed by slicing sections through the block model in positions coincident with drilling<br>- A quantitative assessment of the estimate was completed by comparing the average grades of the composite file input against the block model output for all the resource objects.<br>- A trend analysis was completed by comparing the interpolated blocks to the sample composite data within the lodes. This analysis was completed for northings and elevations across the deposit. Validation plots showed good correlation between the composite grades and the block model grades. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Moisture* | • *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.* | • Tonnage estimates for the 2015 Mineral Resource are estimated on a dry tonnage. |
| *Cut-off parameters* | • *The basis of the adopted cut-off grade(s) or quality parameters applied.* | • The 2015 resource model was constrained by a boundary representing the natural grade cut-off of the deposit. This approximated a cut-off of 0.5g/t Au.<br>• The 2015 Mineral Resource was reported using a 0.7g/t Au cut-off grade which approximates an economic mining cut-off grade. |
| *Mining factors or assumptions* | • *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.* | • Mining is assumed to be via conventional open pit surface mining techniques.<br>• The deposit is amenable to open pit mining, followed by underground mining.<br>• Internal dilution of up to 3m has been incorporated into the modelled wireframes where necessary to allow for continuity of mineralisation.<br>• No mining dilution or ore loss has been modelled in the Resource model or applied to the reported Mineral Resource.<br>• The boundary of the mineralisation has been interpreted using a cut-off of 0.5 g/t Au, considered to be a conservative economic cut-off for the deposit. |
| *Metallurgical factors or assumptions* | • *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.* | • Metallurgical test work undertaken by ALS Ammtec, Perth indicates that the Cannon mineralisation is suitable for processing by standard treatment methods.<br>• The metallurgical characteristics of Cannon ore have been determined by testwork to be free milling, of moderate hardness and free of cyanicides. The estimated recovered ounces adopted are on average 92% of the mined ounces.<br>• Metallurgical factors have not been applied to the resource estimate. |
| *Environmental factors or assumptions* | • *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of* | • Waste characterisation and acid base accounting (ABA) and net acid generation (NAG) test work indicates that the waste material from Cannon is generally considered as non-acid forming (NAF). The samples analysed had |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.* | predominantly low total sulphur content (less than 0.2%) and an excess of acid neutralising capacity (ANC). It is considered the materials tested present a low risk of metalliferous drainage.<br>• No assumptions were made with respect to other variables |
| *Bulk density* | • *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*<br>• *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.*<br>• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.* | • Bulk density values used in the model were determined by measurements using the water displacement method. These were undertaken by Company employees for transitional and fresh lithologies with an assumed regional average used for the oxide zone.<br>• The assumed oxide density value was considered appropriate as it is very consistent across a large number of deposits in the Eastern Goldfields.<br>• Average bulk density values used were: Oxide – 2.0 t/$m^3$, Transitional – 2.53 t/$m^3$ and Fresh – 2.75 t/$m^3$.<br>• The water displacement method used for bulk density measurements is considered appropriate as the material measured has very low porosity and minimal to no cavities.<br>• Assumptions that samples measured in the fresh and transitional zones are representative of the entire deposit are considered valid as the lithological and alteration characteristics are very consistent across the deposit. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Classification* | • *The basis for the classification of the Mineral Resources into varying confidence categories.*<br>• *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).*<br>• *Whether the result appropriately reflects the Competent Person's view of the deposit.* | • The classification of Measured, Indicated and Inferred is made on the basis of data quality, continuity of structure and grade distributions, plus drill spacing and reflects the level of confidence in those parameters.<br>• The Cannon Mineral Resource has been classified in accordance with the Australasian Code for the Reporting of Identified Mineral Resources and Ore Reserves (JORC, 2012).<br>• The classification approach considers all relevant factors and appropriately reflects the Competent Person's view of the deposit. |
| *Audits or reviews* | • *The results of any audits or reviews of Mineral Resource estimates.* | • No internal audits or reviews were undertaken as part of this resource estimation process. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Discussion of relative accuracy/ confidence* | • *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*<br>• *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.*<br>• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.* | • The mineralisation wireframe and block modelling procedures were undertaken by external consultants (Cube Consulting) in consultation with Southern Gold geologists and the Competent Person who deemed them appropriate to the deposit and of an adequate level of confidence and accuracy.<br>• Production has not commenced on the deposit at this time so a comparison to production data is not possible. |

**References**

JORC, 2012. Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition

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