

Metals X Limited is a diversified group exploring and developing minerals and metals in Australia. It is Australia's largest tin producer, a top 10 gold producer and holds a pipeline of assets from exploration to development including the world class Wingellina Nickel Project.

> CORPORATE DIRECTORY ASX Code: MLX OTCQX Code: MLXEF

Level 3, 18–32 Parliament Place West Perth WA 6005 Australia

> PO Box 1959 West Perth WA 6872 Australia

t: +61 8 9220 5700 f: +61 8 9220 5757 reception@metalsx.com.au www.metalsx.com.au



# **QUARTERLY REPORT** FOR THE PERIOD ENDING 31 DECEMBER 2015 **HIGHLIGHTS OF THE QUARTER** GOLD DIVISION

- Total gold produced of 48,134 ounces (including Cannon 50% profit share).
- Attributable gold production (excluding Cannon) of 41,660 ounces at Cash Cost of sales of \$1,161 per ounce (compared to guidance of 43,000 ounces at Cash Cost of Sales of \$1,200 per ounce).
- HBJ underground mine transitions to stoping translating to higher gold production and lower costs.
- Agreement reached to expand Cannon and to mine MLX's wholly owned and adjoining Georges Reward resource in conjunction. Mining commenced on the expanded pit and the first Cannon toll processing campaign was completed in November and yielded 6,474 ounces. MLX has a 50% share of surplus funds from the open pit results.
- CMGP plant successfully commissioned in mid-October 2015 and first quarter gold production (8 weeks milling) produces 8,934 ounces at cash cost of sales of \$1,166 per ounce.
- New gold acquisition of Mt Henry Gold Project and Fortnum (Grosvenor) Gold Project have been settled and agreement reached to acquire the Comet Gold Mine and a 260-person accommodation village in Cue.

### TIN DIVISION

- Renison mine increases tin production by 14.8% (over previous quarter) to 1,889 tonnes of tin metal and Cash Cost of Sales decrease by 7.9% to \$16,076 per tonne of tin metal.
- Process plant improvements continue to lower residues and improve throughput.
- Excellent drill results continue to positively expand and enhance the operations.

### **OTHER BASE METALS**

- Wingellina Nickel-Cobalt project completes Public Environmental Review process with no major issues and continues to advance to be development ready for a nickel market uptick.
- Re-assaying of previous nickel-cobaltr-iron intercepts suggest a very significant co-product of scandium exists in the ores.

### CORPORATE

- Cash, working capital and investments at the end of the quarter stood at \$63.1 million.
- Shares on issue now total 458,181,038. Shares allotted during the quarter were 18 million for the settlement of Fortnum Gold Project.
- Metals X made an off-market takeover offer for all the shares in copper producer, Aditya Birla Ltd during the quarter with conditional acceptances currently standing at 25.5%.

### ENQUIRIES

Peter Cook peter.cook@metalsx.com.au Warren Hallam warren.hallam@metalsx.com.au

# GOLD DIVISION

## OVERVIEW

Total gold produced from the operations was 48,134 ounces (including Cannon).

Gold produced excluding Cannon was 41,660 at cash cost of sales of \$1,161 per ounce. This compares with guidance provided of 43,000 ounces at cash cost of sales of \$1200 per ounce.

EBITDA of \$17.16 million was generated by the gold group. Capital re-investment across the whole gold division was \$22.3 million reflecting the various phases in capital development across the different operations.

The December quarter was one of the most active for Metals X as we commenced commissioning of the Central Murchison Gold Project (CMGP) and transitioned it into gold production.

At the CMGP we established access into the Paddy's Flat underground mine and commenced pre-strips for future open pit production from the new Jack Ryan and Bluebird open pits. At the same time we remained in an intensive capital development phase at the HBJ underground mine, although this was somewhat mitigated by the onset of ore stoping and expanded mine development. This quarter marked the transition of HBJ underground from mine development to mine production, resulting in increases in productivity, a reduction in costs, improved profitability and cash flow from the South Kalgoorlie Operations.

Three additional major events occurred at the CMGP during the quarter. The Comet Mine at Cue was agreed to be acquired from Silver Lake Resources Limited (Silver Lake) (Mineral Resource estimate 3.8 million tonnes @ 2.9 g/t containing 353,000 ounces). Agreement was reached to acquire the 260 person (near new) accommodation village in Cue, and thirdly a revised Mineral Resource estimate for the planned Big Bell underground using a more selective approach was completed with excellent outcomes.

Mining continued at the Cannon mine and the first parcel of ore from Cannon Stage 1 was processed yielding 6,474 ounces of gold and showing excellent reconciliations. Metals X has a mine management and profit share arrangement over the Cannon mine whereby it has rights to all gold and gold sales to repay costs and a right to 50% of all surplus profits. Although the final surplus profit of the Cannon mine will not ultimately be determined until the end of the pit in late 2016. For guidance, the Cannon mine (refer to Southern Gold Limited (Southern Gold) announcement of 9/12/2015 ASX:SAU) is expected to produce 50,000 ounces at AISC of \$1014 per ounce. Significantly, agreement with Southern Gold to mine the Georges Reward deposit (an immediate over the lease boundary extension of the Cannon ore body) in conjunction with Cannon was reached. Georges Reward (100% Metals X) ore will form part of the blended processing options for the South Kalgoorlie Operations.

At the Higginsville Gold Operations (HGO), lower outputs and higher costs continued as the Trident mine remained in a lower grade zone near the limits of the Artemis and Helios lodes. Both mining metrics and geotechnical constraints impacted mine costs during the quarter. The Trident mine is under review by the Company as to whether it can continue as a long term and sustainable source of blended feedstock and a decision is expected to be made in the ensuing half. Suffice to say that significant progress was made on the current open pits and on bringing the Mt Henry open pits into the blended mill feed-stocks. Even without Trident, HGO has a long future with outputs around 100,000 ounces per annum from the large open pit feedstock available in the region.

Having settled the acquisition of Fortnum (Grosvenor) Gold Project in the quarter, the datasets were reviewed and development plans for a project re-start advanced with engineering, permitting and planning works taking a priority. In the ensuing quarter drilling of known low grade stockpiles will commence as will the completion of initial mine development plans. Metals X expects to outline its feasibility and development strategy by the end of the June quarter.

Metals X continued to operate and sell its gold above average prices by virtue of its gold hedge sales program and the delivery of most of its gold into the program. This enabled total gold sales to achieve a sales price of \$1,575 per ounce on average for the quarter.

Overall guidance for the gold division for Calendar 2016 is for production of 300,000 ounces at an average cash cost of sales of \$1,115 per ounce. This excludes potential production from Fortnum as a final development decision is yet to be made. Guidance of March 2016 Quarter is 58,000 ounces at a Cash Cost of Sales of \$1,300 per ounce.

# SOUTH KALGOORLIE OPERATIONS (SKO) (MLX 100%)

It was a solid quarter for the South Kalgoorlie Operations with the rewards from a period of heavy capital investment starting to flow through. Whilst still advancing, the momentum has shifted from capital invest toward operating as stoping commenced on the HBJ Underground Central Ore Zone (COZ) enhancing productivity and grade.

Overall gold production (including Cannon) for SKO increased by 62% over the previous quarter to 17,361 ounces. Leaving Cannon aside due to the complications of the integration of its fiscal performance on overall costs the wholly owned operations of SKO (being the HBJ underground mine, the Georges Reward pit and existing low grade stocks) performed strongly with Cash Costs of Sales falling by 39% to \$871 per ounce and quarterly EBITDA increasing seven-fold to \$7.36 million. Total Costs of Sales coincidentally fell by 35% to \$1048 per ounce.

Overall guidance for the SKO for calendar 2016 is 65,000 ounces at a cash cost of sales of \$1,000 per ounce.

Key physical outputs for the quarter are summarised:

		December 15 Quarter	Previous Quarter	Rolling 12 Months
Mine Production	Source			
Underground Mines (t)	HBJ	88,053	72,472	171,212
Ore Grade (g/t Au)	-	2.99	2.05	2.52
Open Pits (t)	SK0	9,333	212,992	375,696
Ore Grade (g/t Au)		2.67	1.65	1.47
Open Pits (t)	Cannon	98,393	32,069	130,462
Ore Grade (g/t Au)		2.48	2.99	2.66
Total Mine Production	Tonnes	195,779	317,533	677,370
	Grade	2.72	1.88	1.96
Plant Production				
SKO - Ore Processed	Tonnes	177,243	270,171	766,259
SKO Head Grade	g/t gold	2.12	1.37	1.42
Recovery (%)	%	90.0	90.5	87.7
SKO Gold Produced	Ounces	10,887	10,750	31,522
Cannon*- Ore Processed	Tonnes	86,333	0	86,333
Cannon Head Grade	g/t gold	2.57	0.00	2.57
Recovery (%)	%	91.0	0.0	91.0
Cannon Gold Produced	Ounces	6,474	0	6,474
Total Gold Produced	Ounces	17,361	10,750	37,996

\* For Cannon, MLX entitled to all gold to repay costs and 50% share of surplus.

The key fiscal outcomes for the quarter for SKO are summarised below:

	December 15 Quarter	Previous Quarter	Rolling 12 Months
Imputed Revenue (\$M)	16.84	16.33	48.82
Avg. Gold Price Received (\$/oz)	1,542	1,519	1,549
Cash Cost of Sales (\$/oz)	871	1,426	1,214
Cash Operating Surplus (EBITDA \$M)	7.36	1.00	10.54
Depreciation & Amortisation (\$/oz)	177	190	211
Total Cost of Sales (\$/oz)	1,048	1,615	1,425

Total capital reinvestment into SKO for the quarter is summarised:

	December 15 Quarter	Previous Quarter	Rolling 12 Months
Capital Mine Development (\$M)	3.95	6.18	19.92
Exploration (\$M)	0.39	3.21	5.07
Property Plant & Equipment (\$M)	0.66	0.97	3.61

## **CANNON – MINE MANAGEMENT & PROFIT SHARE**

Under the Cannon agreement, Metals X, through it's wholly owned subsidiary HBJ Minerals Pty Ltd (HBJ) has the rights to mine, cart and process ores from the Cannon mine. All revenue from Cannon goes first to repay costs and HBJ has the right to a 50% share of all surplus profits. Metals X is banker to the project on a cost recovery basis and has extended addition loan funds on a secured basis to Cannon's owner, Southern Gold which are earning 8% p.a. interest.

A stage 1 open pit mine commenced at Cannon (Bulong District) in the September quarter. Metals X purchased the Georges Reward prospect in July 2015 for \$4.5 million (plus stamp duty) and opened the door for a larger open pit to be mined over the one ore system without lease boundary complications. Subsequently a larger open pit (Stage 2) for the Cannon Agreement was enabled with the one larger open pit exploiting ore on both mining leases. The existing agreement for Cannon was extended, although all ore from Georges Reward will be 100% owned by and at the sole risk of Metals X.

The Stage 2 Cannon Pit commenced during the quarter with 1.16 million cubic metres of waste and 130,462 tonnes at 2.66 g/t being mined. The first parcel of ore was processed in November 2015 with some 86,333 tonnes of ore at head grade of 2.57 g/t were treated. Metallurgical recovery was 91% resulting in 6,474.2 ounces of gold being recovered and \$9.71 million of revenue received.

Mine to processing reconciliations have been very close and actual mined to ore reserve estimate reconciliations have been positive. The open pit will continue to be mined for the ensuing year. Estimates by Southern Gold (refer to their ASX announcement of 9/12/2015) are that 50,000 ounces will be recovered and all-in-sustaining costs are estimated to be \$1,014 per ounce.

Metals X believes that the Cannon- Georges Reward ore system has excellent metrics for underground mining and this will be the subject of investigation as the open pit progresses.

## **SKO EXPLORATION**

Exploration at SKO produced another strong quarter of results from extensional drilling at the HBJ underground mine with drilling into the bulk areas returning best results of 51.46 m at 2.98 g/t Au from 92 m in HBJUG0080, 64.77 m at 2.17 g/t Au from 26 m in HBJUG0085 demonstrating the potential of this very large ore system to produce significant levels of base-load feed for the Jubilee Process Plant.

Diamond holes testing some of the narrower high-grade zones returned best true width intercepts of 3.58 m @ 17.36 g/t Au in HBJUG076, 2.73 m @ 58.94 g/t Au in HBJUG0113 and 3.9 m @ 17.71 g/t Au in HBJUG0134.

RC Drilling at Georges Reward for infill and later grade control modelling purposes has returned a number of excellent intercepts including:

- CAGC 439 returning 21 m @ 7.15 g/t down-hole from 15 m.
- CAGC 455 returning 19 m @ 14.86 g/t down-hole from 17 m.
- CAGC 483 returning 10 m @ 13.84 g/t down-hole from 0 m.
- CAGC 547 returning 15 m @ 6.36 g/t down-hole from 20 m.

Refer to Appendix 1 for all significant exploration results during the quarter.

## HIGGINSVILLE GOLD OPERATIONS (HGO) (MLX 100%)

The HGO continued to operate on a blend of ores from the Trident underground mine and the Lake Cowen open pits with the process plant operating on a campaign 9-on : 5-off basis.

The Trident mine continued to grind through the lower grade ores at the limits of the Artemis and Helios lodes during the quarter, which resulted in low-grade production. Mining has noted a shift in grade consistency in these areas and development and stoping has also been problematic with increasing geotechnical challenges. The down plunge drilling for extensions to the Artemis and Helios lode positions (Pluto – refer to exploration results) has proved that the mineralisation continues, but has also been complicated by a mixture of excellent high grade intercepts mixed with low grade results making overall interpretation of the resource problematic. Drilling is continuing and at this point a decision as to whether to invest the capital to extend another 200-300 vertical metres is yet to be made. Meanwhile exploration drilling has successfully intercepted high-grade results from a number of peripheral lode positions.

Capital development into the Ares zone commenced and successfully intersected the ore during the quarter. Ares is a lower grade dilational-zone up-dip of the Helios structure and whilst it provides an additional production area the grades and depth provide only higher cost ounces. Drill testing of a conceptual lode position parallel to Artemis but approximately 80 m into the footwall has commenced with excellent visual lodes intercepted but awaiting assays. This position is effectively untested up and down-dip and manifests as a large target.

Open pit mining progressed with the deeper parts of Napoleon giving way to slower ore production. During the quarter the Fairplay pre-strip commenced, with this source along with Atreides to supply the majority of production over the ensuing quarters. Both are relatively short life pits with skewed expenditure and ore production. Preparations to bring the Mt Henry open pits into the mix as a longer-life, steady production source are underway with this likely to occur in the second half of the calendar year.

Exploration follow-up of the exciting Igloo prospect to the north of Sirius' Barloo discovery was hampered by access and timing to lake capable drill rigs. Only one hole was successfully drilled under the anomaly with much difficulty, with two additional attempts failing to make target depth. The first hole returned a positive intercept showing the trend has primary mineralisation, albeit of low grade. Metals X is confident that the most prospective part of the target zone has yet to be defined and intends to carry out follow-up work as soon as access to suitable lake capable drills are gained. Overall guidance from the HGO for calendar 2016 is 120,000 ounces at a cash cost of sales of \$1,000 per ounce.

Key physical outputs for the quarter are summarised:

		December 15 Quarter	Previous Quarter	Rolling 12 Months
Mine Production	Source			
Trident -Ore Tonnes (t)	Trident U/g	177,668	120,524	622,804
Trident Grade (g/t Au)		3.55	4.22	4.66
Cowan Pits - Tonnes (t)	Cowan Pits	43,573	62,332	479,585
Cowan Grade (g/t Au)		1.60	1.72	1.91
Total Mine Production	Tonnes	221,241	182,856	1,102,389
	Grade	3.17	3.37	3.46
Plant Production				
Ore Processed	Tonnes	250,501	338,631	1,184,423
Head Grade	g/t gold	2.93	2.63	3.34
Recovery	%	92.4	88.2	90.5
Gold Produced	Ounces	21,839	25,288	115,230

The key fiscal outcomes for the quarter for HGO are summarised below:

	December 15 Quarter	Previous Quarter	Rolling 12 Months
Imputed Revenue (\$M)	34.01	38.43	177.18
Gold Price Received (\$/oz)	1,555	1,518	1,538
Total Cash Cost of Sales (\$/oz)	1,304	1,099	1,058
Cash Operating Surplus (EBITDA) \$M	5.53	10.64	55.22
Depreciation & Amortisation (\$/oz)	317	284	268
Total Cost of Sales (\$/oz)	1,621	1,383	1,327

Total capital reinvestment into HGO for the quarter is summarised:

	December 15 Quarter	Previous Quarter	Rolling 12 Months
Capital Mine Development (\$M)	3.53	4.81	17.35
Exploration (\$M)	0.63	1.63	4.35
Property Plant & Equipment (\$M)	0.37	0.13	1.04

### MT HENRY GOLD PROJECT

Metals X acquired all the data on the Mt Henry Gold Project (approximately 75 km south of the Higginsville plant) during the quarter and began re-working the data.

A Mineral Resource estimate at a 1 g/t cut-off grade (higher than the 0.4 g/t used by the previous owners) was completed for the Mt Henry Project, This revised estimate will be used in mining studies and is summarized below (note the Selene and North Scotia mineral resource estimates are yet to be updated by Metals X):

Deposit	Category	Tonnes	Grade (g/t Au)	Gold (oz)
Mt Henry	Measured	0	0.00	0
	Indicated	5,700,256	2.01	368,601
	Inferred	2,692,567	1.80	155,930
	Sub-total	8,392,823	1.94	524,531
Selene	Measured	0	0.00	0
	Indicated	8,591,909	1.61	444,740
	Inferred	2,358,008	1.31	99,313
	Sub-total	10,949,917	1.55	544,053
North Scotia	Measured	0	0.00	0
	Indicated	357,522	3.11	35,748
	Inferred	137,914	1.95	8,646
	Sub-total	495,436	2.79	44,395
Project Totals	Measured	0	0.00	0
	Indicated	14,649,687	1.80	849,089
	Inferred	5,188,489	1.58	263,889
	Total	19,838,176	1.74	1,112,979

Mining studies and permit submissions with an objective to have a first phase of mining to commence by mid-year are advanced. Initial plans are to mine the oxide and transitions zones of each ore system as a stage 1 operation with the stage 2 operation dealing with primary sulphide ores in the Mt Henry and Selene iron formations.

## MT HENRY METALLURGICAL REVIEWS

All historic metallurgical test-work was reviewed.

Mt Henry and Selene iron formations show excellent (+90%) recoveries from oxide and transition ores.

Mt Henry & Selene (iron formations) primary ores are sulphidic. These sources will require finer grinds than currently used at the HGO plant to liberate all the gold. The previous owners had elected to take a whole ore fine grinding approach, however indications are that pre and/or post concentration followed by fine grinding may be a lower cost and more practical solution. Metals X has commence flotation studies (flash-float) to assess the route of pre-concentration before finer grinding of a concentrate which is expected to be less than 10% of whole ore volume. Metals X is also assessing post leaching gravity concentration to assess whether concentration of leach tailings followed by finer grinding may be a more effective option enabling multiple ore sources to be blended.

The North Scotia deposit is free milling and has no metallurgical complications..

## **HGO EXPLORATION**

Exploration works at Higginsville continue to be focused on extensions to the existing Trident underground mine. Underground drilling has successfully extended Athena 50 lode, which is being mined with a best hit of 2.8 m at 46.15 g/t Au from 20 m in TUG2747. Drilling of deeper conceptual targets returned some good hits at Pluto, 6.4 m at 7.56 g/t Au from 210 m in TUG2669, and at Pluto Upper where TUG2669 returned 8 m at 9.43 g/t Au from 60 m.

Planning for infill drilling at the recently Mt Henry Project is underway with works planned for the ensuing quarter.

Refer to Appendix 1 for all significant exploration results during the quarter.

# **CENTRAL MURCHISON GOLD PROJECT (CMGP)** (MLX 100%)

The CMGP had a milestone quarter with the process plant being successfully commissioned in mid-October 2015. In the first operating quarter for the plant several scenarios and operating styles have been trialed. These include campaign milling for the initial 8 weeks of ore processing then continuous operation. To enable scale and capacity the low grade ores mined coincident with the high-grade (ROM) ores and low-grade stockpiles of varying hardness were blended to assess optimal operating conditions and costs. In the initial period this has proved invaluable to refining operating strategies for the project. The process plant will revert back to campaign milling in the ensuing quarter as ore stocks build up.

Simple conclusions from ore processing were that with the SAG mill (1.2 MW) and two ball mills (1.2 MW each) operating the plant could comfortably process at 240 tph on a 50 hard : 50 soft blend. Some calibration of throughput as the percentage of hard ore increased and decreased was determined. Further the plant could comfortably process at 180 tph with SAG mill and one ball mill operating. Indications are that as the project matures and the ore sources become predominantly harder primary ores from the various underground mines some secondary crushing or higher capacity integrated scats crushing may be required to maintain the expected throughputs.

The open pit mining progressed in the Yaloginda area with both the Batavia and Whangamata pits now mid-way through their lives. Both Batavia and Whangamata have so far proven to be more complex than originally thought with reconciliations showing considerably more tonnes at a lower grade and high-grade to low grade ore block delineation proving problematic. This has to a certain extent been mitigated by aggregation of high and low-grade blocks during mining. Both are ultimately expected to deliver their pre-mining outcomes on a fiscal basis. A third pit, a re-work of the Bluebird mine commenced during the quarter, with Surprise and Surprise West open pits to come on-line following the completion of Batavia and Whangamata.

Open pit mining also commenced at Reedy's area during the quarter with waste pre-stripping of the Jack Ryan pit. This pit will expose ore in the ensuing quarter and will be followed by or possibly be mined in conjunction with the Callisto, South Emu, Turn of the Tide, Culiculli and Culiculli North open pits.

Underground mining at Paddy's Flat commenced in mid October and by month end the decline was well established and the first level had exposed the spur and contact mineralisation of the Vivian Consols line of lode. Access to the Prohibition lodes was delayed due to issues with establishing ventilation, secondary egress and geotechnical studies for the same. This has resulted in a 6-week setback from where Paddy's was expected to be and has consequently deferred the majority of the planned early ore from the mine. It is expected that both ore driving on multiple levels and stoping of both Vivian-Consols and Prohibition lodes will commence in the ensuing quarter.

Significant enhancements to the overall CMGP will be made with the acquisition of the Comet mine, the agreed acquisition of a new 260 person village at Cue to serve the southern operations and a re-work of the large Big Bell mineral resource at a higher cut-off grade to enable a better financial outcome for the planned underground mine.

Financially, the project still remains in a capital intensive phase and the delays in the onset of high grade production and potential variations to the early ore extraction plans have had and will have an impact on project capex guidance. Previously Metals X was expecting a maximum negative cash outflow for the project of \$42.5 million and this is likely to increase to \$50.0 million.

Revised guidance for Calendar 2016 and the CMGP's first full year of operation is 115,000 ounces at a cash cost of sales of \$1,300 per ounce with positive outputs skewed to the second half.

Key physical outputs for the quarter are summarised below:

		December 15 Quarter	Previous Quarter	Rolling 12 Months
Mine Production	Source			
Underground Mines (t)	Paddy's Flat	10,084		10,084
Ore Grade (g/t Au)		1.88		1.88
Open Pits (t)	Yaloginda	197,364	145,208	342,572
Ore Grade (g/t Au)	Group*	1.06	1.48	1.26
Total Mine Production	Tonnes	207,448	145,208	352,656
	Grade	1.10	1.48	1.26
Plant Production				
Ore Processed (t)	Tonnes	287,477	0	287,477
Head Grade	g/t gold	1.06	0.00	1.06
Recovery (%)	%	90.8	0.0	90.8
Gold Produced	Ounces	8,934	0	8,934

\* high and low grade ores at Whangamata blended together as ROM.

The key fiscal outcomes for the quarter for CMGP are summarised below:

	December 15 Quarter	Previous Quarter	Rolling 12 Months
Imputed Revenue (\$M)	14.69	0	14.69
Avg. Gold Price Received (\$/oz)	1,630	0	1,630
Cash Cost of Sales (\$/oz)	1,166	0	1,166
Cash Operating Surplus (EBITDA \$M)	4.27	0	4.27
Depreciation & Amortisation (\$/oz)	133	0	133
Total Cost of Sales (\$/oz)	1,299	0	1,299

Total capital reinvestment into CMGP for the quarter is summarised:

	December 15 Quarter	Previous Quarter	Rolling 12 Months
Capital Mine Development (\$M)	6.09	2.69	9.57
Mine Properties & Dev'ment (\$M)	3.28	4.86	10.00
Exploration (\$M)	1.29	3.93	10.57
Property Plant & Equipment (\$M)	2.10	2.23	11.77

## **COMET GOLD MINE**

Metals X reached a binding agreement with Silver Lake Resources Limited (Silver Lake) to acquire the Comet Gold Project near Cue in Western Australia's Murchison Goldfield. The acquisition price is A\$3 million and the agreement is subject to Ministerial approval for transfer of the titles and FIRB (Foreign Investment Review Board) which have been received subsequent to the end of the quarter.

The Comet Gold Project covers an area of 50 km<sup>2</sup> and includes the Comet, Comet North and Pinnacles Mines and includes the Lunar/Solar Prospects. The total mineral resource estimate as previously announced (refer MLX ASX announcement of 25/11/2015) is 3.8 million tonnes at 2.9 g/t Au containing 353,000 ounces of gold. The core focus of Metals X will be the Comet mine (include in the above total), which Metals X plans to develop as an underground operation and which has a total mineral resource estimate of 1.46 million tonnes at 4.8 g/t Au containing over 225,000 ounces.

Metals X reviewed the dataset and has commenced working through the data, devising a development plan and completing permitting for a mine development as part of the CMGP overall project.

## **BIG BELL – REVISED RESOURCE ESTIMATE**

The Big Bell gold mine is a major long term contributor to the CMGP having the largest resource based and the largest single historic production base of 2.6 million ounces. The Big Bell mine was previously operated as a sub-level block cave and closed in 2003 when the gold price was below A\$500 per ounce.

The resource model at Big Bell was previously generated on a whole shear zone basis which smoothed into a bulk overall grade of approximately 3 g/t. A review of the earlier underground mining and the actual data from the previous block model has indicated that a higher grade core exists within the bulk ore zone and this is consistent enough to be considered as a higher grade mining target with the benefit of having all dilutant material coming from the lower grade surrounding shear. A new model internally differentiating the recognised higher-grade core of the Big Bell shear zone from the surrounding lower-grade material within the shear has been completed.

The outcomes of this review are a revised Mineral Resource Estimate at a 3 g/t cut-off for the Big Bell mine portion of the Big Bell trend overall resource as follows:

Prospect	JORC Category	Tonnes	Grade (g/t Au)	Gold (oz)
Mt Henry	Measured	0	0.00	0
	Indicated	7,008,149	4.23	953,091
	Inferred	2,513,350	4.03	325,648
	Total	9,521,499	4.18	1,278,739

This new resource model will be the subject of a revised mining study and development plan. The higher grade is expected to have a more positive economic outcome than the previously plan.

In the background works have commenced in preparation for the dewatering of the Big Bell mine, exposure of the portal and the longer term dewatering of the old sub-level cave. It is expected that it will take up to 9 months to gain access to the mine for rehabilitation purposes.

## **CMGP EXPLORATION**

Exploration works at the CMGP was focused on the next series of pits at the Reedy Mining Centre. Particularly encouraging results were received from the Turn of the Tide prospect with some of the better intercepts being 8 m at 3.87 g/t Au from 6 m in 15TTRC053, 6 m at 5.76 g/t Au from 31 m in 15TTRC059 and 4 m at 7.42 g/t Au from 6 m in 15TTRC082.

The longer lead-time Sherwood project north of Meekatharra also produced some encouragement, with 2 m at 12.18 g/t Au from 53 m in 15MNAC015 and 6 m at 3.74 g/t Au from 53 m in 15MNAC045 being the standouts from early stage wide spaced air-core drilling.

Refer to Appendix 1 for all significant exploration results during the quarter.

# FORTNUM GOLD PROJECT (FGO) (MLX 100%)

Metals X completed and settled the acquisition of the FGO (previously Grosvenor) from RNI NL during the quarter.

Metals X has taken over the operations and has commenced working on a feasibility study to re-start the operations. During the quarter most of the works were associated with permitting and engineering studies for the plant and infrastructure refurbishment.

Revised resource modelling on the resources as handed over commenced as did mine design and scheduling works. The development plan being worked on by Metals X involves a capital de-risking of the project by first commissioning on low-grade stocks. The plant will be re-commissioned taking the lowest realistic capital option and by obtaining synergies from the CMGP opportunities approximately 150 km south. It is contemplated that when the project achieves cash flow from low grade processing, open pit mining will commence. Initial studies indicate that there are ample open pit ores for two to three years of processing. Works will then commence on restarting the Starlight Underground Mine to lift overall outputs from the operations.

Works on drill testing of low-grade stockpiles will commence in the ensuing quarter with up to 1.5 million tonnes so far identified as having potential to fill the plan.

On acquisition (refer to MLX announcement of 31/7/2015) of the FGO Metals X picked up the historic mining centres of Labouchere and Fortnum (referred to previously by RNI as Grosvenor) as well as the Horseshoe and Peak Hill mining centres. The Fortnum gold project has an overall Mineral Resource estimate of 1.97 million ounces (refer Sep 2015 quarterly report) a 1.0M tpa CIL plant (in need of refurbishment) a 100 person workers village and all the plant and infrastructure required to operate the project.

## ROVER PROJECT (MLX 100%)

The latest drilling program at Rover 1 Prospect was completed and the new data including the following spectacular intercepts (previously announced) were uploaded into the dataset:

- WGR 1059 2A1 20.87 m at 14.7 g/t Au, 6.00% Cu, 0.22% Bi and 0.08% Co from 836 m.
- WGR 1060 5.46 m at 15.8 g/t Au, 4.03% Cu, 0.96% Bi and 0.06% Co from 937 m.
- WGR 1060 -1 6.28 m at 19.8 g/t Au, 6.97% Cu, 0.67% Bi and 0.07% Co from 906 m.

Previous development studies on Rover 1 were aimed at only the 300 m to 600 m vertical horizon or top 300 m of the ore system because most of the resource blocks below this level were predominantly in Inferred category. There were indications that a second bonanza zone sat between 600 and 800 m vertical depth and this drilling successfully targeted that zone.

A revised resource model and then feasibility study is planned.

# TIN DIVISION RENISON PROJECT (MLX 50%)

The December 2015 quarter was an excellent quarter for the Tin Division.

Quarterly tin production was 14.8% higher than the previous quarter at 1,889 tonnes. The Cash Costs of sales were down by 7.9% to \$16,076 and Total costs of sales were down by 7.5% to \$18,889, mainly as a result of the higher tin production.

Unfortunately, world tin prices continued to remain lacklustre, but generally in line with overall base metal sentiment. Despite the depressed tin prices the operations continued to remained profitable and generated a modest EBITDA \$9M (MLX 50% share \$4.5M) for the quarter.

The continued optimisation of the Renison Project progressed during the December quarter with further improvements in mine and processed tonnes (up 7.2% and 4.3% respectively). The concentrator continued to operate at better than nameplate capacity (700,000 tonnes per annum) and once again continued to report historically low tails and high recoveries. The Renison underground operations successfully ramped up production to meet the improved process plant throughput requirements.

Renison Mine (100%)	December 15 Quarter	Previous Quarter	Rolling 12 Months
Mine Production			
Ore Tonnes (t)	176,436	164,635	651,429
ROM Grade % Sn	1.41	1.37	1.44
Tin Concentrator			
Tonnes Processed (t)	179,288	171,968	658,796
Head Grade (% Sn)	1.42	1.34	1.44
Tail Grade (% Sn)	0.37	0.39	0.41
Tin Metal Produced (t)	1,889	1,645	6,816

Physical outputs for the quarter are summarised below:

The key fiscal outcomes for the quarter attributable to Metals X's 50% ownership of the Renison Project for the quarter are summarised below:

Fiscal Outcomes (MLX Share)	December 15 Quarter	Previous Quarter	Rolling 12 Months
Imputed Revenue (\$M)	19.7	17.2	72.3
Tin Price Received (\$/t Sn)	20,836	20,933	21,225
Cash Operating Cost (\$/t Sn)	12,719	14,280	14,119
Total Cash Cost of Sales (\$/t Sn)	16,076	17,454	17,369
Cash Operating Surplus (EBITDA) \$M	4.50	3.15	13.98
Depreciation & Amortisation (\$/t Sn)	2,297	2,422	2,150
Total Cost of Sales (\$/t Sn)	18,846	19,876	19,569

Capital re-investment in the Renison Project remains at expected levels consistent with sustainable development. A large stock of capitally and normally developed ore remains, which also creates additional flexibility and reduces the risk for future production. Drilling activity during the quarter was once again focussed on the upgrading and infilling of known resources.

Capital Re-investments (MLX Share)	December 15 Quarter	Previous Quarter	Rolling 12 Months
Capital Mine Development (\$M)	1.36	1.39	7.00
Exploration (\$M)	0.50	0.47	1.13
Property Plant & Equipment (\$M)	0.19	0.15	1.14

## **RENISON EXPLORATION AND DEVELOPMENT**

The Renison tin mine has once again demonstrated why it is considered the western world's premier tin orebody, with definition drilling this quarter again producing some exceptional drillhole intersections. Results from the currently producing Area 4 zone included 4.1 m at 10.33% Sn and 0.23% Cu from 125.6 m in U5469 and 4.8 m at 4.13% Sn and 0.67% Cu from 2.4 m in U5546. The remnant Flinder's zone has demonstrated the benefit of the intensive geological modelling work undertaken on site, with a result of 3.1 m at 7.66% Sn and 0.47% Cu in a zone previously considered exhausted.

Refer to Appendix 1 for all significant exploration results during the quarter.

# NICKEL DIVISION WINGELLINA PROJECT (MLX 100%)

Metals X's wholly owned Wingellina Project sits as one of the largest undeveloped nickel-cobalt-iron deposits in the world but sitting in a very depressed nickel market. The project is essentially on hold, however logistical aspects relating to have it ready for any up-tick in the nickel cycle are progressing.

## SCANDIUM - POTENTIALLY ANOTHER VALUABLE CO-PRODUCT

The coincidence of rare earth minerals, in particular scandium oxides with high iron limonite forming over layered intrusive ultrabasic rocks has prompted some evaluation of the potential for this other co-product from Wingellina.

Whilst most of the drill samples in the database have not been routinely assayed for scandium, some composited samples have been, and these show strong primary scandium results coincident in the ore.

Routine ICP assay scans of 350 two-metre composite samples from ten RC drill holes within the Wingellina deposit revealed that the ore (>0.5% Ni) contains an average of about 40 ppm scandium. Scandium varies from less than 10 ppm to 146 ppm in the ore, and the limited data to date suggests a general positive relationship with iron and vanadium content. The samples were not selected to specifically test for scandium, but were designed to give preliminary geochemical signatures for ores and waste in the deposit zone. The ten holes sampled are evenly distributed over an 8 km strike length of the deposit to specifically provide an overall representative sample.

During metallurgical testing of two representative run-of-mine ore samples from the Wingellina deposit, it was noted that the scandium was readily taken into solution during the ore treatment process and could be extracted from solution as a by-product during routine nickel processing. Samples of the solids taken from various points in the nickel extraction process showed the waste precipitate to contain up 440 ppm scandium.

Recent pilot-scale testing of the Wingellina ore using a different process route demonstrated that scandium was also extracted by that process, and could be extracted from solution with high efficiency.

Scandium is primarily used in aluminum-scandium alloys for aerospace industry components and for sports equipment such as bicycle frames, fishing rods, golf iron shafts and baseball bats. Scandium iodide is used in mercury vapor lamps, which are used to replicate sunlight in studios for the film and television industry. The scandium market is known to be a supply constrained market with demand, consumption and application controlled by scarcity. World consumption of scandium is low and currently estimated to be in the 30-50 tonne range. Despite this low level of use, scandium offers significant benefits. Particularly promising is the strengthening of aluminium alloys with as little as 0.5% scandium. Scandium-stabilised zirconia enjoys a growing market demand for use as a high efficiency electrolyte in solid oxide fuel cells. Scandium oxide prices currently range from \$3,500 to \$5,000 per kilogram depending on quality-purity characteristics.

Refer to Appendix 1 for all significant exploration results during the quarter.

### WINGELLINA APPROVALS

The final Public Environmental Review document was completed and approved by the EPA for release to the public for an 8-week review period on 14 September 2015 and ended on 9 November 2015. There were 6 public submissions received by the department none of which raised any specific issues that required a response from Metals X or that could impact the project. The Office of the Department of the Environment Protection Authority has requested some minor additional and specific information prior to granting its approval.

Inter-action with the State and Federal Governments in relation to infrastructure requirements within Central Australia continued during the quarter again with strong co-operation and a desire to assist with the development of the project being a feature.

## **COMPETENT PERSONS STATEMENTS**

The information in this report that relates to Mineral Resources compiled by Metals X technical employees under the supervision of Mr. Jake Russell B.Sc. (Hons), who is a member of the Australian Institute of Geoscientists. Mr Russell is a full-time employee of the company, and has sufficient experience which is relevant to the styles of mineralisation and types of deposit under consideration and to the activities which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Russell consents to the inclusion in this report of the matters based on his information in the form and context in which it appears. Mr Russell is eligible to participate in short and long term incentive plans and holds performance rights in the Company as has been previously disclosed.

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Mr Peter Cook BSc (App. Geol.), MSc (Min. Econ.) MAusIMM (11072) who has sufficient experience that is relevant to the styles of mineralisation, the types of deposits under consideration and the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Cook is the CEO and an Executive Director and a full time employee of Metals X Limited and consents to the inclusion in the reports of the matters based on his information in the form and context in which it appears. Mr Cook is a shareholder of Metals X and is entitled to participate in Metals X's short term and long term incentive plans details of which are included in Metals X's Remuneration Report in the Annual Report.

# CORPORATE

Metals X ended the December quarter with un-audited cash working capital and investments of \$63.1 million.

# **CAPITAL STRUCTURE**

The Company has the following equities on issue as of 31 December 2015:

Fully Paid Ordinary Shares	458,181,038
Performance Rights	3,388,155
Fully Diluted Equity	461,569,193

During the quarter 18 million shares were allotted in settlement of the Fortnum Acquisition

## MAJOR SHAREHOLDERS

The major shareholders of the Company as of 31 December 2015 are:

APAC Resources (HKEX:1104)	21.70%
Jinchuan Group	9.60%
BlackRock Group	9.49%

## TAKEOVER OFFER FOR ADITYA BIRLA LIMITED (ASX:ABY)

Metals X made an off-market all-scrip and conditional takeover offer for all the shares in Aditya Birla Minerals Ltd (ABY) during the quarter on a ratio of 1 Metals X share for every 5 shares in ABY. Metals X sweetened the offer ration to 1 for 4.75 and waived most conditions apart form basic third part protection conditions and extended the offer to 24 February 2016. Metals X currently has acceptances representing a voting power of 25.5% as of 25 January 2016.

End

# APPENDIX 1 – SIGNIFICANT EXPLORATION RESULTS FOR THE QUARTER SOUTH KALGOORLIE OPERATIONS

SKO - Underground - Significant (>5gm metres) Intercepts for December 2015 Quarter

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
НВЈ	HBJUG0062	366,795	6,565,888	201	23.47m at 2.8g/t Au	161.0	-25	100
					9.6m at 2.23g/t Au	205.7		
	HBJUG0063	366,794	6,565,889	201	13m at 0.6g/t Au	188.0	-43	88
					3.68m at 2.52g/t Au	216.3		
					1.34m at 12.67g/t Au	223.8		
	HBJUG0071	366,545	6,566,437	115	18.17m at 1.95g/t Au	54.0	-6	8
					3.39m at 1.99g/t Au	95.0		
					22.26m at 1.95g/t Au	102.3		
					18.47m at 1.1g/t Au	127.7		
	HBJUG0072	366,548	6,566,433	115	3m at 2.14g/t Au	6.0	-21	103
					30.05m at 0.74g/t Au	13.0		
					27.63m at 0.56g/t Au	89.0		
	HBJUG0073	366,545	6,566,437	115	9.95m at 2.45g/t Au	25.1	-20	12
					4.93m at 1.2g/t Au	38.4		
					16.2m at 2.32g/t Au	87.8		
					5.14m at 4.57g/t Au	119.0		
	HBJUG0076	366,547	6,566,433	114	41.85m at 1.8g/t Au	18.2	-56	93
					3.58m at 17.36g/t Au	104.0		
					0.45m at 20.8g/t Au	113.0		
	HBJUG0077	366,546	6,566,435	114	37m at 0.95g/t Au	24.0	-59	53
					53.43m at 1.12g/t Au	86.0		
	HBJUG0080	366,547	6,566,434	114	28.21m at 1.81g/t Au	24.8	-63	76
					11m at 0.91g/t Au	55.0		
					51.46m at 2.98g/t Au	92.0		
	HBJUG0081	366,546	6,566,435	114	42m at 1.76 g/t Au	31.0	-59	38
	HBJUG0081A	366,546	6,566,435	114	6.56m at 2.02 g/t Au	13.6	-60	40
					32.37m at 1.43 g/t Au	31.6		
					8m at 1.37 g/t Au	66.0		
					53m at 0.80 g/t Au	81.0		
					25.8m at 2.40 g/t Au	136.0		
	HBJUG0084	366,547	6,566,433	114	21m at 1.84g/t Au	26.0	-64	93
					24m at 1g/t Au	49.0		
					17m at 0.87g/t Au	104.0		
					23.69m at 2.09g/t Au	127.0		

SKO - Underground - Significant (>5gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
HBJ (Continued)	HBJUG0085	366,546	6,566,434	114	7.71m at 0.93g/t Au	11.7	-67	58
					64.77m at 2.17g/t Au	26.2		
					14m at 1.08g/t Au	100.0		
					55.8m at 1.57g/t Au	116.0		
	HBJUG0086	366,546	6,566,435	114	4.01m at 2.83 g/t Au	19.9	-58	29
					35.26m at 2.09 g/t Au	49.7		
					61m at 1.87 g/t Au	91.0		
	HBJUG0086A	366,545	6,566,435	114	10.53m at 1.83 g/t Au	16.5		
					3.72m at 1.28 g/t Au	47.3	-60	29
					24.44m at 1.58 g/t Au	56.6		
					28.27m at 1.53 g/t Au	93.0		
					29m at 1.07 g/t Au	128.0		
					37m at 1.66 g/t Au	159.0		
	HBJUG0088	366,875	6,566,030	146	10.84m at 1.37g/t Au	-	-12	222
					6.61m at 0.89g/t Au	12.8		
	HBJUG0090	366,876	6,566,029	146	19.74m at 0.91g/t Au	-	-9	189
					9.04m at 0.81g/t Au	36.7		
	HBJUG0091	266,876	6,566,029	145	9.8m at 1.31g/t Au	-	-34	189
					12.79m at 0.72g/t Au	12.8		
					5.32m at 1.64g/t Au	44.4		
	HBJUG0092	366,875	6,566,031	145	7m at 1.07g/t Au	-	-51	243
					7.5m at 1.43g/t Au	21.3		
					4m at 5.94g/t Au	37.2		
	HBJUG0093	366,875	6,566,030	145	7.97m at 1.32g/t Au	5.0	-51	220
					4m at 1.54g/t Au	26.5		
					10.1m at 3.07g/t Au	33.3		
	HBJUG0095	366,547	6,566,434	116	2.52m at 2.23 g/t Au	8.5	8	71
					26.3m at 1.34 g/t Au	13.4		
					12.9m at 3.03 g/t Au	54.7		
	HBJUG0096	366,546	6,566,435	116	4.35m at 2.07 g/t Au	9.7	8	62
					7.46m at 5.47 g/t Au	23.9		
					8.6m at 4.89 g/t Au	37.0		
					3m at 1.99 g/t Au	57.6		
					4m at 3.27 g/t Au	62.6		

SKO - Underground - Significant (>5gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
HBJ (Continued)	HBJUG0108	366,550	6,566,526	115	2.88m at 3.08 g/t Au	19.7	-25	54
	HBJUG0109	366,551	6,566,524	115	2.5m at 1.81 g/t Au	31.0	-24	91
					4.68m at 4.51 g/t Au	18.3		
	HBJUG0110	366,549	6,566,527	115	10.17m at 0.55 g/t Au	-	-37	18
					2.75m at 1.87 g/t Au	28.9		
					26.24m at 2.34 g/t Au	33.6		
	HBJUG0111	366,551	6,566,525	114	8.28m at 1.59 g/t Au	22.7	-47	70
					4.96m at 1.22 g/t Au	39.0		
	HBJUG0112	366,552	6,566,524	114	6.1m at 0.83 g/t Au	-	-42	103
					1.82m at 7.21 g/t Au	15.7		
					14.88m at 2.07 g/t Au	19.1		
					8.44m at 2.53 g/t Au	43.0		
	HBJUG0113	366,549	6,566,526	114	10m at 0.51 g/t Au	-	-49	22
					5.5m at 2.08 g/t Au	40.4		
					2.73m at 58.94 g/t Au	69.9		
	HBJUG0114	366,550	6,566,526	114	9m at 0.62 g/t Au	-	-56	52
					9.32m at 2.74 g/t Au	26.7		
					9m at 0.71 g/t Au	50.0		
	HBJUG0120	366,569	6,566,545	111	3m at 3.94 g/t Au	-	24	253
					2.12m at 9.24 g/t Au	4.7		
					2.19m at 2.78 g/t Au	41.0		
	HBJUG0121	366,569	6,566,545	111	1.55m at 4.02 g/t Au	4.0	-7	252
	HBJUG0122	366,569	6,566,545	111	3.77m at 6.08 g/t Au	0.2	-40	259
					14.05m at 4.25 g/t Au	43.0		
	HBJUG0123	366,545	6,566,584	112	11.89m at 2.33 g/t Au	14.4	-47	208
	HBJUG0124	366,545	6,566,584	112	3.75m at 2.67 g/t Au	-	24	224
					6.88m at 2.14 g/t Au	10.8		
	HBJUG0125	366,545	6,566,584	112	9.16m at 0.80 g/t Au	9.4	4	223
					2.88m at 2.20 g/t Au	25.7		
					7.65m at 0.84 g/t Au	38.1		
	HBJUG0126	366,545	6,566,584	112	9.61m at 0.75 g/t Au	10.8	-33	225
					12.05m at 0.88 g/t Au	34.0		

SKO - Underground - Significant (>5gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
HBJ (Continued)	HBJUG0127	366,545	6,566,584	112	4.19m at 6.54 g/t Au	-	27	255
					3.16m at 4.53 g/t Au	16.8		
					3.98m at 1.70 g/t Au	42.9		
	HBJUG0128	366,545	6,566,584	112	3.23m at 4.50 g/t Au	-	6	252
	HBJUG0128	366,545	6,566,584	112	4m at 2.56 g/t Au	12.0	6	252
	HBJUG0128	366,545	6,566,584	112	7m at 3.20 g/t Au	36.0	6	252
	HBJUG0129	366,545	6,566,584	112	5.91m at 2.33 g/t Au	11.3	-23	256
					7m at 4.48 g/t Au	37.6		
	HBJUG0130	366,545	6,566,584	112	3.5m at 2.17 g/t Au	-	-44	289
					10.25m at 0.78 g/t Au	11.8		
					10.25m at 0.95 g/t Au	38.2		
	HBJUG0131	366,545	6,566,584	112	4.54m at 3.33 g/t Au	-	-54	259
					14.1m at 1.70 g/t Au	13.5		
					4.53m at 1.52 g/t Au	47.2		
	HBJUG0132	366,545	6,566,584	112	4m at 1.32 g/t Au	-	24	275
	HBJUG0133	366,545	6,566,584	112	4m at 2.10 g/t Au	-	6	276
					6m at 1.27 g/t Au	41.0		
	HBJUG0134	366,545	6,566,584	112	3.9m at 17.71 g/t Au	-	-22	280
					5.2m at 1.09 g/t Au	13.3		
					13.95m at 1.38 g/t Au	41.0		
	HBJUG0135	366,545	6,566,584	112	5.44m at 2.12 g/t Au	-	-41	282
					3m at 4.63 g/t Au	42.3		
					3.97m at 3.17 g/t Au	61.8		
	HBJUG0136	366,545	6,566,584	112	4.72m at 2.25 g/t Au	1.0	-51	286
					3.08m at 2.55 g/t Au	18.9		
					9.5m at 0.56 g/t Au	54.5		
	HBJUG0137	366,545	6,566,584	112	11.9m at 2.92 g/t Au	-	3	295
					9.41m at 0.99 g/t Au	22.1		
					7m at 2.03 g/t Au	52.9		
	HBJUG0138	366,545	6,566,584	112	10.5m at 2.82 g/t Au	1.0	-18	301
					10.8m at 2.38 g/t Au	53.7		
	HBJUG0139	366,545	6,566,584	112	2.7m at 1.83 g/t Au	51.3	-35	300
					7.5m at 2.72 g/t Au	2.0		

SKO - Underground - Significant (>5gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
HBJ (Continued)	HBJUG0140	366,545	6,566,584	112	9.46m at 1.35 g/t Au	-	-44	300
					12.19m at 0.96 g/t Au	56.9		
	HBJUG0141	366,550	6,566,586	112	NSI			
	HBJUG0141A	366,550	6,566,586	112	15m at 0.58 g/t Au	17.0	-3	108
	HBJUG0142	366,550	6,566,586	112	29.3m at 1.37 g/t Au	8.0	-2	69
	HBJUG0143	366,550	6,566,586	112	13m at 0.55 g/t Au	22.0	-2	39
					8.52m at 1.04 g/t Au	40.0		

SKO - Open Pit - Significant (>5gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Georges Reward	CAGC394	381,730	6,590,210	357	16m at 3.92 g/t Au	20.0	-60	90
	CAGC395	381,735	6,590,210	357	8m at 1.74 g/t Au	17.0	-60	91
					7m at 2.49 g/t Au	29.0		
	CAGC396	381,740	6,590,210	357	6m at 0.98 g/t Au	13.0	-60	90
					8m at 0.92 g/t Au	22.0		
	CAGC400	381,775	6,590,210	356	14m at 1.22 g/t Au	22.0	-60	90
	CAGC401	381,778	6,590,210	356	16m at 1.77 g/t Au	20.0	-60	90
	CAGC402	381,785	6,590,210	356	11m at 1.71 g/t Au	25.0	-59	90
	CAGC403	381,790	6,590,210	356	12m at 2.33 g/t Au	24.0	-58	90
	CAGC404	381,797	6,590,210	356	9m at 2.88 g/t Au	19.0	-59	90
	CAGC405	381,803	6,590,210	356	10m at 1.42 g/t Au	14.0	-59	90
	CAGC410	381,735	6,590,215	357	16m at 4.21 g/t Au	20.0	-60	94
	CAGC411	381,740	6,590,215	357	13m at 5.54 g/t Au	10.0	-59	92
					10m at 4.16 g/t Au	26.0		
	CAGC412	381,745	6,590,215	357	9m at 2.33 g/t Au	8.0	-58	90
					8m at 4.46 g/t Au	23.0		
	CAGC413	381,749	6,590,215	357	7m at 0.89 g/t Au	4.0	-60	91
	CAGC414	381,755	6,590,215	357	5m at 1.15 g/t Au	16.0	-60	90
	CAGC415	381,765	6,590,215	357	9m at 0.57 g/t Au	22.0	-57	90
	CAGC416	381,769	6,590,215	357	11m at 1.57 g/t Au	25.0	-57	90
	CAGC417	381,775	6,590,215	357	16m at 1.91 g/t Au	20.0	-57	90
	CAGC418	381,780	6,590,215	357	21m at 3.08 g/t Au	15.0	-59	90
	CAGC419	381,785	6,590,215	356	21m at 2.86 g/t Au	15.0	-59	90

SKO - Open Pit - Significant (>5gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Georges Reward	CAGC420	381,790	6,590,215	356	24m at 2.18 g/t Au	12.0	-58	92
(Continued)	CAGC421	381,795	6,590,215	356	28m at 2.18 g/t Au	6.0	-59	92
	CAGC422	381,800	6,590,215	356	16m at 1.31 g/t Au	8.0	-58	90
					3m at 2.64 g/t Au	27.0		
	CAGC423	381,805	6,590,215	356	6m at 4.25 g/t Au	6.0	-58	90
					6m at 0.95 g/t Au	16.0		
	CAGC424	381,810	6,590,215	356	9m at 0.93 g/t Au	-	-58	90
	CAGC429	381,740	6,590,220	357	19m at 1.73 g/t Au	17.0	-60	90
	CAGC430	381,750	6,590,220	357	11m at 6.99 g/t Au	4.0	-59	90
					9m at 1.57 g/t Au	21.0		
	CAGC431	381,760	6,590,220	357	4m at 2.88 g/t Au	32.0	-60	90
	CAGC432	381,775	6,590,220	357	16m at 3.57 g/t Au	20.0	-60	93
	CAGC433	381,781	6,590,220	356	19m at 3.08 g/t Au	17.0	-58	91
	CAGC434	381,791	6,590,220	356	21m at 2.65 g/t Au	9.0	-59	93
	CAGC434	381,791	6,590,220	356	3m at 1.81 g/t Au	32.0	-59	93
	CAGC439	381,750	6,590,225	357	21m at 7.15 g/t Au	15.0	-60	90
	CAGC440	381,755	6,590,225	357	13m at 5.02 g/t Au	-	-60	92
					13m at 1.97 g/t Au	19.0		
	CAGC441	381,759	6,590,225	357	8m at 2.12 g/t Au	-	-60	91
					9m at 2.60 g/t Au	18.0		
	CAGC442	381,765	6,590,225	357	3m at 3.22 g/t Au	27.0	-60	90
	CAGC443	381,770	6,590,225	356	6m at 2.19 g/t Au	22.0	-60	90
	CAGC444	381,775	6,590,225	356	6m at 6.81 g/t Au	19.0	-60	92
	CAGC445	381,780	6,590,225	356	22m at 2.17 g/t Au	14.0	-60	92
	CAGC446	381,784	6,590,225	356	22m at 1.64 g/t Au	14.0	-58	93
	CAGC447	381,790	6,590,225	356	8m at 1.57 g/t Au	9.0	-57	95
					13m at 1.38 g/t Au	20.0		
	CAGC448	381,795	6,590,225	356	22m at 1.30 g/t Au	-	-58	96
	CAGC454	381,745	6,590,230	357	4m at 1.83 g/t Au	32.0	-59	96
	CAGC455	381,750	6,590,230	357	19m at 14.86 g/t Au	17.0	-60	91
	CAGC456	381,755	6,590,230	357	23m at 9.95 g/t Au	13.0	-60	93
	CAGC457	381,760	6,590,230	357	31m at 2.88 g/t Au	-	-60	91
	CAGC458	381,764	6,590,230	357	11m at 1.09 g/t Au	14.0	-60	90

**SOUTH KALGOORLIE OPERATIONS** (CONTINUED) SKO - Open Pit - Significant (>5gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Georges Reward	CAGC459	381,770	6,590,230	356	10m at 2.15 g/t Au	8.0	-60	93
(Continued)	CAGC460	381,775	6,590,230	356	10m at 0.93 g/t Au	4.0	-60	91
					4m at 1.93 g/t Au	32.0		
	CAGC461	381,785	6,590,230	356	4m at 1.61 g/t Au	-	-60	94
					15m at 1.99 g/t Au	21.0		
	CAGC462	381,795	6,590,230	356	5m at 1.21 g/t Au	13.0	-57	96
					10m at 0.82 g/t Au	20.0		
	CAGC463	381,805	6,590,230	356	8m at 0.78 g/t Au	13.0	-60	94
	CAGC467	381,749	6,590,235	357	9m at 1.08 g/t Au	27.0	-60	95
	CAGC468	381,755	6,590,235	357	15m at 3.88 g/t Au	19.0	-60	92
	CAGC469	381,760	6,590,235	357	18m at 8.81 g/t Au	9.0	-60	91
	CAGC470	381,765	6,590,235	357	23m at 7.30 g/t Au	-	-60	91
	CAGC471	381,770	6,590,235	357	13m at 3.92 g/t Au	-	-60	90
	CAGC472	381,775	6,590,235	357	5m at 1.42 g/t Au	-	-60	90
	CAGC473	381,780	6,590,235	356	7m at 6.17 g/t Au	29.0	-60	90
	CAGC474	381,790	6,590,235	356	13m at 1.52 g/t Au	18.0	-60	93
	CAGC475	381,800	6,590,235	356	12m at 0.64 g/t Au	7.0	-59	93
	CAGC479	381,750	6,590,240	357	6m at 2.09 g/t Au	30.0	-59	92
	CAGC480	381,755	6,590,240	357	13m at 0.82 g/t Au	21.0	-59	97
	CAGC481	381,760	6,590,240	357	6m at 3.77 g/t Au	13.0	-60	92
					7m at 1.21 g/t Au	21.0		
	CAGC482	381,765	6,590,240	357	11m at 2.71 g/t Au	5.0	-59	93
					4m at 3.23 g/t Au	18.0		
					7m at 2.51 g/t Au	29.0		
	CAGC483	381,771	6,590,240	357	10m at 13.84 g/t Au	-	-60	93
	CAGC488	381,755	6,590,245	357	8m at 0.81 g/t Au	23.0	-60	94
	CAGC489	381,760	6,590,245	357	11m at 1.18 g/t Au	19.0	-60	94
	CAGC490	381,765	6,590,245	357	5m at 2.00 g/t Au	8.0	-60	92
					8m at 2.44 g/t Au	15.0		
	CAGC491	381,770	6,590,245	357	9m at 3.31 g/t Au	-	-60	91
	CAGC492	381,775	6,590,245	357	6m at 1.96 g/t Au	-	-60	90
	CAGC499	381,755	6,590,250	357	5m at 1.41 g/t Au	30.0	-60	95
	CAGC500	381,764	6,590,250	357	14m at 1.09 g/t Au	12.0	-60	90
	CAGC539	381,725	6,590,210	358	11m at 3.29 g/t Au	25.0	-60	91
	CAGC547	381,745	6,590,225	358	15m at 6.36 g/t Au	20.0	-60	90

SKO - Exploration - Significant (>2gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Golden Wok	GWC001	367,759	6,557,446	360	8m at 1.75 g/t Au	16.0	-59	52
	GWC002	367,751	6,557,440	360	10m at 0.75 g/t Au	29.0	-59	53
	GWC004	367,708	6,557,510	358	7m at 0.91 g/t Au	25.0	-59	53
	GWC006	367,666	6,557,580	356	4m at 1.29 g/t Au	28.0	-59	55
					3m at 1.03 g/t Au	36.0		
	GWC007	367,633	6,557,641	355	6m at 0.77 g/t Au	34.0	-59	59
	GWC008	367,622	6,557,637	355	6m at 0.76 g/t Au	47.0	-60	60
Lancashire Lass	LLC001	367,126	6,557,875	358	4m at 0.81 g/t Au	9.0	-60	69
	LLC003	367,151	6,557,826	357	6m at 0.48 g/t Au	22.0	-58	68
	LLC004	367,172	6,557,835	356	3m at 0.84 g/t Au	26.0	-59	66
	LLC005	367,185	6,557,841	356	3m at 0.98 g/t Au	16.0	-59	65
	LLC006	367,175	6,557,815	356	5m at 1.73 g/t Au	43.0	-58	66
	LLC007	367,195	6,557,823	355	2m at 1.10 g/t Au	17.0	-59	69
	LLC008	367,207	6,557,829	355	2m at 1.07 g/t Au	22.0	-59	68
	LLC009	367,223	6,557,814	354	3m at 0.84 g/t Au	11.0	-59	64
	LLC011	367,234	6,557,720	353	5m at 0.41 g/t Au	26.0	-60	68
	LLC013	367,237	6,557,700	353	5m at 0.81 g/t Au	37.0	-59	78
	LLC014	367,260	6,557,709	353	6m at 0.64 g/t Au	18.0	-59	67
Luna	LUC006	367,305	6,558,364	350	6m at 0.41 g/t Au	16.0	-60	47
	LUC007	367,224	6,558,507	345	9m at 0.67 g/t Au	4.0	-57	55
Shropshire Lass	SLC014	367,502	6,557,443	365	2m at 1.33 g/t Au	16.0	-56	51
	SLC017	367,444	6,557,395	372	6m at 0.37 g/t Au	-	-57	51
	SLC018	367,419	6,557,377	373	5m at 2.16 g/t Au	31.0	-59	52
	SLC019	367,412	6,557,583	358	2m at 1.23 g/t Au	28.0	-59	52

## **HIGGINSVILLE GOLD OPERATIONS**

HGO - Trident - Significant (>5gm metres) Intercepts for December 2015 Quarter

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Ares	TUG2624A	6,489,987	379,990	674	3.5m at 1.7g/t	71	39	222
	TUG2628	6,489,987	379,990	675	2.7m at 17.06g/t	54	57	241
	TUG2629	6,489,987	379,990	673	5.7m at 4.12g/t	53	33	251
	TUG2630	6,489,987	379,990	672	3.3m at 1.9g/t	62	7	235
	TUG2633	6,489,987	379,990	672	3m at 2.28g/t	61	-2	273
	TUG2634B	6,490,010	379,979	677	1.3m at 6.27g/t	49	70	226

**HIGGINSVILLE GOLD OPERATIONS** (CONTINUED) HGO - Trident - Significant (>5gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Area (Continued)	TUG2635A	6,490,022	379,972	676	3.9m at 3.23g/t	26	52	235
	TUG2636	6,490,021	379,972	674	3.6m at 3.22g/t	27	11	252
	TUG2638	6,490,023	379,971	675	3.8m at 8.22g/t	25	33	290
	TUG2639	6,490,022	379,971	673	3.6m at 2.02g/t	31	-5	280
	TUG2641	6,490,047	379,966	675	3.5m at 2.26g/t	23	13	246
	TUG2642	6,490,049	379,967	675	6.5m at 1.22g/t	23	16	276
	TUG2643	6,490,049	379,967	674	7.8m at 2.54g/t	32	-9	271
	TUG2645	6,490,050	379,968	674	3.4m at 3.63g/t	35	-4	302
Artemis	TUG2596A	6,489,935	379,948	385	3m at 2.09g/t	147	-5	242
	TUG2597	6,489,937	379,947	385	2.4m at 5.5g/t	131	-27	275
	TUG2600	6,489,938	379,948	384	0.6m at 10.5g/t	170	-45	296
	TUG2607	6,489,940	379,948	384	0.4m at 58.7g/t	146	-35	305
	TUG2608	6,489,940	379,948	384	2.2m at 4.53g/t	176	-40	316
	TUG2609	6,489,939	379,948	384	3.8m at 1.45g/t	190	-40	322
	TUG2611	6,489,939	379,948	384	4.3m at 71.46g/t	155	-33	315
	TUG2613A	6,489,939	379,948	384	1.5m at 4.65g/t	184	-35	326
	TUG2615	6,489,940	379,948	384	2.1m at 51.75g/t	150	-30	319
	TUG2616	6,489,940	379,948	384	1.3m at 8.11g/t	140	-27	310
	TUG2617	6,489,938	379,947	385	1.9m at 35.35g/t	125	-21	306
	TUG2650	6,489,935	379,948	386	2.9m at 3.89g/t	148	0	242
	TUG2651	6,489,935	379,948	385	3m at 2g/t	150	-12	242
Helios Core	TUG2573	6,490,081	379,958	407	7m at 8.35g/t	164	-24	329
	TUG2614	6,489,939	379,948	384	4.2m at 5.7g/t	157	-32	321
	TUG2620	6,489,940	379,948	384	3.5m at 6.45g/t	146	-23	324
	TUG2621	6,489,941	379,947	384	13.6m at 7.01g/t	144	-20	327
	TUG2622	6,489,940	379,947	384	4.7m at 2.9g/t	135	-17	322
Helios Shear	TUG2620	6,489,940	379,948	384	33.2m at 1.253g/t	141	-23	324
	TUG2621	6,489,941	379,947	384	20.2m at 2.543g/t	137	-20	327
	TUG2622	6,489,940	379,947	384	27.5m at 3.36g/t	130	-17	322
Pluto	TUG2592	6,490,112	379,996	408	3.7m at 3.32g/t	213	-47	302
					2.3m at 7.74g/t	228		
	TUG2594	6,490,112	379,997	408	9.2m at 1.04g/t	256	-51	314
Pluto East	TUG2594	6,490,112	379,997	408	1.8m at 3.05g/t	266	-51	314
	TUG2595	6,490,112	379,997	408	1.8m at 6.16g/t	256	-54	314

APPENDIX 1 – SIGNIFICANT EXPLORATION RESULTS FOR THE QUARTER **24** 

# **HIGGINSVILLE GOLD OPERATIONS** (CONTINUED) HGO - Open Pits - Significant (>5gm metres) Intercepts for December 2015 Quarter

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Fairplay	FPGC001	379,464	6,486,335	1,299	2m at 0.68g/t Au	23	-60	270
	FPGC013	379,475	6,486,505	1,299	2m at 2.11g/t Au	35	-60	270
	FPGC014	379,263	6,486,680	1,297	4m at 29.67g/t Au	28	-60	270
					2m at 2.28g/t Au	35	-60	270
	FPGC017	379,267	6,486,670	1,297	2m at 1.61g/t Au	19	-60	270
					2m at 1.22g/t Au	29	-60	270
	FPGC018	379,262	6,486,660	1,298	2m at 0.8g/t Au	24	-60	270
					2m at 3.9g/t Au	28	-60	270
	FPGC019	379,242	6,486,651	1,298	2m at 0.53g/t Au	13	-60	270
	FPGC020	379,258	6,486,651	1,298	2m at 26.1g/t Au	18	-60	270
Napoleon	NAGCO63	69,273	11,355	470	6m at 1.32g/t Au	15	-60	55
	NAGCO64	69,283	11,355	470	4m at 1.43g/t Au	6	-60	55
					3m at 1.57g/t Au	13	-60	55
					3m at 12.79g/t Au	19	-60	55
	NAGCO65	69,261	11,365	470	2m at 1g/t Au	18	-60	55
					3m at 15.5g/t Au	36	-60	55
	NAGC066	69,271	11,365	470	5m at 1.31g/t Au	16	-60	55
					2m at 7.25g/t Au	28	-60	55
					8m at 1.23g/t Au	34	-60	55
	NAGCO67	69,281	11,365	470	12m at 1.06g/t Au	4	-60	55
	NAGCO68	69,291	11,365	470	7m at 1.58g/t Au	1	-60	55
					3m at 3.88g/t Au	12	-60	55
	NAGCO69	69,237	11,375	470	13m at 3.35g/t Au	10	-60	55
					3m at 1.3g/t Au	29	-60	55
					6m at 1.85g/t Au	38	-60	55
					9m at 1.89g/t Au	46	-60	55
	NAGC070	69,247	11,375	470	6m at 1.13g/t Au	2	-60	55
					2m at 0.84g/t Au	33	-60	55
					3m at 4.34g/t Au	44	-60	55
	NAGC071	69,260	11,375	470	5m at 1.17g/t Au	19	-60	55
					3m at 44.06g/t Au	32	-60	55
	NAGC072	69,273	11,375	470	10m at 1.37g/t Au	3	-60	55
					9m at 1.27g/t Au	31	-60	55

**HIGGINSVILLE GOLD OPERATIONS** (CONTINUED) HGO - Open Pits - Significant (>5gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Napoleon (Continued)	NAGC073	69,283	11,375	470	13m at 1.6g/t Au	1	-60	55
					2m at 1.9g/t Au	18	-60	55
	NAGC074	69,274	11,380	470	9m at 1.31g/t Au	9	-60	55
	NAGC075	69,234	11,385	470	4m at 4.25g/t Au	11	-60	55
					4m at 1.59g/t Au	20	-60	55
					6m at 4.15g/t Au	29	-60	55
					17m at 4.99g/t Au	36	-60	55
	NAGC076	69,257	11,385	470	17m at 1.73g/t Au	17	-60	55
	NAGC077	69,273	11,385	470	5m at 5.14g/t Au	16	-60	55
					3m at 1.1g/t Au	27	-60	55
	NAGC078	69,282	11,385	470	2m at 2.47g/t Au	0	-60	55
					11m at 2.44g/t Au	6	-60	55
					2m at 0.55g/t Au	20	-60	55
	NAGC079	69,292	11,385	470	2m at 4.1g/t Au	1	-60	55
					2m at 1.08g/t Au	8	-60	55
	NAGC080	69,244	11,395	470	5m at 0.78g/t Au	10	-60	55
					9m at 1.65g/t Au	19	-60	55
					5m at 2.56g/t Au	30	-60	55
					3m at 1.58g/t Au	39	-60	55
	NAGCO81	69,262	11,395	470	7m at 4.93g/t Au	21	-60	55
	NAGC082	69,274	11,395	470	21m at 2.13g/t Au	8	-60	55
					6m at 1.94g/t Au	33	-60	55
	NAGC084	69,252	11,400	470	9m at 4.26g/t Au	15	-60	55
					2m at 0.68g/t Au	8	-60	55
	NAGC085	69,269	11,400	470	15m at 3.27g/t Au	14	-60	55
					2m at 1.16g/t Au	32	-60	55
	NAGC086	69,239	11,405	470	9m at 1.3g/t Au	0	-60	55
					17m at 5.66g/t Au	12	-60	55
					6m at 0.84g/t Au	32	-60	55
					2m at 0.86g/t Au	40	-60	55
					8m at 26.66g/t Au	44	-60	55
	NAGCO87	69,257	11,405	470	2m at 2.04g/t Au	22	-60	55
					6m at 6.38g/t Au	30	-60	55
					2m at 2.99g/t Au	40	-60	55

APPENDIX 1 – SIGNIFICANT EXPLORATION RESULTS FOR THE QUARTER **26** 

**HIGGINSVILLE GOLD OPERATIONS** (CONTINUED) HGO - Open Pits - Significant (>5gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Napoleon (Continued)	NAGC088	69,280	11,405	470	2m at 0.93g/t Au	0	-60	55
	NAGC089	69,291	11,406	470	2m at 0.71g/t Au	0	-60	55
					2m at 0.85g/t Au	10	-60	55
	NAGC090	69,230	11,415	470	15m at 1.87g/t Au	7	-60	55
					9m at 2.12g/t Au	22	-60	55
					4m at 1.98g/t Au	35	-60	55
	NAGC091	69,245	11,415	470	7m at 2.59g/t Au	0	-60	55
					12m at 1.81g/t Au	10	-60	55
					6m at 13.7g/t Au	27	-60	55
	NAGC092	69,255	11,415	470	4m at 3.6g/t Au	21	-60	55
					2m at 1.16g/t Au	28	-60	55
					3m at 0.81g/t Au	33	-60	55
	NAGC093	69,269	11,415	470	2m at 0.83g/t Au	3	-60	55
	NAGC094	69,280	11,415	470	7m at 2.48g/t Au	0	-60	55
	NAGC095	69,233	11,426	470	6m at 4.09g/t Au	6	-60	55
					13m at 5.71g/t Au	15	-60	55
					4m at 0.68g/t Au	28	-60	55
	NAGC096	69,256	11,425	470	2m at 1.46g/t Au	17	-60	55
	NAGC098	69,251	11,430	470	2m at 1.11g/t Au	20	-60	55
	NAGC099	69,264	11,430	470	4m at 7.4g/t Au	3	-60	55
	NAGC100	69,245	11,435	470	3m at 0.85g/t Au	1	-60	55
					7m at 1.81g/t Au	9	-60	55
					3m at 1.5g/t Au	20	-60	55
	NAGC101	69,251	11,440	470	3m at 4.37g/t Au	11	-60	55
	NAGC102	69,240	11,445	470	6m at 0.99g/t Au	2	-60	55
	NAGC103	69,246	11,445	470	4m at 1.45g/t Au	0	-60	55
					3m at 1.11g/t Au	7	-60	55
	NAGC104	69,256	11,445	470	6m at 0.81g/t Au	2	-60	55
	NAGC105	69,253	11,450	470	2m at 0.75g/t Au	1	-60	55
					5m at 1.11g/t Au	6	-60	55
	NAGC106	69,244	11,455	470	3m at 2.61g/t Au	3	-60	55
					6m at 1.67g/t Au	10	-60	55
	NAGC107	69,257	11,456	470	6m at 1.89g/t Au	0	-60	55

# HIGGINSVILLE GOLD OPERATIONS (CONTINUED)

HGO - Exploration - Significant (>2gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Higginsville North	HIGA7348	378,960	6,500,600	300	8m at 73ppb Au	18	-60	270
	HIGA7352	377,160	6,501,750	300	4m at 213ppb Au	78	-60	270
	HIGA7359	378,280	6,501,750	300	4m at 43ppb Au	50	-60	270
	HIGA7366	377,520	6,503,000	300	5m at 34ppb Au	28	-60	270
Igloo	IGLR001	400,665	6,490,750	265	2m at 1.27g/t Au	63	-60	270
Luc De L'Est	LKCA838	399,450	6,494,055	265	4m at 30ppb Au	16	-90	0
	LKCA839	399,500	6,494,055	265	4m at 76ppb Au	20	-90	0
	LKCA843	399,350	6,493,855	265	8m at 98ppb Au	47	-90	0
	LKCA844	399,400	6,493,855	265	8m at 45ppb Au	39	-90	0
	LKCA845	399,450	6,493,855	265	4m at 185ppb Au	15	-90	0
	LKCA845				4m at 31ppb Au	35	-90	0
	LKCA846	399,500	6,493,855	265	8m at 41ppb Au	24	-90	0
	LKCA847	399,440	6,493,760	265	4m at 26ppb Au	11	-90	0
	LKCA847				4m at 40ppb Au	47	-90	0
	LKCA850	399,400	6,493,660	265	5m at 53ppb Au	43	-90	0
	LKCA853	399,550	6,493,660	265	1m at 24ppb Au	54	-90	0
	LKCA854	399,450	6,493,550	265	4m at 28ppb Au	31	-90	0
	LKCA856	399,500	6,493,450	265	4m at 190ppb Au	11	-90	0
	LKCA856				16m at 147ppb Au	39	-90	0
	LKCA857	399,550	6,493,450	265	4m at 36ppb Au	8	-90	0
	LKCA857				4m at 27ppb Au	16	-90	0
	LKCA857				4m at 30ppb Au	44	-90	0
	SLC018	367,419	6,557,377	373	5m at 2.16 g/t Au	31.0	-59	52
	SLC019	367,412	6,557,583	358	2m at 1.23 g/t Au	28.0	-59	52

## **CENTRAL MURCHISON GOLD PROJECT**

CMGP - Resource Development - Significant (>5gm metres) Intercepts for December 2015 Quarter

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Rand	15RARCOO1	6,998,781	625,862	492	11m at 2.33g/t Au	257	-62	276
	15RARCOO2	6,998,879	625,852	492	13m at 1.86g/t Au	152	-62	276
	15RARCOO3	6,998,941	625,867	492	4m at 2.24g/t Au	142	-60	276
	15RARCOO4	6,999,371	626,035	486	9m at 1.85g/t Au	213	-48	269
					5m at 3.37g/t Au	223		

**CENTRAL MURCHISON GOLD PROJECT** (CONTINUED) CMGP - Resource Development - Significant (>5gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Sherwood	15MNAC009	7,071,710	657,998	490	1m at 5.3g/t Au	41	-60	300
					2m at 1.74g/t Au	47		
	15MNAC010	7,071,676	658,051	490	3m at 1.26g/t Au	99	-60	300
	15MNAC015	7,071,760	658,097	491	2m at 12.18g/t Au	53	-60	300
	15MNAC016	7,071,776	658,071	490	1m at 2g/t Au	37	-60	300
	15MNAC018	7,071,776	658,411	492	1m at 5.9g/t Au	42	-60	300
	15MNAC025	7,071,890	658,215	491	3m at 0.96g/t Au	57	-60	300
	15MNAC029	7,071,832	658,490	493	3m at 1.65g/t Au	72	-60	300
	15MNAC031	7,071,865	658,418	492	4m at 0.82g/t Au	11	-60	300
	15MNAC034	7,071,925	658,314	491	1m at 2.24g/t Au	40	-60	300
	15MNAC035	7,071,956	658,276	491	7m at 1.81g/t Au	36	-60	300
	15MNAC037	7,072,022	658,452	492	3m at 0.96g/t Au	38	-60	300
	15MNAC041	7,072,117	658,267	491	1m at 5.9g/t Au	35	-60	300
	15MNAC044	7,071,283	657,703	488	3m at 0.9g/t Au	98	-60	300
	15MNAC045	7,071,319	657,648	488	6m at 3.74g/t Au	53	-60	300
	15MNAC046	7,071,337	657,613	488	1m at 2.09g/t Au	13	-60	300
	15MNAC048	7,071,143	657,607	488	2m at 1.72g/t Au	104	-60	300
					1m at 2.41g/t Au	108		
	15MNAC049	7,071,169	657,563	488	2m at 1.13g/t Au	48	-60	300
					3m at 1.39g/t Au	59		
					1m at 2.47g/t Au	63		
	15MNAC050	7,071,189	657,520	488	1m at 9.7g/t Au	12	-60	300
					1m at 3.05g/t Au	15		
	15MNAC068	7,073,213	659,635	496	5m at 1.49g/t Au	64	-60	300
	15MNAC069	7,073,231	659,602	496	2m at 1.33g/t Au	47	-60	300
	15MNAC079	7,065,758	653,689	493	2m at 1.44g/t Au	41	-60	300
	15MNAC080	7,065,529	653,628	494	3m at 1.33g/t Au	65	-60	300
	15MNAC081	7,065,556	653,610	494	3m at 1.31g/t Au	51	-60	300
					4m at 2.2g/t Au	55		
					3m at 1.29g/t Au	78		
	15MNAC082	7,065,575	653,574	494	1m at 5.3g/t Au	23	-60	300
	15MNAC083	7,065,597	653,535	494	3m at 1.49g/t Au	8	-60	300
	15MNAC084	7,065,317	653,516	495	1m at 3.82g/t Au	21	-60	300

**CENTRAL MURCHISON GOLD PROJECT** (CONTINUED) CMGP - Resource Development - Significant (>5gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Sherwood (Continued)	15MNAC085	7,065,334	653,483	496	2m at 1.71g/t Au	22	-60	300
					4m at 0.51g/t Au	28		
	15MNAC098	7,064,360	653,205	500	2m at 1.59g/t Au	15	-60	309
Turn of the Tide	15TTRC043	7,003,342	633,677	471	4m at 2.78g/t Au	30	-89	180
	15TTRC051	7,002,084	633,277	479	4m at 1.78g/t Au	22	-60	290
	15TTRC053	7,002,179	633,309	478	8m at 3.87g/t Au	6	-60	290
	15TTRC055	7,002,168	633,340	478	2m at 2.89g/t Au	27	-60	290
					3m at 2.09g/t Au	32		
	15TTRC059	7,002,185	633,351	478	6m at 5.76g/t Au	31	-60	290
	15TTRC060	7,002,230	633,286	477	4m at 2.06g/t Au	14	-60	290
					1m at 10.5g/t Au	30		
	15TTRCO61	7,002,210	633,339	478	3m at 5.58g/t Au	28	-60	290
	15TTRC063	7,002,226	633,355	477	2m at 9.8g/t Au	7	-60	290
					2m at 2.51g/t Au	17		
	15TTRC065	7,002,263	633,369	477	4m at 1.36g/t Au	45	-60	290
	15TTRC069	7,002,431	633,377	475	3m at 1.75g/t Au	48	-60	290
	15TTRC070	7,002,426	633,391	475	3m at 4.8g/t Au	63	-60	290
	15TTRC073	7,002,449	633,389	475	2m at 3.22g/t Au	50	-60	290
	15TTRC076	7,002,462	633,408	475	5m at 6.19g/t Au	9	-60	290
	15TTRC077	7,002,494	633,381	474	4m at 1.5g/t Au	18	-60	290
	15TTRC078	7,002,482	633,411	475	3m at 2g/t Au	45	-60	290
					3m at 7.13g/t Au	54		
	15TTRC079	7,002,508	633,395	474	4m at 1.89g/t Au	29	-60	290
	15TTRC080	7,002,511	633,416	475	5m at 1.41g/t Au	59	-60	279
	15TTRC082	7,002,542	633,425	475	4m at 7.42g/t Au	6	-60	290
					5m at 2.14g/t Au	11		
					1m at 5.3g/t Au	18		
	15TTRC086	7,002,600	633,440	475	6m at 0.94g/t Au	21	-55	290
	15TTRC088	7,002,615	633,456	474	4m at 1.92g/t Au	20	-60	290
	15TTRC092	7,003,343	633,667	471	4m at 1.83g/t Au	18	-65	290
	15TTRC094	7,003,380	633,685	471	6m at 1.74g/t Au	4	-50	290
	15TTRC095	7,003,401	633,695	471	4m at 4.1g/t Au	7	-60	290

# **CENTRAL MURCHISON GOLD PROJECT** (CONTINUED) CMGP - Open Pits - Significant (>5gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Surprise West	15SWGC0002	7,045,492	642,677	473	3m at 3.93g/t Au	10	-60	289
	15SWGC0005	7,045,532	642,684	473	2m at 5.71g/t Au	6	-55	289
	15SWGC0006	7,045,529	642,691	473	9m at 1.78g/t Au	13	-55	289
	15SWGC0007	7,045,527	642,698	473	6m at 1.61g/t Au	28	-57	289
	15SWGC0015	7,045,522	642,681	473	1m at 5.3g/t Au	4	-60	289
	15SWGC0016	7,045,542	642,687	473	8m at 2.56g/t Au	1	-60	289
	15SWGC0022	7,045,617	642,712	473	2m at 7.65g/t Au	5	-60	289
Surprise Supergene	SPGC_475_054	7,045,679	643,212	474	4m at 1.65g/t Au	7	90	0
	SPGC_475_090	7,045,663	643,196	474	3m at 2.29g/t Au	4	-90	0
	SPGC_475_091	7,045,661	643,205	474	4m at 1.71g/t Au	4	-90	0
	SPGC_475_110	7,045,658	643,180	474	3m at 2.11g/t Au	4	-90	0
	SPGC_475_112	7,045,647	643,212	474	3m at 1.69g/t Au	5	-90	0
Whangamata	15WHGC135	7,050,258	643,566	490	5m at 1.44g/t Au	7	-90	289
	15WHGC138	7,050,281	643,559	490	1m at 13.4g/t Au	2	-60	289
	15WHGC139	7,050,273	643,583	490	3m at 2.01g/t Au	23	-60	289
	15WHGC144	7,050,296	643,576	490	2m at 5.64g/t Au	32	-60	289
	15WHGC146	7,050,306	643,579	490	2m at 2.86g/t Au	26	-60	289
	15WHGC148	7,050,317	643,578	490	4m at 1.35g/t Au	39	-61	289
	15WHGC150	7,050,313	643,589	490	1m at 21.4g/t Au	34	-60	289
					4m at 1.31g/t Au	50		
	15WHGC151	7,050,299	643,599	490	5m at 1.53g/t Au	66	-60	289
	15WHGC153	7,050,319	643,601	490	5m at 1.47g/t Au	45	-60	289
					3m at 6.11g/t Au	76		
	15WHGC154	7,050,341	643,600	490	5m at 1.2g/t Au	77	-60	289
	15WHGC162	7,050,053	643,548	481	6m at 1.27g/t Au	15	-60	289
	15WHGC166	7,050,061	643,556	481	5m at 1.5g/t Au	28	-60	289
	15WHGC174	7,050,083	643,553	480	4m at 1.39g/t Au	23	-60	289
	15WHGC180	7,050,088	643,568	480	2m at 3.34g/t Au	1	-60	289
	15WHGC181	7,050,085	643,577	480	4m at 1.3g/t Au	22	-60	289
	15WHGC182	7,050,101	643,559	480	7m at 3.39g/t Au	22	-60	289
	15WHGC183	7,050,096	643,573	480	3m at 1.89g/t Au	51	-60	289
	15WHGC185	7,050,109	643,569	480	9m at 1.45g/t Au	30	-60	289
	15WHGC186	7,050,106	643,578	480	4m at 2.16g/t Au	55	-60	289

# **CENTRAL MURCHISON GOLD PROJECT** (CONTINUED) CMGP - Open Pits - Significant (>5gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Whangamata	15WHGC187	7,050,117	643,577	480	4m at 2.31g/t Au	12	-60	289
(Continued)					5m at 1.01g/t Au	19		
					3m at 1.94g/t Au	42		
					7m at 1.65g/t Au	50		
	15WHGC188	7,050,121	643,580	480	5m at 2.27g/t Au	40	-50	289
	15WHGC201	7,050,193	643,580	479	2m at 2.71g/t Au	35	-60	289
	15WHGC206	7,050,216	643,564	479	5m at 1.68g/t Au	3	-60	289
	15WHGC207	7,050,213	643,573	479	2m at 33.15g/t Au	10	-60	289
	15WHGC208	7,050,212	643,576	479	6m at 14.92g/t Au	10	-60	289
	15WHGC228	7,050,095	643,547	465	2m at 3.38g/t Au	8	-60	289
	15WHGC231	7,050,101	643,560	465	3m at 3.24g/t Au	2	-60	289
					5m at 1.72g/t Au	17		
	15WHGC232	7,050,104	643,565	465	3m at 2.02g/t Au	31	-60	289
	15WHGC236	7,050,114	643,555	465	7m at 1.72g/t Au	7	-60	289
	15WHGC237	7,050,127	643,534	465	4m at 2.96g/t Au	2	-90	19
	15WHGC244	7,050,132	643,557	465	4m at 1.4g/t Au	11	-50	289
					3m at 1.89g/t Au	23		
	15WHGC246	7,050,132	643,562	465	1m at 14.4g/t Au	34	-60	289
	15WHGC247	7,050,130	643,569	465	7m at 4.14g/t Au	18	-60	289
					5m at 1.22g/t Au	27		
	15WHGC251	7,050,139	643,572	465	4m at 1.83g/t Au	36	-60	289
	15WHGC252	7,050,146	643,568	465	8m at 2.23g/t Au	23	-60	289
					2m at 4.64g/t Au	32		
	15WHGC253	7,050,151	643,570	465	6m at 1.22g/t Au	24	-50	289
	15WHGC254	7,050,150	643,570	465	3m at 2.35g/t Au	33	-60	289
	15WHGC256	7,050,161	643,570	465	5m at 2.96g/t Au	21	-50	289
	15WHGC257	7,050,161	643,571	465	4m at 1.42g/t Au	24	-60	289
	15WHGC260	7,050,176	643,565	465	5m at 2.32g/t Au	13	-50	289
	15WHGC262	7,050,171	643,572	465	5m at 2.19g/t Au	4	-70	289
Jack Ryan	JRGC_454_011	7,002,101	626,824	456	3m at 2.49g/t Au	28	-60	99
	JRGC_454_012	7,002,101	626,820	456	5m at 3.17g/t Au	35	-70	99
	JRGC_454_016	7,002,118	626,843	454	9m at 4.08g/t Au	26	-90	359
	JRGC_454_016	7,002,118	626,843	454	2m at 4.56g/t Au	36	-90	359
	JRGC_454_019	7,002,130	626,830	454	4m at 2.21g/t Au	32	-60	98

APPENDIX 1 – SIGNIFICANT EXPLORATION RESULTS FOR THE QUARTER 32

# **CENTRAL MURCHISON GOLD PROJECT** (CONTINUED) CMGP - Open Pits - Significant (>5gm metres) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
	JRGC_454_020	7,002,137	626,853	454	6m at 1.93g/t Au	12	-60	98
	JRGC_454_021	7,002,138	626,843	454	2m at 7.54g/t Au	24	-60	98
	JRGC_454_022	7,002,139	626,834	454	6m at 2.41g/t Au	34	-60	98
	JRGC_454_024	7,002,147	626,844	454	4m at 1.7g/t Au	25	-60	98
	JRGC_454_024	7,002,147	626,844	454	5m at 2.1g/t Au	31	-60	98
	JRGC_454_027	7,002,159	626,844	454	5m at 3.36g/t Au	34	-60	98
	JRGC_454_031	7,002,177	626,852	455	4m at 1.94g/t Au	34	-60	98

## **RENISON TIN PROJECT**

Renison Tin Mine - Significant (> 2% Sn) Intercepts for December 2015 Quarter

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Area 4	U5469	66,438.8	44,622.4	1,134.0	4.1m at 10.33% Sn and 0.23% Cu	125.6	-63	201
		66,410.1	44,611.4	1,074.5	7m at 4.29% Sn and 0.06% Cu	191.0	-63	201
		66,402.6	44,608.4	1,058.7	2.1m at 1.32% Sn and 0.04% Cu	213.0	-63	201
	U5524	66,319.1	44,532.3	1,209.4	1m at 1.63% Sn and 0.27% Cu	177.8	-14	223
	U5525	66,429.4	44,565.6	1,197.0	1.5m at 2.06% Sn and 0.12% Cu	110.9	-27	231
	U5527	66,351.4	44,582.6	1,171.8	1.6m at 3.24% Sn and 0.38% Cu	138.7	-33	215
		66,313.6	44,555.7	1,141.6	6.5m at 1.79% Sn and 0.3% Cu	189.0	-33	215
	U5528	66,394.7	44,605.1	1,144.9	1.6m at 1.92% Sn and 0.09% Cu	122.7	-56	222
	U5545	66,405.4	44,512.1	1,230.9	1.1m at 3.58% Sn and 0.74% Cu	7.5	16	230
	U5546	66,411.2	44,514.3	1,222.4	4.8m at 4.13% Sn and 0.67% Cu	2.4	-52	264
	U5549	66,452.6	44,514.7	1,230.8	1.4m at 3.18% Sn and 0.2% Cu	-	32	259
	U5550	66,452.6	44,513.9	1,226.6	2.6m at 1.15% Sn and 0.25% Cu	-	-9	266
	U5551	66,459.4	44,527.7	1,226.1	3m at 2.53% Sn and 0.57% Cu	-	-12	93
		66,458.7	44,537.6	1,223.9	2.1m at 2.18% Sn and 0.47% Cu	10.5	-12	93
	U5552	66,401.1	44,520.2	1,208.4	1.5m at 1.28% Sn and 0.19% Cu	-	-9	199
	U5555	66,405.3	44,534.0	1,224.7	2.6m at 2.9% Sn and 0.19% Cu	14.2	53	89
	U5560	66,450.9	44,541.0	1,215.4	4m at 2.47% Sn and 0.15% Cu	10.9	27	92
	U5562	66,459.4	44,514.4	1,213.2	1.4m at 1.51% Sn and 0.29% Cu	12.2	19	272
	U5577	66,319.3	44,543.4	1,177.8	1.4m at 4.51% Sn and 0.16% Cu	180.2	-24	221
		66,315.6	44,540.3	1,175.7	2.9m at 1.49% Sn and 0.18% Cu	184.2	-24	221
	U5578	66,302.0	44,575.1	1,096.2	9.9m at 2% Sn and 0.28% Cu	216.1	-44	209
	U5579	66,340.4	44,604.9	1,087.4	1.9m at 2.3% Sn and 0.31% Cu	196.6	-55	204
	U5586	66,373.2	44,518.7	1,212.6	1.2m at 2.23% Sn and 0.34% Cu	5.4	20	236

APPENDIX 1 – SIGNIFICANT EXPLORATION RESULTS FOR THE QUARTER **33** 

**RENISON TIN PROJECT** (CONTINUED) Renison Tin Mine - Significant (> 2% Sn) Intercepts for December 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Flinders	U5567	66,299.2	44,329.6	1,844.9	0.8m at 1.18% Sn and 0.09% Cu	6.0	-0	306
	U5569	66,271.9	44,334.7	1,849.5	3.3m at 6.02% Sn and 0.17% Cu	0.7	42	269
	U5572	66,245.9	44,348.5	1,842.6	3.1m at 7.66% Sn and 0.47% Cu	0.7	-33	79
	U5576	66,167.5	44,342.8	1,839.5	2.7m at 2.17% Sn and 0.17% Cu	13.7	-15	285
Lower Federal	U5263	66,166.2	44,563.9	1,224.0	3.8m at 0.86% Sn and 0.26% Cu	-	13	97
	U5472	65,895.3	44,647.0	1,106.9	6.5m at 1.65% Sn and 1.82% Cu	198.5	-37	85
	U5476	65,998.2	44,586.4	1,084.5	0.9m at 3.61% Sn and 0.06% Cu	186.0	-47	72
	U5481	66,081.3	44,557.0	1,169.0	2.3m at 2.74% Sn and 0.11% Cu	65.2	-12	81
		66,083.7	44,572.9	1,165.7	3.4m at 1.72% Sn and 0.16% Cu	81.8	-12	81
	U5484	66,110.3	44,561.6	1,138.8	1.1m at 0.97% Sn and 0.06% Cu	88.9	-29	61
	U5486	66,187.3	44,601.1	1,155.0	1.2m at 2.4% Sn and 0.02% Cu	130.6	-16	77
	U5492	66,240.0	44,568.8	1,130.7	1m at 3.21% Sn and 0.06% Cu	130.5	-28	54
	U5510	65,938.0	44,595.6	1,224.7	1m at 1.07% Sn and 0.19% Cu	8.0	7	111
	U5513	66,007.9	44,599.8	1,243.7	2.7m at 2.25% Sn and 1.08% Cu	20.0	5	106
	U5514	65,990.2	44,597.0	1,243.8	4.8m at 0.79% Sn and 1.53% Cu	14.4	6	98
	U5515	65,974.4	44,595.0	1,244.1	5m at 0.77% Sn and 1.11% Cu	8.0	9	96
	U5566	66,041.2	44,599.4	1,126.1	1.2m at 8.18% Sn and 0.1% Cu	123.4	-26	106
	U5581	66,056.4	44,574.9	1,219.2	2.2m at 1.18% Sn and 0.21% Cu	-	-12	79
	U5582	66,058.5	44,575.8	1,221.0	4.7m at 0.86% Sn and 0.15% Cu	-	9	51
	U5506	66,025.9	44,599.0	1,223.4	1.5m at 2.45% Sn and 1.09% Cu	18.3	4	87
	U5507	66,006.8	44,591.3	1,222.8	3.3m at 2.26% Sn and 0.19% Cu	7.0	4	86
	U5508	65,987.7	44,585.0	1,221.0	3.6m at 1.53% Sn and 0.24% Cu	-	1	108
					5.8m at 15.46% Sn and 0.26% Cu	11.8	1	108
Upper Federal	U5459	65,580.8	44,342.4	1,946.2	10.4m at 1.16% Sn and 0.45% Cu	50.2	18	98
	U5465	65,678.9	44,346.2	1,939.0	10.4m at 1.4% Sn and 0.26% Cu	-	11	90
	U5521	65,707.4	44,348.1	1,939.6	7.9m at 1.31% Sn and 0.27% Cu	-	16	90
	U5523	65,735.0	44,353.5	1,949.5	9.8m at 0.65% Sn and 0.15% Cu	3.0	13	76
	U5561	65,634.0	44,329.0	1,942.4	0.7m at 1.43% Sn and 0.12% Cu	7.4	33	297

## **TENNANT CREEK**

Rover 1 - Significant Intercepts for December 2015 Quarter

Prospect	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Curiosity	MXCURD004	7,794,766	324,251	285	3.65m at 1.05% Cu	667.6	-45.0	102.5
					10.7m@ 0.53% Cu	680.0	-44.0	102.0

## **CENTRAL MUSGRAVE PROJECT**

Wingellina - Selected Scandium Assays December 2015 Quarter

Prospect	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Wingellina	WPRC0181	83045	50027	664	2m at 73.9ppm Sc	4.0	-90	0
					2m at 89.5ppm Sc	6.0		
	WPRC0461	76569	50000	685	2m at 130ppm Sc	52.0	-60	270
	WPRC0582	82542	49703	671	2m at 106ppm Sc	4.0	-60	90
					2m at 116ppm Sc	12.0		
					2m at 109ppm Sc	14.0		
					2m at 109ppm Sc	26.0		
					2m at 146ppm Sc	60.0		
					2m at 137ppm Sc	62.0		
					2m at 113ppm Sc	64.0		
					2m at 118ppm Sc	66.0		
	WPRC0665	74984	50509	681	2m at 138ppm Sc	42.0	-60	270
					2m at 108ppm Sc	44.0		

## **APPENDIX 2 – JORC 2012 TABLE 1 – GOLD DIVISION** (RELATING TO EXPLORATION RESULTS) **SECTION 1 SAMPLING TECHNIQUES AND DATA**

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

Criteria	JORC Code Explanation	Commentary	
Sampling techniques	<ul> <li>Nature and quality of sampling (eg 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg fraverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to</li> </ul>	<ul> <li>HG0</li> <li>Diamond Drilling         The bulk of the data used in resource calculations at Trident has been gathered from diamond core. Four types of diamond core sample have been historically collected. The predominant sample method is half-core NQ2 diamond with half-core LTK60 diamond, Whole core LTK48 diamond and whole core BQ also used. This core is logged and sampled to geologically relevant intervals.     </li> <li>The bulk of the data used in resource calculations at Chalice has been gathered from diamond core. The predominant drilling and cample tupe is half core NQ2 diamond. Occasionally whole     </li> </ul>	
	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 (eg submarine nodules) may warrant disclosure of detailed information.	core has been sampled to streamline the core handling process. Historically half and whole core LTK60 and half core HQ diamond have been used. This core is logged and sampled to geologically relevant intervals.	
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	<ul> <li>Face Sampling         Each development face / round is chip sampled at both Trident and Chalice. One or two         channels are taken per face perpendicular to the mineralisation. The sampling intervals are         domained by geological constraints (e.g. rock type, veining and alteration / sulphidation     </li> </ul>	
Drill sample recovery	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias</li> </ul>	etc.) with an effort made to ensure each 3kg sample is representative of the interval being extracted. Samples are taken in a range from 0.1 m up to 1.2 m in waste / mullock. All exposures within the orebody are sampled.	
	may have occurred due to preferential loss/gain of fine/coarse material.	• Sludge Drilling Sludge drilling at Chalice and Trident is performed with an underground production drill rig. It is an open hole drilling method using water as the flushing medium, with a 64 mm or 89 mm hole diameter. Samples are taken twice per drill steel (1.9 m steel, 0.8 m sample). Holes are drilled at sufficient angles to allow flushing of the hole with water following each interval to prevent contamination.	
		<ul> <li>RC Drilling         For Fairplay, Vine, Lake Cowan, Two Boys, Mousehollow, Pioneer and Eundynie the bulk of the data used in the resource estimate is sourced from RC drilling. Minor RC drilling is also utilised at Trident, Musket, Chalice and the Palaeochannels (Wills, Pluto, Mitchell 3 &amp; 4).     </li> <li>Drill cuttings are extracted from the RC return via cyclone. The underflow from each 1 m interval is transferred via bucket to a four tiered riffle splitter, delivering approximately three kilograms of the recovered material into calico bags for analysis. The residual material is retained on the ground near the hole. Samples too wet to be split through the riffle splitter are taken as grabs and are recorded as such.</li> </ul>	
Criteria	JORC Code Explanation	Com	imentary
----------	-----------------------	-----	--
		•	RAB / Air Core Drilling
			Drill cuttings are extracted from the RAB and Aircore return via cyclone. 4 m Composite samples are obtained by spear sampling from the individual 1 m drill return piles; the residue material is retained on the ground near the hole. In the Palaeochannels 1 m samples are riffle split for analysis.
			There is no RAB or Aircore drilling used in the estimation of Trident, Chalice, Corona, Fairplay, Vine, Lake Cowan and Two Boys.
			SKO
			SKO is a long-term producing operation with a long history of drilling and sampling to support exploration and resource development.
		•	Sampling Techniques
			Chips from the RC drilling face-sampling hammer are collected for assaying. Sample return lines are cleaned with compressed air each metre and the cyclone sample collector is cleaned following each rod. Samples are riffle split through a three-tier splitter with a split ~3kg sample (generally at 1 m intervals) pulverised to produce a 30g charge analysed via fire assay.
			Diamond drill-core is geologically logged and then sampled according to geology (minimum sample length of 0.4 m to maximum sample length of 1.5 m) – where consistent geology is sampled, a 1 m length is used for sampling the core. The core is sawn half-core with one half sent off for analysis.
			Samples have been collected from numerous other styles of drilling at SKO, including but not limited to RAB, aircore, blast-hole, sludge drilling and face samples.
		•	Drilling Techniques
			Historical data includes DD, RC, RAB and aircore holes drilled between 1984 and 2010. Not all the historical drilling programmes at SKO are documented and many historical holes are assigned a drill type of 'unknown'. Over 4,000 km of drilling has been completed on the tenure.
			Drilling by the most recent previous owners (Alacer Gold Corporation) has predominantly been RC, with minor DD and aircore drilling.
			RC drilling is used predominantly for defining and testing for near-surface mineralisation and utilises a face sampling hammer with the sample being collected on the inside of the drill-tube. RC drillholes utilise downhole single or multi shot cameras. Drillhole collars were surveyed by onsite mine surveyors.
			Diamond drilling is used for either testing / targeting deeper mineralised systems or to define the orientation of the host geology. Many of these holes had RC pre-collars generally to a depth of between $60 - 120$ m, followed by a diamond tail. The majority of these holes have been drilled at NQ2 size with minor HQ sized core. All diamond holes were surveyed during drilling with downhole cameras, and then at end of hole using a
			Gyro Inclinometer at 5 or 10 m intervals. Drillhole collars were surveyed by onsite mine surveyors.

Criteria	JORC Code Explanation	Com	imentary
		•	Sample Recovery
			Sample recovery is generally good, and there is no
			indication that sampling presents a material risk for the quality of the evaluation of any deposit at SKO.
			CMGP
		•	Diamond Drilling
			A significant portion of the data used in resource calculations at the CMGP has been gathered from diamond core. Multiple sizes have been used historically. This core is geologically logged and subsequently halved for sampling. Grade control holes may be whole-cored to streamline the core handling process if required.
		•	Face Sampling
			At each of the major past underground producers at the CMGP, each development face / round is horizontally chip sampled. The sampling intervals are domained by geological constraints (e.g. rock type, veining and alteration / sulphidation etc.). The majority of exposures within the orebody are sampled.
		•	Sludge Drilling
			Sludge drilling at the CMGP was performed with an underground production drill rig. It is an open hole drilling method using water as the flushing medium, with a 64 mm (nominal) hole diameter. Sample intervals are ostensibly the length of the drill steel. Holes are drilled at sufficient angles to allow flushing of the hole with water following each interval to prevent contamination. Sludge drilling is not used to inform resource models.
		•	RC Drilling
			RC drilling has been utilised at the CMGP.
			Drill cuttings are extracted from the RC return via cyclone. The underflow from each interval is transferred via bucket to a four tiered riffle splitter, delivering approximately three kilograms of the recovered material into calico bags for analysis. The residual material is retained on the ground near the hole. Composite samples are obtained from the residue material for initial analysis, with the split samples remaining with the individual residual piles until required for re-split analysis or eventual disposal.
		•	RAB / Aircore Drilling
			Combined scoops from bucket dumps from cyclone for composite. Split samples taken from individual bucket dumps via scoop. RAB holes are not included in the resource estimate.
		•	Blast Hole Drilling
			Cuttings sampled via splitter tray per individual drill rod. Blast holes not included in the resource estimate.
			All geology input is logged and validated by the relevant area geologists, incorporated into this is assessment of sample recovery. No defined relationship exists between sample recovery and grade. Nor has sample bias due to preferential loss or gain of fine or coarse material been noted.

Criteria	JOF	C Code Explanation	Con	nmentary
<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc)</li> </ul>	•	Metals X surface drill-holes are all orientated and have been logged in detail for geology, veining, alteration, mineralisation and orientated structure. Metals X underground drill-holes are logged in detail for geology, veining, alteration, mineralisation and structure. Core has been logged in enough detail to allow for the relevant mineral resource estimation techniques to be employed.		
	•	The total length and percentage of the relevant intersections logged	•	Surface core is photographed both wet and dry and underground core is photographed wet. All photos are stored on the companies servers, with the photographs from each hole contained within separate folders.
			•	Development faces are mapped geologically.
			•	RC, RAB and Aircore chips are geologically logged.
			•	Sludge drilling is logged for lithology, mineralisation and vein,
Sub-sampling techniques and	•	If core, whether cut or sawn and whether quarter, half or all core taken.		HGO
sample preparation	•	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	•	NQ2 and LTK60 diameter core is sawn half core using a diamond-blade saw, with one half
	•	For all sample types, the nature, quality and appropriateness of the sample preparation technique.		of the core consistently taken for analysis. LTK48 and BQ are whole core sampled. Sludge samples are dried then riffle split.
		Quality control procedures adopted for all sub-sampling stages to maximise representivity	•	The un-sampled half of diamond core is retained for check sampling if required.
	•	<ul> <li>of samples.</li> <li>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.</li> </ul>	•	For the onsite Intertek facility the entire dried sample is jaw crushed (JC2500 or Boyd Crusher) to a nominal 85% passing 2 mm with crushing equipment cleaned between samples. An analytical sub-sample of approximately 500-750 g is split out from the crushed sample using a riffle splitter, with the coarse residue being retained for any verification analysis. Sample
	•	whether sample sizes are appropriate to the grain size of the material being sampled.		preparation techniques are appropriate for the type of analytical process.
			•	Where Fire assay has been used the entire half core sample (3-3.5 kg) is crushed and pulverised (single stage mix and grind using LM5 mills) to a target of 85-90% passing 75 $\mu$ m in size. A 200g sub-sample is then separated out for analysis.
			•	Core and underground face samples are taken to geologically relevant boundaries to ensure each sample is representative of a geological domain. Sludge samples are taken to nominal sample lengths.
			•	The sample size is considered appropriate for the grain size of the material being sampled.
			•	For RC, RAB and Aircore chips regular field duplicates are collected and analysed for significant variance to primary results.
			•	RAB and Aircore sub-samples are collected through spear sampling.
				SKO
			•	NQ2 and HQ diameter core is sawn half core using a diamond-blade saw, with one half of the core consistently taken for analysis. Smaller sized core (LTK48 and BQ) are whole core sampled. The un-sampled half of diamond core is retained for check sampling if required.
			•	SKO staff collect the sample in pre-numbered calico sample bags which are then submitted to the laboratory for analysis. Delivery of the sample is by a SKO staff member.

Criteria	JORC Code Explanation	Comme	entary
		• R( tie ba lal	C samples are collected at 1 m intervals with the samples being riffle split through a three- er splitter. The samples are collected by the RC drill crews in pre-numbered calico sample ags which are then collected by SKO staff for submission. Delivery of the sample to the boratory is by a SKO staff member.
		• Up ag Ial	pon delivery to the laboratory, the sample numbers are checked by the SKO staff member gainst the sample submission sheet. Sample numbers are recorded and tracked by the boratory using electronic coding.
		• Sa be	ample preparation techniques are considered appropriate for the style of mineralisation eing tested for – this technique is industry standard across the Eastern Goldfields. MGP
		• Bl	last holes -Sampled via splitter tray per individual drill rods.
		• RA	AB / AC chips - Combined scoops from bucket dumps from cyclone for composite. Split amples taken from individual bucket dumps via scoop.
		• R0	C - Three tier riffle splitter (approximately 5kg sample). Samples generally dry.
		• Fa	ace Chips - Nominally chipped horizontally across the face from left to right, sub-set via eological features as appropriate.
		• Di Gr	iamond Drilling - Half-core niche samples, sub-set via geological features as appropriate. rade control holes may be whole-cored to streamline the core handling process if required.
		• Ch	hips / core chips undergo total preparation.
		• Sa	amples undergo fine pulverisation of the entire sample by an LM5 type mill to achieve a 75µ roduct prior to splitting.
		• QA sy of	A/QC is currently ensured during the sub-sampling stages process via the use of the ystems of an independent NATA / ISO accredited laboratory contractor. A significant portion f the historical informing data has been processed by in-house laboratories.
		• Th	ne sample size is considered appropriate for the grain size of the material being sampled.
		• Th re	ne un-sampled half of diamond core is retained for check sampling if required. For RC chips egular field duplicates are collected and analysed for significant variance to primary results.
Quality of assay data and	• The nature, quality and appropriateness of the assaying and laboratory procedures used and	H	GO
laboratory tests	<ul> <li>tory tests whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>At</li> <li>we</li> <li>nc</li> <li>ar</li> <li>co</li> <li>of</li> </ul>	the Intertek on-site facility, analysis is performed using a 500g PAL method. The accurately eighed sub-sample is further processed utilising a PAL1000B to grind the sample to a ominal 90% passing 75µm particle size, whilst simultaneously extracting any cyanide menable gold liberated into a Leachwell liquor. The resulting liquor is then analysed for gold ontent by organic extraction with flame AAS finish, with an overall method detection limit f 0.01ppm Au content in the original sample. This method is appropriate for the type and nagnitude of mineralisation at Higginsville.
		• Qu ar wl Th pr	uality control procedures include the use of standards, blanks and duplicates. Standards and duplicates are used to test both the accuracy and precision of the analytical process, hile blanks are employed to test for contamination during the sample preparation stage. The analyses have confirmed the analytical process employed at Higginsville is adequately recise and accurate for use as part of the mineral resource estimation.

Criteria	JORC Code Explanation	Com	mentary
			SKO
		•	Only nationally accredited laboratories are used for the analysis of the samples collected at SKO.
		•	The laboratory dry and if necessary (if the sample is >3kg) riffle split the sample, which is then jaw crushed and pulverised (the entire 3kg sample) in a ring mill to a nominal 90% passing 75 microns. All recent RC and Diamond core samples are analysed via Fire Assay, which involves a 30g charge (sub-sampled after the pulverisation) of the analytical pulp being fused at 1050°C for 45 minutes with litharge. The resultant metal pill is digested in aqua regia and the gold content determined by atomic adsorption spectrometry – detection limit is 0.01 ppm Au.
		•	Quality Assurance and Quality Control (QA/QC) samples are routinely submitted by SKO staff and comprise standards, blanks, assay pills, field duplicates, lab duplicates and repeat analyses. The results for these QA/QC samples are routinely analysed by Senior Geologists with any discrepancies dealt with in conjunction with the laboratory prior to the analytical data being imported into the database.
		•	There is limited information available on historic QA/QC procedures. SKO has generally accepted the available data at face value and carry out data validation procedures as each deposit is re-evaluated.
		•	The analytical techniques used are considered appropriate for the style of mineralisation being tested for – this technique is industry standard across the Eastern Goldfields.
		•	Ongoing production data generally confirms the validity of prior sampling and assaying of the mined deposits to within acceptable limits of accuracy.
			СМБР
		•	Recent drilling was analysed by fire assay as outlined below;
			» A 50g sample undergoes fire assay lead collection followed by flame atomic adsorption spectrometry.
			» The laboratory includes a minimum of 1 project standard with every 22 samples analysed.
			» Quality control is ensured via the use of standards, blanks and duplicates.
		•	No significant QA/QC issues have arisen in recent drilling results.
		•	Historical drilling has used a combination of Fire Assay, Aqua Regia and PAL analysis.
		•	These assay methodologies are appropriate for the resources in question.

Criteria	JORC Code Explanation	Commentary
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> </ul>	<ul> <li>No independent or alternative verifications are available.</li> <li>Virtual twinned holes have been drilled in several instances across all sites with no significant issues highlighted. Drillhole data is also routinely confirmed by development assay data in the acception and accepted.</li> </ul>
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Primary data is collected utilising LogChief. The information is imported into a SQL database server and verified.</li> <li>All data used in the collected prime of recorders and recorders are compiled in database.</li> </ul>
		<ul> <li>All data used in the calculation of resources and reserves are compiled in databases (underground and open pit) which are overseen and validated by senior geologists.</li> <li>No adjustments have been made to any assay data.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>HGO</li> <li>Collar coordinates for surface drill-holes were generally determined by GPS, with underground drill-holes generally determined by survey pick-up. Downhole survey measurements for most surface diamond holes were by Gyro-compass at 5 m intervals. Holes not gyro-surveyed were surveyed using Eastman single shot cameras at 20 m intervals. Downhole surveys for underground diamond drill-holes were taken at 15 – 30 m intervals by Reflex single-shot cameras. Routine survey pick-ups of underground and surface holes where they intersected development indicates (apart from some minor discrepancies with pre-Avoca drilling) a survey accuracy of less than 5 m.</li> <li>All drilling and resource estimation is undertaken in local mine grid at the various projects.</li> <li>Topographic control is generated from Differential GPS. This methodology is adequate for the resource in question.</li> <li>SKO</li> <li>Collar coordinates for surface RC and diamond drill-holes were generally determined by either RTK-GPS or a total station survey instrument. Underground drill-hole locations (Mount Marion and HBJ) were all surveyed using a Leica reflectorless total station.</li> <li>Recent surface diamond holes were surveyed during drilling with down-hole single shot cameras and then at the end of the hole by Gyro-Inclinometer at 5 or 10 mm intervals. Holes</li> </ul>
		<ul> <li>not gyro-surveyed were surveyed using Eastman single shot cameras at 20 m intervals. RC drill-holes utilised down-hole single shot camera surveys spaced every 15 to 30 m down-hole.</li> <li>Down-hole surveys for underground diamond drill-holes were taken at 15 – 30 m intervals by Reflex single-shot cameras.</li> <li>The orientation and size of the project determines if the resource estimate is undertaken in local or MGA 94 grid. Each project has a robust conversion between local, magnetic and an MGA grid which is managed by the SKO survey department.</li> <li>Topographic control is generated from RTK GPS. This methodology is adequate for the resources in question.</li> </ul>

Criteria	JORC Code Explanation	Com	imentary
			CMGP
		•	All data is spatially oriented by survey controls via direct pickups by the survey department. Drillholes are all surveyed downhole, deeper holes with a Gyro tool if required, the majority with single / multishot cameras.
		•	All drilling and resource estimation is preferentially undertaken in local mine grid at the various sites.
		•	Topographic control is generated from a combination of remote sensing methods and ground- based surveys. This methodology is adequate for the resources in question.
Data spacing and distribution	Data spacing for reporting of Exploration Results.		HGO
	• 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.	•	Drilling in the underground environment at Trident is nominally carried-out on 20 m $\times$ 30 m spacing for resource definition and in filled to a 10 m $\times$ 15 m spacing with grade control drilling. At Trident the drill spacing below the 500RL widens to an average of 40 m $\times$ 80 m.
	Whether sample compositing has been applied.	•	Drilling at the Lake Cowan region is on a 20 m x 10 m spacing. Historical mining has shown this to be an appropriate spacing for the style of mineralisation and the classifications applied.
		•	Compositing is carried out based upon the modal sample length of each project.
			SKO
		•	HBJ:
			Drill spacing ranges from 10 m x 5 m grade control drilling to 100 m x 100 m at deeper levels of the resource. The majority of the Indicated Resource is estimated using a maximum drill spacing of 40 m x 40 m. The resource has been classified based on drill density with mining of the 2.2km long HBJ Open-Pit confirming that the data spacing is adequate for the resource classifications applied.
		•	Mount Martin:
			Drill spacing ranges from 10 m x 5 m grade control drilling to 60 m x 60 m for the Inferred areas of the resource. The drill spacing for the majority of the Indicated Resource is 20 m x 20 m. The resource has been classified primarily on drill density and the confidence in the geological/grade continuity – the data spacing and distribution is deemed adequate for the estimation techniques and classifications applied.
		•	Pernatty:
			Drill spacing for the reported resource is no greater than 60 m x 60 m with the majority of the Indicated resource based on a maximum spacing of 40 m x 40 m. The geological
			interpretation of the area is well understood, and is supported by the knowledge from open pit and underground operations. However given the mineralisation is controlled by shear zones the mineralisation continuity is considered to be less understood. The resource is classified on a combination of drill density and the number of samples used to estimate the resource blocks.

Criteria	JORC Code Explanation	Com	imentary
		•	Mount Marion:
			Drill-spacing ranges from 20 m x 20 m to no greater than 60 m x 60 m for the reported resource Given that the geological and mineralisation understanding is well established via mining operations, this drill-spacing is considered adequate for the classifications applied to the resource.
			Compositing is carried out based upon the modal sample length of each project. CMGP
		•	Data spacing is variable dependent upon the individual orebody under consideration. A lengthy history of mining has shown that this approach is appropriate for the Mineral Resource estimation process and to allow for classification of the resources as they stand.
		•	Compositing is carried out based upon the modal sample length of each individual domain.
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.	•	Drilling intersections are nominally designed to be normal to the orebody as far as underground infrastructure constraints / topography allows.
	• If the relationship between the drilling orientation and the orientation of key mineralised	•	Development sampling is nominally undertaken normal to the various orebodies.
	structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	•	Where drilling angles are sub optimal the number of samples per drill hole used in the estimation has been limited to reduce any potential bias.
		•	It is not considered that drilling orientation has introduced an appreciable sampling bias.
Sample security	The measures taken to ensure sample security.	•	The core is transported to the core storage facility by either drilling company personnel or geological staff. Once at the facility the samples are kept in a secure location while logging and sampling is being conducted. The storage facility is enclosed by a fence which is locked at night or when the geology staff are absent. The samples are transported to the laboratory facility or collection point by geological staff.
Audits or reviews	The results of any audits or reviews of sampling techniques and data		HGO
		•	A review of the grade control practices on site has been undertaken by an external consultant. No formal external audit or review has been performed on the resource estimate. Site generated resources and reserves and the parent geological data is routinely reviewed by the Metals X Corporate technical team.
			SKO
		•	No formal external audit or review has been performed on the sampling techniques and data. Site generated resources and reserves and the parent geological data is routinely reviewed by the Metals X Corporate technical team.
			CMGP
		•	Site generated resources and reserves and the parent geological data is routinely reviewed by the Metals X Corporate technical team.

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

Criteria	JORC Code Explanation	Commentary
Criteria Mineral tenement and land tenure status	<ul> <li>JURC Code Explanation</li> <li>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.</li> <li>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.</li> </ul>	Commentary         HGO         State Royalty of 2.5% of revenue applies to all tenements.         The Trident Resource is located within mining leases M15/0642, M15/0351 and M15/0348. M15/0351 and M15/0642 also incur the Morgan Stanley royalty of 4% of revenue after 100,000 oz of production and the Morgan Stanley price participation royalty at 10% of incremental revenue for gold prices above AUD\$600/oz. M15/0642 is also subject to the Mitchell Royalty at AUD\$32/oz.         The Chalice Resource is located on mining lease M15/1132. Lake Cowan is subject to an additional royalty (Brocks Creek) of \$1/tonne of ore.         SK0         State Royalty of 2.5% of revenue applies to all tenements, although does not apply to the 16 freehold titles (which host the majority of SK0's Resource inventory). There are a number of minor agreements attached to a select number of tenements and locations with many         of these royalty agreements are in place that relate to production from HBJ open-pit at \$10/ oz. In addition, a royalty is payable in the form of 1.75% of the total gold ounces produced from the following resources: Shirl Underground, Golden Hope, Bellevue, HBJ Open-pit, Mount Martin open-pit, Mount Martin Stockpiles and any reclaimed tailings.         SK0 consists of 141 tenements including 16 freehold titles, 6 exploration licenses, 47 mining leases, 12 miscellaneous licenses and 60 prospecting licenses, all held directly by the Company.         There are no known insues regarding security of tenure.       There are no known impediments to continued operation. CMGP         Native title interests are recorded against several CMGP tenements.       The CMGP tenements are held by the Big Be
		<ul> <li>The CMBP tenements are need by the Big Bell Gold Uperations (BBGU) of which Metals X ha 100% ownership.</li> <li>Several third party royalties exist across various tenements at CMGP, over and above th state government royalty.</li> <li>BBGO operates in accordance with all environmental conditions set down as conditions for grant of the leases.</li> <li>There are no known issues regarding security of tenure.</li> <li>There are no known impediments to continued operation.</li> </ul>

Criteria	JORC Code Explanation	Com	imentary
Exploration done by other	Acknowledgment and appraisal of exploration by other partie	•	The Higginsville region has an exploration and production history in excess of 30 years.
parties		•	The SK0 tenements have an exploration and production history in excess of 100 years.
		•	The CMGP tenements have an exploration and production history in excess of 100 years.
Geology	Deposit type, geological setting and style of mineralisation.	•	Metals X work has generally confirmed the veracity of historic exploration data. HGO
		•	Trident is hosted primarily within a thick, weakly differentiated gabbro with subordinate mafic and ultramafic lithologies and comprises a series of north-northeast trending, shallowly north-plunging mineralised zones. The deposit comprises two main mineralisation styles; large wallrock-hosted ore-zones comprising sigmoidal quartz tensional vein arrays and associated metasomatic wall rock alteration hosted exclusively within the gabbro;
		•	and thin, lode-style, nuggetty laminated quartz veins that formed primarily at sheared lithological contacts between the various mafic and ultramafic lithologies.
		•	Lake Cowan mineralisation can be separated into two types. Structurally controlled primary mineralisation in ultramafics, basalts and felsics host (e.g. Louis, Josephine and Napoleon), and saprolite / palaeochannel hosted supergene hydromorphic deposits, including Sophia, Brigitte and Atreides.
			SKO
		•	HBJ:
			The HBJ lodes form part of a gold mineralised system along the Boulder-Lefroy shear zone that is over 5km long and includes the Celebration, Mutooroo, HBJ and Golden Hope open- pit and underground mines. The lodes are hosted within a steeply-dipping, north-northwest striking package of mafic, ultramafic and sedimentary rocks and schists that have been intruded by felsic to intermediate porphyries. Gold mineralisation is structurally controlled and is focused along lithological contacts, within stockwork and tensional vein arrays and within shear zones. The main mineralised zone has a length in excess of 1.9 km and an average width of 40 m in the Jubilee workings but is generally narrower to the north in the Hampton -Boulder workings.
		•	Mount Marion:
		•	The Mount Marion deposit is located on the eastern side of the Coolgardie Domain within a flexure in the Karramindie Shear Zone. It is hosted within a sub-vertical sequence of meta- komatiites intercalated with metasediments that have been metamorphosed to amphibolite facies. Gold mineralisation occurs in a footwall and hangingwall lode, each ranging in thickness from 2 to 15 m. The mineralisation plunges steeply to the west and is open at depth.
		•	Mount Martin:
			Ihe Mount Martin Tribute Area, is located within a regional scale north-northwest trending Archean Greenstone Belt. Within the Mount Martin - Carnilya area, the greenstone belt comprises a mixed sequence of ultramafic (predominantly komatiitic) and fine-grained, variably sulphidic sedimentary lithologies with subsidiary mafic units. Known gold and nickel mineralisation at the Mount Martin Mine is associated with a series of stacked, westerly dipping, sulphide and quartz-carbonate bearing lodes which are mainly hosted within intensely deformed and altered chloritic schists sandwiched between talc-carbonate ultramafic lithologies.

Criteria	JORC Code Explanation	Commentary
		<ul> <li>Pernatty: The Pernatty deposit is hosted within a granophyric phase of a gabbro and is controlled by a structurally complex interaction of a number of major shear zones. Shearing has altered the original granophyric quartz dolerite to a biotite-carbonate-plagioclase-pyrite schist. The sequence has also been intruded by mafic and felsic porphyritic dykes, which are also mineralised.</li> </ul>
		CMGP
		<ul> <li>The CMGP is located in the Achaean Murchison Province, a granite-greenstone terrane in the northwest of the Yilgarn Craton. Greenstone belts trending north-northeast are separated by granite-gneiss domes, with smaller granite plutons also present within or on the margins of the belts.</li> </ul>
		<ul> <li>Mineralisation at Big Bell is hosted in the shear zone (Mine Sequence) and is associated with the post-peak metamorphic retrograde assemblages. Stibnite, native antimony and trace arsenopyrite are disseminated through the K-feldspar-rich lode schist. These are intergrown with pyrite and pyrrhotite and chalcopyrite. Mineralisation outside the typical Big Bell host rocks (KPSH), for example 1,600N and Shocker, also display a very strong W-As-Sb geochemical halo.</li> </ul>
		<ul> <li>Numerous gold deposits occur within the Cuddingwarra Project area, the majority of which are hosted within the central mafic-ultramafic ± felsic porphyry sequence. Within this broad framework, mineralisation is shown to be spatially controlled by competency contrasts across, and flexures along, layer-parallel D2 shear zones, and is maximised when transected by corridors of northeast striking D3 faults and fractures.</li> </ul>
		• The Great Fingall Dolerite hosts the majority gold mineralisation within the portion of the greenstone belt proximal to Cue (The Day Dawn Project Area). Unit AGF3 is the most brittle of all the five units and this characteristic is responsible for its role as the most favourable lithological host to gold mineralisation in the Greenstone Belt.
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:	• Tables containing drillhole collar, downhole survey and intersection data are included in the body of the announcement.
	» easting and northing of the drill hole collar	
	» elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
	» dip and azimuth of the hole	
	» down hole length and interception depth	
	» hole length.	
	• 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.	

Criteria	JORC Code Explanation	Commentary
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>All results presented are length weighted.</li> <li>No high-grade cuts are used.</li> <li>Reported results contain no more than two contiguous metres of internal dilution below 1 g/t.</li> <li>Results are reported above a variety of gram / metre cut-offs dependent upon the nature of the hole. These are cut-offs are clearly stated in the relevant tables.</li> <li>No metal equivalent values are stated.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul> <li>Unless indicated to the contrary, all results reported are true width.</li> <li>Given restricted access in the underground environment the majority of drillhole intersections are not normal to the orebody.</li> </ul>
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.	Appropriate diagrams are provided in the body of the release.
Balanced reporting	<ul> <li>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.</li> </ul>	Appropriate balance in exploration results reporting is provided.
Other substantive exploration data	<ul> <li>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.</li> </ul>	• There is no other substantive exploration data associated with this release.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	Ongoing surface and underground exploration activities will be undertaken to support continuing mining activities at Metals X Gold Operations.

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure	• 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,	<ul> <li>The CMGP comprises 6 granted exploration leases, 10 granted general purpose leases, 31 granted mis- cellaneous leases, 210 granted mining leases and 14 granted prospecting leases.</li> </ul>
status	historical sites, wilderness or national park and environmental settings.	Native title interests are recorded against several CMGP tenements.
	• 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 CMGP tenements are held by the Big Bell Gold Operations (BBGO) of which Metals X has 100% own- ership.
		<ul> <li>Several third party royalties exist across various tenements at CMGP, over and above the state government royalty.</li> </ul>
		• BBGO operates in accordance with all environmental conditions set down as conditions for grant of the leases.
	Acknowledgment and appraisal of exploration by other parties.	There are no known issues regarding security of tenure.
		There are no known impediments to continued operation.
Exploration done by		• The CMGP area has an exploration and production history in excess of 100 years.
other parties		On balance, BBG0 work has generally confirmed the veracity of historic exploration data.

Criteria	JORC Code explanation	Commentary
Geology	• Deposit type, geological setting and style of mineralisation.	• The CMGP is located in the Achaean Murchison Province, a granite-greenstone terrane in the northwest of the Yilgarn Craton. Greenstone belts trending north-northeast are separated by granite-gneiss domes, with smaller granite plutons also present within or on the margins of the belts.
		<ul> <li>Mineralisation at Big Bell is hosted in the shear zone (Mine Sequence) and is associated with the post- peak metamorphic retrograde assemblages. Stibnite, native antimony and trace arsenopyrite are dis- seminated through the K-feldspar-rich lode schist. These are intergrown with pyrite and pyrrhotite and chalcopyrite. Mineralisation outside the typical Big Bell host rocks (KPSH), for example 1,600N and Shocker, also display a very strong W-As-Sb geochemical halo.</li> </ul>
		<ul> <li>Numerous gold deposits occur within the Cuddingwarra Project area, the majority of which are hosted within the central mafic-ultramafic ± felsic porphyry sequence. Within this broad framework, minerali- sation is shown to be spatially controlled by competency contrasts across, and flexures along, layer-par- allel D2 shear zones, and is maximised when transected by corridors of northeast striking D3 faults and fractures.</li> </ul>
		• The Great Fingall Dolerite hosts the majority gold mineralisation within the portion of the greenstone belt proximal to Cue (The Day Dawn Project Area). Unit AGF3 is the most brittle of all the five units and this characteristic is responsible for its role as the most favourable lithological host to gold mineralisation in the Greenstone Belt.
		• The Paddy's Flat area is located on the western limb of a regional fold, the Polelle Syncline, within a sequence of mafic to ultramafic volcanics with minor interflow sediments and banded iron-formation. The sequence has also been intruded by felsic porphyry dykes prior to mineralisation. Mineralisation is located along four sub-parallel trends at Paddy's Flat which can be summarised as containing three dominant mineralisation styles:
		Sulphide replacement BIF hosted gold.
		Quartz vein hosted shear-related gold.
		Quartz-carbonate-sulphide stockwork vein and alteration related gold.
		<ul> <li>The Yaloginda area is a gold-bearing Archaean greenstone belt situated ~15 km south of Meekatharra. The deposits in the area are hosted in a strained and metamorphosed volcanic sequence that consists primarily of ultramafic and high-magnesium basalt with minor komatiite, peridotite, gabbro, tholeiitic basalt and interflow sediments. The sequence was intruded by a variety of felsic porphyry and interme- diate sills and dykes.</li> </ul>
		<ul> <li>The Reedy's mining district is located approximately 15 km to the south-east to Meekatharra and to the south of Lake Annean. The Reedy gold deposits occur within a north-south trending greenstone belt, two to five kilometres wide, composed of volcano-sedimentary sequences and separated multiphase syn- and post-tectonic granitoid complexes. Structurally controlled the gold occurs at the sheared contacts of dolerite, basalt, ultramafic schist, quartz-feldspar porphyry, and shale.</li> </ul>

Criteria	JORC Code explanation	Commentary			
Drill hole Informa-	• A summary of all information material to the understanding of the exploration results including	Presented in tables above.			
tion	a tabulation of the following information for all Material drill holes:	• Excluded results are non-significant and do not materially affect understanding of the CMGP deposits.			
	<ul> <li>easting and northing of the drill hole collar</li> <li>elevation or PL (Pedward Leval, elevation above can leval in matrice) of the drill hale collar</li> </ul>				
	O elevation of the hole				
	<ul> <li>down hole length and interception depth</li> </ul>				
	<ul> <li>hole length.</li> </ul>				
	<ul> <li>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.</li> </ul>				
Data aggregation	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum	Results are reported on a length weighted average basis.			
methods	grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	• Results are reported above a 5g/m Au cut-off.			
	Where aggregate intercepts incorporate short lengths of high grade results and longer lengths	• Results reported may include up to two metres of internal dilution below a 0.5 g/t Au cut-off.			
	<sup>F</sup> low grade results, the procedure used for such aggregation should be stated and some typical xamples of such aggregations should be shown in detail.	No metal equivalent values are reported.			
	• The assumptions used for any reporting of metal equivalent values should be clearly stated.				
Relationship	• These relationships are particularly important in the reporting of Exploration Results.	Interval widths are downhole width unless otherwise stated.			
between minerali- sation widths and intercept lengths	• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.				
	<ul> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>				
Diagrams	<ul> <li>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.</li> </ul>	• Images are presented in the body of the text as appropriate.			
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative re- porting of both low and high grades and/or widths should be practiced to avoid misleading re- porting of Exploration Results.</li> </ul>	• Excluded results are non-significant and do not materially affect understanding of the CMGP deposit.			
Other substantive exploration data	<ul> <li>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.</li> </ul>	Relevant information presented in the body of the above.			
Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	• Exploration and mine planning assessment continues to take place at the CMGP.			
	<ul> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>				

# **APPENDIX 3 – JORC 2012 TABLE 1 – TIN DIVISION** (RELATING TO EXPLORATION RESULTS) **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 (eg 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.	<ul> <li>Diamond Drilling         The bulk of the data used in resource calculations at Renison has been gathered from diamond core. Three sizes have been used historically NQ2 (45.1 mm nominal core diameter), LTK60 (45.2 mm nominal core diameter) and LTK48 (36.1 mm nominal core diameter), with NQ2     </li> </ul>
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	currently in use. This core is geologically logged and subsequently halved for sampling. Grade control holes may be whole-cored to streamline the core handling process if required.
	• Aspects of the determination of mineralisation that are Material to the Public Report.	NQ and $HQ$ core sizes have been recorded as being used at Mount Bischoff. This core is
	<ul> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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</li> </ul>	<ul><li>geologically logged and subsequently halved for sampling.</li><li>There is no diamond drilling for the Rentails Project.</li><li>Face Sampling</li></ul>
Drilling techniques	<ul> <li>g techniques</li> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> </ul>	Each development face / round is horizontally chip sampled at Renison. The sampling intervals are domained by geological constraints (e.g. rock type, veining and alteration / sulphidation etc.). Samples are taken in a range from 0.3 m up to 1.2 m in waste / mullock. All exposures within the orebody are sampled. A similar process would have been followed for historical Mount Bischoff face sampling.
	• Method of recording and assessing core and chip sample recoveries and results assessed.	There is no face sampling for the Rentails Project.
Drill sample recovery	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	Sludge Drilling
		Sludge drilling at Renison is performed with an underground production drill rig. It is an open hole drilling method using water as the flushing medium, with a 64 mm (nominal) hole diameter. Sample intervals are ostensibly the length of the drill steel. Holes are drilled at sufficient angles to allow flushing of the hole with water following each interval to prevent contamination.
		There is no sludge drilling for the Mount Bischoff Project. There is no sludge drilling for the Rentails Project.
		RC Drilling
		RC drilling has been utilised at Mount Bischoff.
		Drill cuttings are extracted from the RC return via cyclone. The underflow from each interval is transferred via bucket to a four tiered riffle splitter, delivering approximately three kilograms of the recovered material into calico bags for analysis. The residual material is retained on the ground near the hole. Composite samples are obtained from the residue material for initial analysis, with the split samples remaining with the individual residual piles until required for re-split analysis or eventual disposal.
		There is no RC drilling for the Renison Project.

Criteria	JOF	C Code Explanation	Con	nmentary
			•	Percussion Drilling This drilling method was used for the Rentails project and uses a rotary tubular drilling cutter
				which was driven percussively into the tailings. The head of the cutting tube consisted of a 50 mm diameter hard tipped cutting head inside which were fitted 4 spring steel fingers which allowed the core sample to enter and then prevented it from falling out as the drill tube was withdrawn from the drill hole.
				There is no percussion drilling for the Renison Project.
				There is no percussion drilling for the Mount Bischoff Project.
				All geology input is logged and validated by the relevant area geologists, incorporated into this is assessment of sample recovery. No defined relationship exists between sample recovery and grade. Nor has sample bias due to preferential loss or gain of fine or coarse material been noted.
Logging	•	Whether core and chip samples have been geologically and geotechnically logged to a level of	•	Diamond core is logged geologically and geotechnically.
		detail to support appropriate Mineral Resource estimation, mining studies and metallurgical	•	RC chips are logged geologically.
		Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	•	Development faces are mapped geologically.
			•	Logging is qualitative in nature.
	•	The total length and percentage of the relevant intersections logged	•	All holes are logged completely, all faces are mapped completely.
Sub-sampling techniques and	•	If core, whether cut or sawn and whether quarter, half or all core taken.	•	Drill core is halved for sampling. Grade control holes may be whole-cored to streamline the
sample preparation	•	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.		core handling process.
	•	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	•	Samples are dried at 90°C, then crushed to <3 mm. Samples are then riffle split to obtain a sub-sample of approximately 100g which is then pulverized to 90% passing 75um. 2g of the
	•	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Massures taken to ensure that the campling is representative of the institument advected.</li> </ul>		sample is then pulverized again for one minute. The sample is then compressed into a pressed powder tablet for introduction to the XRF. This preparation has been proven to be
		including for instance results for field duplicate/second-half sampling.		appropriate for the style of mineralisation being considered.
	Whether	Whether sample sizes are appropriate to the grain size of the material being sampled.	•	VA/VL is ensured during the sub-sampling stages process via the use of the systems of an independent NATA / ISO accredited laboratory contractor.
			•	The sample size is considered appropriate for the grain size of the material being sampled.
			•	The un-sampled half of diamond core is retained for check sampling if required.
			•	For RC chips regular field duplicates are collected and analysed for significant variance to primary results.
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.	•	Assaying is undertaken via the pressed powder XRF technique. Sn, As and Cu have a detection limit 0.01%, Fe and S detection limits are 0.1%. These assay methodologies are appropriate for
	•	For geophysical tools, spectrometers, handheld ${\sf XRF}$ instruments, etc, the parameters used in		the resource in question.
		determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	•	All assay data has built in quality control checks. Each XRF batch of twenty consists of one blank, one internal standard, one duplicate and a replicate, anomalies are re-assayed to
	•	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	•	ensure quaiity control. Specific gravity / density values for individual areas are routinely sampled during all diamond drilling where material is competent enough to do so.

Criteria	JO	RC Code Explanation	Con	nmentary
Criteria Verification of sampling and assaying Location of data points Data spacing and distribution	0L • • • •	RC Code Explanation The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 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. Specification of the grid system used. Quality and adequacy of topographic control. Data spacing for reporting of Exploration Results. 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.	Con - - - - - - - - - - - - -	Immentary           Anomalous intervals as well as random intervals are routinely checked assayed as part of the internal QA/QC process.           Virtual twinned holes have been drilled in several instances across all sites with no significant issues highlighted. Drillhole data is also routinely confirmed by development assay data in the operating environment.           Primary data is loaded into the drillhole database system and then archived for reference.           All data used in the calculation of resources and reserves are compiled in databases (underground and open pit) which are overseen and validated by senior geologists.           No primary assays data is modified in any way.           All data is spatially oriented by survey controls via direct pickups by the survey department.           Drillholes are all surveyed downhole, currently with a GyroSmart tool in the underground environment at Renison, and a multishot camera for the typically short surface diamond holes.           All drilling and resource estimation is undertaken in local mine grid at the various sites.           Topographic control is generated from remote sensing methods in general, with ground based surveys undertaken where additional detail is required. This methodology is adequate for the resource in question.           Drilling in the underground environment at Renison is nominally carried-out on 40 m x 40 m spacing in the south of the mine and 25 m, x 25 m spacing in the north of the mine prior to mining occurring. A lengthy history of mining has shown that this data spacing is appropriate for the Mineral Resource estimation process and to allow for classification of the resource as it stands.           Drilling at Mount B
			•	Compositing is carried out based upon the modal sample length of each individual domain.
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.	•	Drilling intersections are nominally designed to be normal to the orebody as far as underground infrastructure constraints / topography allows.
		structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	•	lt is not considered that drilling orientation has introduced an appreciable sampling bias.
Sample security	•	The measures taken to ensure sample security.	•	At Renison, Mount Bischoff and Rentails samples are delivered directly to the on-site laboratory by the geotechnical crew where they are taken into custody by the independent laboratory contractor.
Audits or reviews	•	The results of any audits or reviews of sampling techniques and data	•	Site generated resources and reserves and the parent geological data is routinely reviewed by the Metals X Corporate technical team.

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

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>All Tasmania resources are hosted within 12M1995 and 12M2006. Both tenements are standard Tasmanian mining leases.</li> <li>No native title interests are recorded against the Tasmanian tenements. Native title interests are recorded against the Queensland tenements.</li> <li>Tasmanian tenements are held by the Bluestone Mines Tasmania Joint Venture of which Match VI. 50%</li> </ul>
		<ul> <li>No royalties above legislated state royalties apply for the Tasmanian tenements.</li> </ul>
		• Bluestone Mines Tasmania Joint Venture operates in accordance with all environmental conditions set down as conditions for grant of the mining leases.
		• There are no known issues regarding security of tenure.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other partie	• The Renison and Mount Bischoff areas have an exploration and production history in excess of 100 years.
		• Bluestone Mines Tasmania Joint Venture work has generally confirmed the veracity of historic exploration data.
Geology	• Deposit type, geological setting and style of mineralisation.	• Renison is one of the world's largest operating underground tin mines and Australia's largest primary tin producer. Renison is the largest of three major Skarn, carbonate replacement, pyrrhotite-cassiterite deposits within western Tasmania. The Renison Mine area is situated in the Dundas Trough, a province underlain by a thick sequence of Neoproterozoic-Cambrian siliciclastic and volcaniclastic rocks. At Renison there are three shallow-dipping dolomite horizons which host replacement mineralisation.
		<ul> <li>Mount Bischoff is the second of three major Skarn, carbonate replacement, pyrrhotite- cassiterite deposits within western Tasmania. The Mount Bischoff Mine area is situated within the Dundas Trough, a province underlain by a thick sequence of Neoproterozoic- Cambrian siliciclastic and volcaniclastic rocks. At Mount Bischoff folded and faulted shallow-dipping dolomite horizons host replacement mineralisation with fluid interpreted to be sourced from the forceful emplacement of a granite ridge and associated porphyry intrusions associated with the Devonian Meredith Granite, which resulted in the complex brittle / ductile deformation of the host rocks. Lithologies outside the current mining area are almost exclusively metamorphosed siltstones. Major porphyry dykes and faults such as the Giblin and Queen provided the major focus for ascending hydrothermal</li> </ul>
		• fluids from a buried ridge of the Meredith Granite. Mineralisation has resulted in tin-rich sulphide replacement in the dolomite lodes, greisen and sulphide lodes in the porphyry and fault / vein lodes in the major faults. All lodes contain tin as cassiterite within sulphide mineralisation with some coarse cassiterite as veins throughout the lodes.
		• The Rentails resource is contained within three Tailing Storage Facilities (TSF's) that have been built up from the processing of tin ore at the Renison Bell mine over the period 1968 to 2013.

Criteria	JO	RC Code Explanation	Con	nmentary
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:	•	Excluded results are non-significant and do not materially affect understanding of the Renison deposit.
		<ul> <li>» easting and northing of the drill hole collar</li> <li>» elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>		
		» dip and azimuth of the hole		
		» down hole length and interception depth		
		» hole length.		
	•	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.		
Data aggregation methods	•	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum	•	Results are reported on a length weighted average basis.
		grade truncations [eg cutting of high grades] and cut-off grades are usually Material and should be stated.	•	Results are reported above a 4%m Sn cut-off.
	•	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.		
	•	The assumptions used for any reporting of metal equivalent values should be clearly stated.		
Relationship between	•	These relationships are particularly important in the reporting of Exploration Results.	•	Interval widths are true width unless otherwise stated.
mineralisation widths and intercept lengths	•	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.		
	•	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').		
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.	•	Presented in the body of the text above when appropriate.
Balanced reporting	•	Where comprehensive reporting of all Exploration Results is not practicable, representative	•	Presented above.
		reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	•	Excluded results are non-significant and do not materially affect understanding of the Renison deposit.
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.	•	No relevant information to be presented.
Further work	•	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	•	Exploration assessment and normal mine extensional drilling continues to take place at Renison.
	•	Diagrams clearly highlighting the areas of possible extensions, including the main geological	•	Exploration assessment continues to progress at Mount Bischoff.
		interpretations and future drilling areas, provided this information is not commercially sensitive.	•	Project assessment continues to progress at Rentails.

# **APPENDIX 4 – JORC 2012 TABLE 1 – TENNANT CREEK** (RELATING TO EXPLORATION RESULTS) **SECTION 1 SAMPLING TECHNIQUES AND DATA**

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

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg 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 no be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 o mineralisation types (eg submarine nodules) may warrant disclosure of detailed information</li> </ul>	<ul> <li>Diamond Drilling         <ul> <li>Diamond Drilling</li> <li>All data used in resource calculations at the Tennant Creek Project has been gathered from diamond core. Multiple sizes have been used historically. This core is geologically logged and subsequently halved for sampling.</li> <li>All geology input is logged and validated by the relevant area geologists, incorporated into this is assessment of sample recovery. No defined relationship exists between sample recovery and grade. Nor has sample bias due to preferential loss or gain of fine or coarse material been noted.</li> </ul> </li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka sonic, etc) and details (eg 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).</li> </ul>	, -
	• Method of recording and assessing core and chip sample recoveries and results assessed.	
Drill sample recovery	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias</li> </ul>	5
	may have occurred due to preferential loss/gain of fine/coarse material.	
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level or detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core for costean channel, etc.</li> </ul>	<ul> <li>f Diamond core is logged geologically and geotechnically.</li> <li>l Logging is qualitative in nature.</li> <li>All holes are logged completely.</li> </ul>
	photography.	
	<ul> <li>The total length and percentage of the relevant intersections logged</li> </ul>	

Criteria	JOF	IC Code Explanation	Cor	nmentary
Sub-sampling techniques and	•	If core, whether cut or sawn and whether quarter, half or all core taken.	•	Diamond Drilling - Half-core niche samples, sub-set via geological features as appropriate.
sample preparation	•	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	•	Core undergoes total preparation.
	•	For all sample types, the nature, quality and appropriateness of the sample preparation	•	The sample preparation process consists of:
		technique.		» Crushing using a vibrating jaw crusher to achieve a maximum sample size of 4mm.
	•	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.		» The sample is then weighed, and if the sample weight is greater than 3.2kg, the sample is split into two using a Jones-type Riffle splitter.
	•	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.		» The crushed sample is then pulverised in a Labtech LM5 Ring Mill for 6 minutes. For samples weighing greater than 3.2kg the first portion is removed and second portion is
	•	Whether sample sizes are appropriate to the grain size of the material being sampled.		homogenised in the same machine. Once complete the first portion is put back in the LM5 and both portions are homogenised.
				» From the pulverised sample, approximately 200g is taken as a master sample which stays in Alice Springs, while a second sample of approximately 150g taken and sent to for assaying. These samples are collected via a scoop inserted to the bottom of the bowl. The remaining sample is transferred to a calico bag for storage.
				» For every 20th sample, an approximately 25g sample is screened to 75 microns to check that homogenising has achieved 80% passing 75 microns.
			•	$\ensuremath{QA/QC}$ is ensured during sampling via the use of sample ledgers, blanks, standards and repeats.
			•	QA/QC is ensured during the assays process via the use of blanks, standards and repeats at a NATA / ISO accredited laboratory.
			•	The sample sizes are considered appropriate to the grainsize of the material being sampled.
			•	The un-sampled half of diamond core is retained for check sampling if required.
Quality of assay data and	•	The nature, quality and appropriateness of the assaying and laboratory procedures used and	•	Analysis of drill core for Au, Ag, Cu, Pb, Zn was carried out in Perth in the following manner;
laboratory tests	•	whether the technique is considered partial or total. 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.		» Gold (Au-AA25 scheme – lower detection limit = 0.01ppm, upper detection limit = 100ppm). A 30g charge of prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents and then cupelled to yield a precious metal bead.
	•	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision		» The bead is then dissolved in acid and analysed by atomic absorption spectroscopy against matrix-matched standards.
		have been established.		» Samples returning assay values in excess of 100g/t Au were repeated using the Au- AA26 method.
				» Ag, Cu, Pb, Zn (ME-0G62) - A prepared sample is digested using a 4 acid digest.
				» The subsequent solution is analysed by inductively coupled plasma - atomic emission spectroscopy or by atomic absorption spectrometry.
			•	No significant QA/QC issues have arisen in recent drilling results.
			•	These assay methodologies are appropriate for the resource in question.

Criteria	JOI	RC Code Explanation	Con	nmentary
Verification of sampling and assaying	•	The verification of significant intersections by either independent or alternative company personnel.	•	Anomalous intervals as well as random intervals are routinely checked assayed as part of the internal QA/QC process.
	•	The use of twinned holes.	•	Virtual twinned holes have been drilled in several instances with no significant issues
	•	Documentation of primary data, data entry procedures, data verification, data storage		highlighted.
		(prysical and electronic) protocols.		All data used in the calculation of resources are compiled in databases which are overseen
				and validated by senior geologists.
			•	No primary assays data is modified in any way.
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.	•	All data is spatially oriented by survey controls via direct pickups by the survey department. Drillholes are all surveyed downhole, deeper holes with a Gyro tool if required.
	•	Specification of the grid system used.	•	All drilling and resource estimation is undertaken in MGA grid.
	•	Quality and adequacy of topographic control.	•	Topographic control is generated from a combination of remote sensing methods and ground- based surveys. This methodology is adequate for the resource in question.
Data spacing and distribution	•	Data spacing for reporting of Exploration Results.	•	Data spacing is variable dependent upon the individual orebody under consideration.
	Whether the data spacing and distribution is sufficient to estab and grade continuity appropriate for the Mineral Resource a	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		This approach is appropriate for the Mineral Resource estimation process and to allow for classification of the resource as it stands.
	procedure(s) and classifications applied.	•	Compositing is carried out based upon the modal sample length of each individual domain.	
	•	Whether sample compositing has 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.	•	Drilling intersections are nominally designed to be normal to the orebody as far topography / economics allows.
	•	If the relationship between the drilling orientation and the orientation of key mineralised	•	Development sampling is nominally undertaken normal to the various orebodies.
		structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	•	It is not considered that drilling orientation has introduced an appreciable sampling bias.
Sample security	•	The measures taken to ensure sample security.	•	Samples are delivered to a third party transport service, who in turn relay them to the independent laboratory contractor. Samples are stored securely until they leave site.
Audits or reviews	•	The results of any audits or reviews of sampling techniques and data	•	Site generated resources and reserves and the parent geological data is routinely reviewed
				by the Metals X Corporate technical team.

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

Criteria	JO	RC Code Explanation	Cor	nmentary
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.	•	The Tennant Creek Project comprises 5 granted exploration leases. Native title interests are recorded against the Tennant Creek tenements.
	•	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 Tennant Creek tenements are held by Lastile with is 100% Metals X owned. Several third party royalties exist across various tenements at Tennant Creek, over and above the Northern Territory government royalty.
			•	Castile operates in accordance with all environmental conditions set down as conditions for grant of the leases.
			•	There are no known issues regarding security of tenure.
			•	There are no known impediments to continued operation.
Exploration done by other parties	•	Acknowledgment and appraisal of exploration by other partie	•	The Tennant Creek area has an exploration and production history in excess of 100 years. The Rover area in particular has an intensive exploration history stretching from the 1970's.
			•	On balance, Castile work has generally confirmed the veracity of historic exploration data.
Geology	•	Deposit type, geological setting and style of mineralisation.	•	The Tennant Creek Project is located in the 1860-1850Ma Warramunga Province is approximately centred on the township of Tennant Creek, and contains the
			•	Palaeoproterozoic Warramunga Formation. This is a weakly metamorphosed turbiditic succession of partly tuffaceous sandstones and siltstones which includes argillaceous banded ironstones locally referred to as 'haematite shale'.
			•	Copper in the form of chalcopyrite occurs around the upper margins of the quartz magnetite ironstones and in the silicified BIF or haematitic shales that often form an alteration transition to the adjacent chlorite alteration envelope. Although copper levels in the upper quartz magnetite portion of the ironstones is usually very low, pervasive sub-economic copper levels can persist throughout this zone. Economic levels of copper are dominantly contained in the lower massive magnetite portion or in massive magnetite "veins" identified in the magnetite quartz zones. The massive magnetite zones grade laterally and at depth into magnetite chlorite stringer zones. Gold content increases where the content of magnetite veining and chlorite alteration decreases and there is an increase in early haematite dusted quartz veins and indurated sediments and fine chlorite veining related to the mineralisation phase. The transition from massive magnetite copper mineralisation to magnetite quartz chlorite stringer gold mineralisation is also the zone of increased bismuthinite mineralisation. Lead and zinc mineralisation at Explorer 108 is associated with a brecciated dolomitised sediment unit, consisting of irregular, generally narrow, domains or veins of semi-massive sulphides (sphalerite and galena). A basal "high-grade" zone is present at the contact of the dolomite and lower felsic units.

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:	• Excluded results are non-significant and do not materially affect understanding of the Rover 1 deposit.
	» easting and northing of the drill hole collar	
	<ul> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> </ul>	
	» dip and azimuth of the hole	
	» down hole length and interception depth	
	» hole length.	
	<ul> <li>If the exclusion of this information is justified on the basis that the information is not Materia and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum	• Results are reported on a length weighted average basis.
	grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.	<ul> <li>Results are reported above a 5gm Au / Au Eq. cut-off / 2.5%m Cu.</li> </ul>
	<ul> <li>Where aggregate intercepts incorporate short lengths of high grade results and longe 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.</li> </ul>	
	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between	• These relationships are particularly important in the reporting of Exploration Results.	• Interval widths are true width unless otherwise stated.
mineralisation widths and intercept lengths	• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	
	<ul> <li>If it is not known and only the down hole lengths are reported, there should be a clea statement to this effect (eg 'down hole length, true width not known').</li> </ul>	·
Diagrams	<ul> <li>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.</li> </ul>	Presented in the body of the text above.
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative	Presented above.
	reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	• Excluded results are non-significant and do not materially affect understanding of the Rover 1 deposit.
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but no 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.</li> </ul>	No relevant information to be presented.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>	• Exploration and mine planning assessment continues to take place at the Tennant Creek Project.
	<ul> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geologica interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	

### APPENDIX 5 – JORC 2012 TABLE 1 – MOUNT HENRY SECTION 1 SAMPLING TECHNIQUES AND DATA

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

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg 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</li> </ul>	• The deposit has been extensively sampled using Reverse Circulation (RC) and Diamond drilling (DD) techniques. The Mt Henry (MH) resource database subset contains 743 RC & DD holes for a total of 59,401m.
	be taken as limiting the broad meaning of sampling.	• The grid drill spacing is typically 25m X 25m over the extent of the mineralisation.
	<ul> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	• RC holes were sampled by collecting 1m samples and splitting then down using either on- board rig or manual riffle splitters to produce an assay sample of ~3kg size.
	• Aspects of the determination of mineralisation that are Material to the Public Report.	• Diamond holes are typically NQ2 (NQ for some historical holes) & occasionally HQ size and
	<ul> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to</li> </ul>	were sampled by cutting the core in half or quarter for the HQ core over geologically logged intervals between 20cm and 1m in length.
	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 (eg submarine nodules) may warrant disclosure of detailed information.	• All recent Panoramic resource assay samples were submitted to SGS Laboratories in Perth for gold analysis by FA50 (Fire Assay) technique. Of the historical RC & DD gold assays in the database, the dominant assay methodology is Fire Assay. A minor proportion of the data (4%) has been assayed via Aqua Regia.
Drilling techniques	• Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).	• The drilling methods used on this deposit are predominantly RC and DD drilling. The RC drilling was typically completed using 5 <sup>1</sup> / <sub>4</sub> inch hammers and recently 5 <sup>1</sup> / <sub>4</sub> inch face sampling hammers.
	• Method of recording and assessing core and chip sample recoveries and results assessed.	<ul> <li>The DD drilling was typically NQ (47.6mm), and more recently NQ2 (50mm) and HQ (63.5mm) diameter core.</li> </ul>
		• HQ size core was typically drilled as geotechnical holes from surface by Panoramic.
Drill sample recovery	<ul> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	• RC sample recoveries were monitored by Panoramic by recording visual estimates of the sample bags prior to sampling. Typical recoveries for RC were greater than 90%.
	<ul> <li>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.</li> </ul>	• Core recovery is noted during drilling and geological logging processes as a percentage recovered vs. expected drill length. Core was reconstructed into continuous runs on a length of angle iron to enable accurate geological logging and estimation of core recovery. Core recovery is typically 100 percent.
		No apparent relationships were noted in relation to sample recovery and grade.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of	• All drill holes in the MH resource database subset have been geologically logged.
	detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	• Both chip and core samples in recent Panoramic drill holes have been logged using geological legends at detail to support geological confidence in Mineral Resource estimates.
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	• Logging details lithology, weathering, oxidation, veining, mineralisation and structural features where noted in drill core.
	The total length and percentage of the relevant intersections logged	• All mineralised drill intersections and associated samples have been logged in full.

Criteria	JORC Code Explanation	Commentary
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> </ul>	• Both historical NQ and recent NQ2 core was typically sawn in half and half core sampled. Recent HQ geotechnical core was quarter core sampled where mineralised. Core sample lengths typically varied between 0.2 and 1.0 metre.
		• The standard RC sample length is 1 metre with samples collected directly from the rig cyclone system. The individual 1m RC samples are then reduced to a 3-5kg assay sample by either automated on-board rig splitters or manually by riffle splitting.
		• The sample preparation process for all samples submitted for analysis follow accepted industry standards, including oven drying sample for a minimum of 8 hrs, crushing and pulverising to 85% passing 75 microns.
	• Whether sample sizes are appropriate to the grain size of the material being sampled.	• Quality control procedures have included the insertion of standards, blanks and duplicates to monitor the sampling and analytical process.
		• The sample sizes used are accepted industry standard sizes used extensively throughout the goldfields and are appropriate for the style of deposit.
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.	• The standard analytical technique used is Fire Assay, mostly by AAS finished. Of the 43,478 Au assays in the MH resource database subset, 2,851 historical assays (7%) do not have a
•	<ul> <li>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.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	recorded technique of are by technique other than Fire Assay. Where non gold analyses exist they are either by AAS or ICP OES determination.
		No other geophysical or analytical tools have been used to estimate grade.
		• QA/QC has been completed routinely during all sampling throughout the life of the Project; though less so historically than more recently. The QA/QC results indicate that the RC and DD assays being used for resource estimation are a fair representation of the material that has been sampled.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel.	• The deposit is very continuous in terms of mineralisation and grade intercepts. The continuity and consistency of the grade intercepts in section and along-strike provides strong
	<ul> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage</li> </ul>	of intersections reported by past operators over many years is further verification of the reliability of the data.
	<ul> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>No recent twin holes were completed. Historical twin holes verified mineralisation continuity. Infill verification holes were completed by Panoramic to test both geological and mineralisation continuity on selected sections. In each instance the expected geological and mineralogical interpretation was confirmed and no major discrepancies were identified.</li> </ul>
		• Logging was completed in logging code protected MS Excel templates on laptops and then imported into the Project SQL database for validation. Sections were then generated and visual validation completed to ensure integrity of the data.
		No adjustments were made to assay data.

Criteria	JORC Code Explanation	Commentary
Location of data points Data spacing and distribution	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>All recent drill collars and where possible historical drill collars have been accurately located by differential GPS. A range of downhole survey instruments, including single shot, electronic multi-shot and gyroscopic tools have been used. Gyroscopic surveys undertaken by Panoramic and previous companies demonstrate that holes do not deviate significantly from design.</li> <li>The MH drill hole database contains local, AMG and MGA coordinates. The resource has been estimated in local grid which is rotated +1.079 degrees from MGA GDA94 zone 51.</li> <li>Conversion from local grid to AMG AGD84 zone 51 is based on a two point transformation: 5,000E, 14,000N = 385,844.34E, 6,421,899.31N</li> <li>5,000E, 6,400N = 385,701.32E, 6,414,302.52N</li> <li>Fugro 2.5m topographic contour data was the primary topographical control. In places this was modified by differential GPS height data.</li> <li>The drilling density is on a nominal 25m by 25m spacing through the majority of the deposit. This spacing is sufficient to provide strong geological and mineralogical confidence in the style of deposit being estimated.</li> <li>As a general rule sample compositing has not be used. Sample compositing of RC pre-collars outside the main mineralised zone was undertaken at times.</li> </ul>
Orientation of data in relation	Whether the orientation of sampling achieves unbiased sampling of possible structures and	Virtually all drilling bas been completed perpendicular to the main strike of the denosit
to geological structure	the extent to which this is known, considering the deposit type.	geometry and angled to best intercept the west dipping mineralisation.
	<ul> <li>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.</li> </ul>	No sampling bias is apparent from the direction of drilling.
Sample security	The measures taken to ensure sample security.	• Little is known about the sample security practices adopted by previous companies. Panoramic samples were freighted in sealed bulka-bags direct from site to the SGS Laboratory in Perth.
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data</li> </ul>	• No audits or review of the Panoramic sampling procedures and protocols has been completed.

# (CRITERIA LISTED IN THE PRECEDING SECTION ALSO APPLY TO THIS SECTION.)

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land	• Type, reference name/number, location and ownership including agreements or material	• The Mount Henry resource is located on tenement M63/0515.
tenure status	issues with third parties such as joint ventures, partnerships, overriding royalties, native title	• State Royalty of 2.5% of revenue applies to all tenements.
	Interests, historical sites, wilderness or national park and environmental settings.	• There are no known issues regarding security of tenure.
	<ul> <li>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.</li> </ul>	There are no known impediments to continued operation.
Exploration done by other	Acknowledgment and appraisal of exploration by other partie	Central Norseman Gold Corporation held most of the tenements in the Mount Henry region
parties		until 1980. Exploration was then carried out by:
		• ESSO Australia (1980–82).
		Australis Mining NL (1982–88).
		• Great Western Mining (1987–89).
		• Australasian Gold Mines (1994-97).
		• Kinross Gold Corporation (1998-2004).
		Australian Gold Investments (2004-2006).
		• Kalgoorlie Boulder Resources (2006-2008).
		Matsa Resources (2008-2012).
		Panoramic Resources (2012 – 2015).
		• Metals X (2015 – Present).

Criteria	JORC Code Explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Mt Henry Project covers 347km<sup>2</sup> of the prolific South Norseman-Wiluna Greenstone belt of the Eastern Goldfields in Western Australia.</li> </ul>
		<ul> <li>Although the greenstone rocks from the Norseman area can be broadly correlated with those of the Kalgoorlie – Kambalda region they form a distinct terrain which is bounded on all sides by major regional shears. The Norseman Terrane has prominent banded iron formations which distinguish it from the Kalgoorlie – Kambalda Terrane.</li> </ul>
		<ul> <li>The Mt Henry gold deposit is hosted by a silicate facies BIF unit within the Noganyer Formation. Gold mineralisation is predominantly hosted by the silicate facies BIF unit but is also associated with minor meta-basalt and dolerite units that were mostly emplaced in the BIF prior to mineralisation. The footwall to the BIF is characterised by a sedimentary schistose unit and the hanging wall by the overlying dolerites of the Woolyeener Formation.</li> </ul>
		• The Mt Henry gold deposit is classified as an Archean, orogenic shear hosted deposit. The main lode is an elongated, shear-hosted body, 1.9km long by 6 - 10 metres wide and dips 65-75 degrees towards the west.
		<ul> <li>Mineralisation is pervasive within sheared BIF throughout the entire length of the deposit; however there are discrete zones (or shoots) that contain higher grades and thicker intervals of mineralisation that plunge to the north-northwest. The host shear to the mineralisation strikes north-south and dips 60 degrees towards the west, more or less contiguously with the upper contact of the BIF unit with the overlying Woolyeener Formation. The relative movement is reverse (footwall down). There does not appear to be any significant strike- slip component. Minor mineralisation is also associated with other shear zones. These typically either emanate from the main shear or are associated with other discrete shears stratigraphically lower down in the BIF unit. In addition to these footwall lodes, two small discrete supergene lodes are recognised.</li> </ul>
		<ul> <li>Sulphide minerals range from trace to 10%. The predominant sulphide is pyrrhotite with minor pyrite, arsenopyrite, chalcopyrite and marcasite. The pyrrhotite is often formed by the replacement and sulphidisation of magnetite. Gold occurs in narrow discrete quartz veins, and in clouds within silicate minerals. It also occurs in close proximity or attached to sulphide minerals, particularly pyrrhotite.</li> </ul>
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> </ul>	<ul> <li>No exploration information is being presented in this release.</li> </ul>
	• 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.	

Criteria	JORC Code Explanation	Commentary
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> </ul>	No exploration information is being presented in this release.
	• 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.	
	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between	• These relationships are particularly important in the reporting of Exploration Results.	No exploration information is being presented in this release.
mineralisation widths and intercept lengths	• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	
	• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	
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.	• No exploration information is being presented in this release.
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.	• No exploration information is being presented in this release.
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.	• No exploration information is being presented in this release.
Further work	• The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	No exploration information is being presented in this release.
	• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	

#### SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code Explanation	Commentary
Database integrity	<ul> <li>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</li> </ul>	• Database integrity is maintained via the use of DataShed software which restricts access to the SQL database. DataShed prevents the import of invalid data.
	<ul> <li>Data validation procedures used.</li> </ul>	• Data validation was completed internally in SQL Server by setting allowable and expected values. Automated queries are run as the data is imported to ensure it meets specified criteria.
		• For resource estimation a subset of the SQL database, restricting the data to the Mt Henry Resource area was exported into an MS Access database. Additional data checks were run to ensure appropriate data robustness for the Resource Estimation.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	Mr Russell undertakes regular visits to site.
	• If no site visits have been undertaken indicate why this is the case.	
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>systematic approach to ensure that the resultant estimated Mineral Resource figure was both sufficiently constrained, and representative of the expected sub-surface conditions. In all aspects of resource estimation the factual and interpreted geology was used to guide the development of the interpretation.</li> </ul>
		• The confidence in the geological interpretation is high, as the overall form of the interpretation has been confirmed by extensive past mining of the deposit.
		• There is a strong geological control to the mineralisation interpretation. The deposit is essentially strata hosted within a sheared Banded Iron Formation (BIF). The shear is essentially contiguous along the upper contact of the BIF and an overlying mafic unit. There is some interpreted supergene mineralisation in the northern extents of the deposit that is controlled by weathering horizons and typically cross cuts stratigraphy at shallow levels.
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 Mt Henry mineralised domain is approximately 2km long and has a down dip extent of 280m and is open at depth. The deposit consists of a main lode that varies between 3m and 40m thick with numerous parallel lodes at various stages along the length of the deposit.

Criteria	JORC Code Explanation	Commentary
Estimation and modelling techniques	<ul> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>All modelling and estimation work undertaken by Metals X is carried out in three dimensions via Surpac Vision.</li> <li>After validating the drillhole data to be used in the estimation, interpretation of the orebody is undertaken in sectional and / or plan view to create the outline strings which form the basis of the three dimensional orebody wireframe. Wireframing is then carried out using a combination of automated stitching algorithms and manual triangulation to create an accurate three dimensional representation of the sub-surface mineralised body.</li> <li>Drillhole intersections within the mineralised body are defined; these intersections are then used to flag the appropriate sections of the drillhole database tables for compositing purposes. Drillholes are subsequently composited to allow for grade estimation. In all aspects of resource estimation the factual and interpreted geology was used to guide the development of the interpretation.</li> <li>Once the sample data has been composited, a statistical analysis is undertaken to assist with determining estimation search parameters, top-cuts etc. Variographic analysis of individual domains is undertaken to assist with determining appropriate search parameters. Which are then incorporated with observed geological and geometrical features to determine the most appropriate search parameters.</li> <li>An empty block model is then created for the area of interest. This model contains attributes set at background values for the various elements of interest. This is determined via QKNA in Snowden's Supervisor v8.3.</li> <li>Grade estimation parameters and levels of informing data available. This is determined via QKNA in Snowden's Supervisor v8.3.</li> <li>Grade estimation was then undertaken, with the ordinary kriging estimation method considered as standard. There are no assumptions made about recovery.</li> <li>The resource was then depleted for mining voids and subsequently classified in line with JDRC guidelines utilising a combination of various e</li></ul>
Moisture	Whether the toppages are estimated on a dru basis or with natural moisture, and the method	The toppages are reported as dru toppes
ויוטוסנעוט	of determination of the moisture content.	
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	• The mineralisation wireframes were modelled on a gold lower grade cut-off of 1.0 g/t Au. This value was determined by visual assessment of grade continuity in Surpac. A geological model of the mineralised BIF unit was also generated.

Criteria	JORC Code Explanation	Commentary
Mining factors or assumptions	<ul> <li>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.</li> </ul>	<ul> <li>The Mt Henry deposit has been modelled under the assumption that it will be mined by conventional open pit mining methods, using excavators and trucks. Mineralisation wireframes were constructed based on minimum thickness of 2m downhole in order to replicate the smallest possible mining selectivity.</li> </ul>
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.	No metallurgical assumptions have been made in respect to the generation of the estimate.
Environmental factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of 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.</li> </ul>	<ul> <li>Metals X operates in accordance with all environmental conditions set down as conditions for grant of the respective mining leases.</li> </ul>
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>A total of 2,501 bulk density (BD) determinations are recorded in the Mt Henry resource database subset. Panoramic completed most of these with measurements on 2,104 whole core samples by Archimedes water immersion method. There are a small number of historical measurements by pycnometer (7HENC115 &amp; 7HENC116 for 54 samples) and down hole geophysical tool (NHC127, NHD120 and NHD121 for 343 one metre intervals). This data was used to generate a default SG for all lithological types. The default was then assigned to unmeasured intervals, and the density was estimated.</li> <li>The host rock type for mineralisation and surrounding mafic material is non-porous and void space porosity is not considered to be of relevance to the measurements.</li> <li>BD estimation for the resource was generated by grouping the 2,501 recorded measurements by rock type to provide an average SG for each of the main lithological rock types. The assay table in the database was tagged with the actual BD or an average value based on rock type grouped average. The BD value was then extracted with the Au grade in the 2m composite file. The densities were estimated using the variogram models and search parameters for the various domains.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. 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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>The classification of the resource has been based on the Competent Person's confidence in the geological model; supported by the 25 x 25m spaced RC and diamond drilling and 20m x 20m spaced drilling through northern extents of deposit which demonstrates consistency and continuity of the mineralisation (gold mineralisation is highly continuous over a 2.0km strike length and is strata bound).</li> <li>The mineral resource reflects the Competent Person's view of the deposit.</li> </ul>

Criteria	JORC Code Explanation	Commentary	
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	No external reviews have been conducted at this point.	
		The resource has been subject to review by Metals X senior technical personnel.	
Discussion of relative accuracy/ confidence	<ul> <li>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.</li> </ul>	<ul> <li>The resource classification is based on standard practices and guidelines as prescribed in JORC 2012.</li> <li>The resource estimate relates to a global estimate of tonnes and grade.</li> <li>No reliable production data exists for the small open pit operated within the confines of the Mt Henry resource by Australis Mining in the 1980's to compare with this resource estimate.</li> </ul>	
	<ul> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>		

# SECTION 4 ESTIMATION AND REPORTING OF ORE RESERVES

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JO	RC Code Explanation	Co	mmentary
Mineral Resource estimate for conversion to Ore Reserves	•	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	•	No reserve information is being presented in this release.
	•	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.		
Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	No reserve information is being presented in this release.
	•	If no site visits have been undertaken indicate why this is the case.		
Study status	•	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	•	No reserve information is being presented in this release.
	•	The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.		
Cut-off parameters	•	The basis of the cut-off grade(s) or quality parameters applied.	•	No reserve information is being presented in this release.

Criteria	JORC Code Explanation	Commentary
Mining factors or assumptions	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility Stud to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriat factors by optimisation or by preliminary or detailed design).	• No reserve information is being presented in this release.
	<ul> <li>The choice, nature and appropriateness of the selected mining method(s) and other minin parameters including associated design issues such as pre-strip, access, etc.</li> </ul>	
	• The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.) grade control and pre-production drilling.	,
	• The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	
	The mining dilution factors used.	
	The mining recovery factors used.	
	Any minimum mining widths used.	
	<ul> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and th sensitivity of the outcome to their inclusion.</li> </ul>	
	The infrastructure requirements of the selected mining methods.	
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	f • No reserve information is being presented in this release.
	Whether the metallurgical process is well-tested technology or novel in nature.	
	<ul> <li>The nature, amount and representativeness of metallurgical test work undertaken, th nature of the metallurgical domaining applied and the corresponding metallurgical recover factors applied.</li> </ul>	
	<ul> <li>Any assumptions or allowances made for deleterious elements.</li> </ul>	
	• The existence of any bulk sample or pilot scale test work and the degree to which suc samples are considered representative of the orebody as a whole.	
	<ul> <li>For minerals that are defined by a specification, has the ore reserve estimation been base on the appropriate mineralogy to meet the specifications?</li> </ul>	4
Environmental	<ul> <li>The status of studies of potential environmental impacts of the mining and processin operation. Details of waste rock characterisation and the consideration of potential sites status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</li> </ul>	• No reserve information is being presented in this release.
Infrastructure	• The existence of appropriate infrastructure: availability of land for plant development, powe water, transportation (particularly for bulk commodities), labour, accommodation; or th ease with which the infrastructure can be provided, or accessed.	• No reserve information is being presented in this release.
Criteria	JORC Code Explanation	Commentary
-------------------	---	--
Costs	• The derivation of, or assumptions made, regarding projected capital costs in the study.	No reserve information is being presented in this release.
	The methodology used to estimate operating costs.	
	Allowances made for the content of deleterious elements.	
	• The source of exchange rates used in the study.	
	Derivation of transportation charges.	
	• The basis for forecasting or source of treatment and refining charges, penalties for failure t meet specification, etc.	0
	• The allowances made for royalties payable, both Government and private.	
Revenue factors	• The derivation of, or assumptions made regarding revenue factors including head grade, meta or commodity price(s) exchange rates, transportation and treatment charges, penalties, ne smelter returns, etc.	<ul> <li>No reserve information is being presented in this release.</li> </ul>
	• The derivation of assumptions made of metal or commodity price(s), for the principal metals minerals and co-products.	S,
Market assessment	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trend and factors likely to affect supply and demand into the future.</li> </ul>	• No reserve information is being presented in this release.
	• A customer and competitor analysis along with the identification of likely market window for the product.	s
	• Price and volume forecasts and the basis for these forecasts.	
	• For industrial minerals the customer specification, testing and acceptance requirement prior to a supply contract.	s
Economic	<ul> <li>The inputs to the economic analysis to produce the net present value (NPV) in the study the source and confidence of these economic inputs including estimated inflation, discour rate, etc.</li> </ul>	<ul> <li>No reserve information is being presented in this release.</li> </ul>
	• NPV ranges and sensitivity to variations in the significant assumptions and inputs.	
Social	The status of agreements with key stakeholders and matters leading to social licence t operate.	• No reserve information is being presented in this release.
Other	• To the extent relevant, the impact of the following on the project and/or on the estimation an classification of the Ore Reserves:	d • No reserve information is being presented in this release.
	Any identified material naturally occurring risks.	
	The status of material legal agreements and marketing arrangements.	
	<ul> <li>The status of governmental agreements and approvals critical to the viability of the projec such as mineral tenement status, and government and statutory approvals. There must b reasonable grounds to expect that all necessary Government approvals will be receive within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight an discuss the materiality of any unresolved matter that is dependent on a third party on whic extraction of the reserve is contingent.</li> </ul>	t, e d d h

Criteria	JORC Code Explanation	Commentary
Classification	• The basis for the classification of the Ore Reserves into varying confidence categories.	No reserve information is being presented in this release.
	• Whether the result appropriately reflects the Competent Person's view of the deposit.	
	• The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	No reserve information is being presented in this release.
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.	• No reserve information is being presented in this release.
	• 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.	
	• Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.	
	• It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	

# **APPENDIX 6 – JORC 2012 TABLE 1 – CENTRAL MUSGRAVE PROJECT – ICP** (RELATING TO EXPLORATION RESULTS) **SECTION 1 SAMPLING TECHNIQUES AND DATA**

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

Criteria	JORC Code Explanation	Commentary
Sampling techniques Drilling techniques Drill sample recovery	<ul> <li>Nature and quality of sampling (eg 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).</li> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias</li> </ul>	<ul> <li>All samples for ICP scan analysis in this program were retrieved pulps from previously assayed RC samples.</li> <li>RC drilling has been utilised extensively at the CMP.</li> <li>This sample program was undertaken to ascertain the broad distribution and geochemical nature of the Wingellina laterite nickel ore. It was not for ore resource definition purposes.</li> <li>For the purposes of this exercise samples were taken from 10 RC drill holes disposed along the 9km length of the ore body.</li> <li>Drill cuttings are extracted from the RC return via cyclone. The underflow from each interval is transferred via bucket to a three-tiered riffle splitter, delivering approximately three kilograms of the recovered material into calico bags for analysis. The residual material is retained on the ground near the hole.</li> <li>All geology input is logged and validated by the relevant area geologists, incorporated into this is assessment of sample recovery. No defined relationship exists between sample recovery and grade. Nor has sample bias due to preferential loss or gain of fine or coarse material been noted.</li> </ul>
Logging	<ul> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of</li> </ul>	RC drill chips are logged geologically.
	detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	<ul> <li>Logging is quantitative in nature.</li> <li>All holes are logged completely.</li> </ul>
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	
	The total length and percentage of the relevant intersections logged	

Criteria	JOF	RC Code Explanation	Con	nmentary
Sub-sampling techniques and	•	If core, whether cut or sawn and whether quarter, half or all core taken.	•	Samples from the RC drilling were collected via riffle splitter for each 2m drilled.
sample preparation	•	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	•	Chips undergo total preparation of drying, crushing, and pulverising to a nominal 90% ${<}75\mu.$
	•	For all sample types, the nature, quality and appropriateness of the sample preparation	•	Samples analysed by ICP methods by SGS Laboratories in Perth.
		technique.	•	$\ensuremath{QA/QC}$ is currently ensured during the sub-sampling stages process via the use of the
	•	Quality control procedures adopted for all sub-sampling stages to maximise representivity		systems of an independent NATA / ISO accredited laboratory contractor.
		or samples.	•	The sample size is considered appropriate for the grain size of the material being sampled.
	•	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.		
	•	Whether sample sizes are appropriate to the grain size of the material being sampled.		
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.	•	Samples were assayed by digesting a 50gm aliquot of the sample in a hydrochloric-nitric- hydroflouric-perchloric acid mix. The 4-acid digest is considered a total digest for most
	•	For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in		elements. However elements such as Cr, Zr, Sn and W are considered partial digests.
		determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	•	Assays were done using ICP-0ES (ICP400) and ICP-MS (IMS400) by SGS Laboratories in Perth. 43 elements were assayed for each sample.
	•	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external	•	No significant QA/QC issues have arisen in recent drilling results.
		laboratory checks J and whether acceptable levels of accuracy [ie lack of bias] and precision have been established.	•	These assay methodologies are appropriate for the samples in question.
Verification of sampling and	•	The verification of significant intersections by either independent or alternative company	•	No external verification of assays was considered necessary for the purposes of this work.
assaying		personnel.	•	Electronic copies of all data are kept at Metals X office.
	•	The use of twinned holes.	•	No primary assays data is modified in any way.
	•	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.		
	•	Discuss any adjustment to assay data.		
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.	•	All hole collar locations for RC holes sampled were surveyed by using a Real Time Kinematic GPS. This measured X, Y and Z to sub-centimetre accuracy in terms of the MGA 94, Zone 52
	•	Specification of the grid system used.		metric grid.
	•	Quality and adequacy of topographic control.	•	Topographic control is generated from a combination of remote sensing methods and ground- based surveys. This methodology is adequate for the resource in question.

Criteria	JORC Code Explanation	Commentary
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drill hole spacing at CMP is generally at 120m x 50m. This has been filled-in to 60 x 50 and 30m x 25m spacing in some areas.</li> <li>The 10 holes sampled for this exercise were irregularly spaced along the entire length of the nickel ore body, and selected to give a broad picture of the geochemical nature of the ore.</li> </ul>
Orientation of data in relation to geological structure Sample security	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> <li>The measures taken to ensure sample security.</li> </ul>	<ul> <li>Drilling intersections are nominally designed to be sub-normal to the orebody.</li> <li>It is not considered that drilling orientation has introduced an appreciable sampling bias.</li> <li>Samples are delivered to a third party transport service, who in turn relay them to the</li> </ul>
		independent laboratory contractor. Samples are stored securely until they leave site.
Audits or reviews	The results of any audits or reviews of sampling techniques and data	• Data is validated when entering into the central Wingellina Datashed database. No external audit is considered necessary for this work.

#### **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	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The CMP includes 5 granted exploration licences and 2 granted miscellaneous licences.</li> <li>Native title interests are recorded against the CMP tenements.</li> <li>The CMP tenements are held by the Austral Nickel Pty Ltd (South Australia) and Hinckley Range Pty Ltd (Western Australia). Metals X has 100% ownership of both companies.</li> <li>One third party royalty agreement applies to the tenements at CMP, over and above the state</li> </ul>
		<ul> <li>government royalty.</li> <li>Hinckley Range and Austral Nickel operate in accordance with all environmental conditions set down as conditions for grant of the leases.</li> <li>There are no known issues regarding security of tenure.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other partie	<ul> <li>There are no known impediments to continued operation.</li> <li>The CMP area has an exploration history which extends to the 1960's, with significant contributors being INCO, Acclaim and Metex Nickel.</li> <li>On balance, MLX work has generally confirmed the veracity of historic exploration data.</li> </ul>

APPENDIX 6 – JORC 2012 TABLE 1 – CENTRAL MUSGRAVE PROJECT – ICP **77** 

Criteria	JORC Code Explanation	Commentary
Geology	• Deposit type, geological setting and style of mineralisation.	<ul> <li>The Musgrave Block is an east-west trending, structurally bounded mid-Proterozoic terrane some 130,000km<sup>2</sup> in area, straddling the common borders of Western Australia, South Australia and the Northern Territory.</li> <li>Deep weathering of olivine-rich ultramafic units has resulted in the concentration of nickel mineralisation. The olivines in the ultramafic units have background values of about 0.15% Ni to 0.3% Ni. The almost complete removal of Mg0 and Si02 to ground waters during the weathering of olivines in the ultramafic units resulted in extreme volume reductions and consequent significant upgrading of other rock forming oxides (Fe203, Al203) and metal element concentrations in the weathered profile.</li> </ul>
Drill hole Information	<ul> <li>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:</li> <li>asting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> 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.	•         The following holes were re-assayed.           HoleId         from         to         No of samples         Iocal Easting         Iocal Northing         dip         Azim           WPRC0181         0         100         50         50027         83045         -90         0           WPRC0350         0         80         40         49756         78643         -90         0           WPRC0355         0         70         35         50055         78645         -90         0           WPRC0438         0         70         35         50208         76990         -60         270           WPRC0438         0         74         37         49900         79419         -90         0           WPRC0481         0         74         37         49900         79419         -90         0           WPRC0489         0         54         27         50706         76206         -90         0           WPRC0582         0         76         38         49703         82542         -60         90           WPRC0617         0         66         33         50052         81701         -90         0
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	No relevant information is being presented.
Relationship between mineralisation widths and intercept lengths Diagrams	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included</li> </ul>	<ul> <li>No relevant information is being presented.</li> <li>Presented in the body of the text above.</li> </ul>
0	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.	······································

Criteria	JORC Code Explanation	Commentary
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.	<ul> <li>Only selected results included. Scandium assays vary from &lt; 10ppm to 146ppm, and average 38ppm.</li> </ul>
Other substantive exploration data	<ul> <li>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.</li> </ul>	• No relevant information is being presented.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	• No relevant information is being presented.

### APPENDIX 7 – JORC 2012 TABLE 1 – BIG BELL GOLD PROJECT SECTION 1 SAMPLING TECHNIQUES AND DATA

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

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	• RAB drilling: Westgold / Harmony – Drill cuttings are extracted from the return by cyclone. The residual material was retained on the ground near the hole in ten metre rows. Four metre composite samples are obtained from the residue material for initial analysis, with the one metre re-split samples obtained from individual metre residual piles if preliminary assays are encouraging. Historical - assumed to be similar. RAB holes not included in the resource estimate.
	<ul> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>RC drilling: Westgold / Harmony – Drill cuttings were extracted from the 5½ inch RC return by cyclone.</li> <li>Either a) the underflow from one-metre intervals is transferred by bucket to a three stage riffle splitter, delivering 12.5% of the recovered material into calico bags for analysis. Or b) drill cuttings from one metre intervals are split within the cyclone cone splitter into a sample calico bag for analysis (10% of the total sample). The residual material is retained on the ground near the hole in ten or twenty metre rows. Four metre composite samples are obtained from the residue material for initial analysis, with one metre split samples remaining with the individual residual piles until required for re-split analysis or eventual disposal. Historical - assumed to be similar.</li> <li>Face chips: Harmony - Nominally chipped horizontally across the face, sub-set via geological features as appropriate. A rubber sheet is inserted into the top of the required bag to act as a scoop to catch falling rock fragments. Sampling starts at the furthest interval from the face on the left hand wall, chipping from left to right, progressing along the left hand wall to the face, across the face and back along the right hand wall. Historical - assumed to be similar.</li> <li>Diamond drilling: Westgold / Aragon - Core exhibiting mineralisation, fracturing, veining or alteration is sampled. Within these zones sample intervals are defined based on geological and olteration is sampled.</li> </ul>
Deillie e to che i euro		and alteration contacts.
Drilling techniques	<ul> <li>brill type (eg core, reverse circulation, open-noie nammer, rotard air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-</li> </ul>	RC drilling: Historical drilling is available. RAB holes not included in the resource estimate
	<ul><li>sampling bit or other type, whether core is oriented and if so, by what method, etc).</li><li>Method of recording and assessing core and chip sample recoveries and results assessed.</li></ul>	<ul> <li>Face chips: Nominally chipped horizontally across the face, sub-set via geological features as appropriate.</li> </ul>
		• Diamond drilling: A significant portion of the drilling undertaken at the Big Bell deposit is diamond. Holes were oriented where possible. A number of wedges were also drilled.
Drill sample recovery	• Measures taken to maximise sample recovery and ensure representative nature of the samples.	Abnormal recovery is recorded in sample ledgers for recent Harmony, Aragon and Westgold percussion drilling data.
	• 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.	• Abnormal core recovery is recorded in sample ledgers and databases for recent Harmony, Aragon and Westgold diamond data.
		No defined relationship exists between sample recovery and grade. Nor has sample bias due to preferential loss or gain of fine or coarse material been noted.

mples have been logged by qualified geologists to a level of detail to source estimate, mining studies and metallurgical studies.
ging of diamond holes was carried out at the same time as sampling oparison between assay results and geological information. The level logging of diamond core was sufficient for the resource estimation sion.
Vestgold / Aragon logging was carried out on a metre by metre basis.
orical logging is of a similar standard.
/ Harmony - Drill cuttings are extracted from the return by cyclone. <i>ras</i> retained on the ground near the hole in ten metre rows. Four metre e obtained from the residue material for initial analysis, with the one s obtained from individual metre residual piles if preliminary assays / Harmony - either; a) the underflow from one-metre intervals is to a three stage riffle splitter, delivering 12.5% of the recovered material alysis. Or b) drill cuttings from one metre intervals are split within the nto a sample calico bag for analysis (10% of the total sample). The tained on the ground near the hole in ten or twenty metre rows. Four ples are obtained from the residue material for initial analysis, with the individual residual piles until required for re-split sposal. Historical - assumed to be similar. chipped horizontally across the face from left to right, sub-set via appropriate. tgold / Aragon - Core exhibiting mineralisation, fracturing, veining or Within these zones sample intervals are defined based on geological and were collected over intervals of 0.3m through to 4.0m (generally). zones was based on one (1) metre intervals. Historical - Assumed to ergo total preparation. bulverisation of the entire sample by an LM5 type mill to achieve a 75µ rg. the assays process via the use of sample ledgers, blanks, standards and the assays process via the use of blanks, standards and repeats at laboratory.
SV of vrs statistics sr le lin n rd o

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.	<ul> <li>Recent drilling by Westgold was analysed by fire assay by Australian Laboratory Services Pty. Ltd. (ALS) as outlined below;</li> </ul>
	• 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.	<ul> <li>A 50g sample undergoes fire assay lead collection followed by flame atomic adsorption spectrometry.</li> <li>ALS include a minimum of 1 project standard with every 22 samples analysed.</li> </ul>
	<ul> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>Quality control is ensured via the use of standards, blanks and duplicates.</li> <li>No significant QA/QC issues have arisen in Westgold drilling results.</li> <li>Historical drilling has used a combination of Fire Assay, Aqua Regia and PAL analysis.</li> <li>These assay methodologies are appropriate for the resource in question.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Westgold sampling and assaying results are verified by both the geologist in charge of the program and the supervising geologist.</li> <li>Virtual twinned holes have been drilled in several instances with no significant issues highlighted.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All Westgold drillhole collars were set-out and picked-up in MGA 1994 Zone 50 grid using a dGPS unit. This information was digitally transferred to the geology database. Previous holes have been set-out and picked up in both national and local grids using a combination of GPS and survey instrument.</li> <li>Holes of significant depth were routinely surveyed during drilling and at the end of the hole using an "Eastman" type single / multi shot camera. Several of the deeper diamond holes were also survey using a gyro unit.</li> <li>Topography control is to a high level of accuracy through the acquisition using survey instruments during recent mining.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Resource development drilling over the deposit has generally been conducted on 25m spaced lines in the area of interest.</li> <li>Grade controls sampling in mined portions of the deposit is at a significantly closer spacing.</li> <li>Compositing of data to 1m was used in the estimate.</li> </ul>

Criteria	JORC Code Explanation	Commentary
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.	• For the most part drilling is oriented perpendicular to the strike of the Big Bell shear zone to provide representative intersection of the orebody.
	• 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.	• In several recent Westgold holes where site infrastructure has restricted access drilling has been oriented at lower angles to the strike of the shear zone.
Sample security	The measures taken to ensure sample security.	• Samples are stored within a secure compound before being delivered to the analytical laboratory via credible haulage contractors.
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data</li> </ul>	No external reviews have been conducted at this point.
		• The resource has been subject to review by Metals X senior technical personnel.

#### **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.	<ul> <li>M20/0017.</li> <li>Held by Big Bell Gold Operations Pty. Ltd, a wholly owned subsidiary of Metals X.</li> <li>As far as can be determined there are no impediments to obtaining a license to operate in</li> </ul>
	• 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 area.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other partie	• Exploration and significant mining of deposits along the Big Bell trend in the past has been conducted by several companies;
		• 1932 – 1955 ASARCO
		• 1969 – 1984 ACM
		• 1984 – 1992 ACM / Placer Pacific JV
		• 1992 – 1999 Normandy
		• 2000 – 2001 New Hampton Goldfields
		• 2001 – 2009 Harmony Gold Australia
		• 2009 – 2010 Aragon Resources
		2011 – 2012 Westgold Resources Limited
		• 2012 – Present Metals X

Criteria	JORC Code Explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Big Bell trend occurs in is a strongly deformed belt of mafic, ultramafic and felsic units that have been metamorphosed to Amphibolite facies. The trend itself is defined by a zone of more intense shearing, which has experienced varying degrees of K-feldspar- muscovite – biotite – sulphide (pyrite, pyrrhotite, arsenopyrite) alteration. At a regional scale, the alteration is most intense in the vicinity of the most intense sulphide alteration and gold mineralisation. However, there is also gold mineralisation in less intensely altered units. The exact timing of the alteration with respect to gold mineralisation is still not clearly defined. Overprinting relationships indicate that the K-feldspar – muscovite alteration has been deformed and is overprinted by the sulphide alteration. The sulphide alteration shows the strongest association with gold mineralisation.</li> <li>Observations indicate at least two deformation events preceded alteration and mineralisation. On the eastern side of the greenstone belt, shear on the amphibolite schist has resulted in drag folding of the north-northeast-striking foliation. The geometry of the drag folds indicates dextral strike-slip shear on the schist (east-side south). This fabric is then overprinted by a north-northwest-striking and northwest-striking shear foliation that hosts weak gold mineralisation. In the Big Bell mine asymmetric boudinage of quartz veins and layered metamorphic host rocks indicates reverse movement on the north-striking, steeply east dipping schist (east side up). At the eastern edge of the greenstone belt, a west-dipping bounding fault has also experienced reverse movement (west side up). The distribution of gold in the known shoots with respect to the major and minor structures indicates gold</li> </ul>
		mineralisation was controlled by left-lateral [sinistral] strike-slip movement on shear zones that bound the mineralised sequence after these two deformation episodes.
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:	No exploration information is being presented in this release.
	» easting and northing of the drill hole collar	
	» elevation or RL [Reduced Level – elevation above sea level in metres] of the drill hole collar	
	» dip and azimuth of the hole	
	» down hole length and interception depth	
	» hole length.	
	<ul> <li>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.</li> </ul>	
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> </ul>	No exploration information is being presented in this release.
	<ul> <li>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.</li> </ul>	
	• The assumptions used for any reporting of metal equivalent values should be clearly stated.	

Criteria	JORC Code Explanation	Commentary
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	No exploration information is being presented in this release.
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.	No exploration information is being presented in this release.
Balanced reporting	<ul> <li>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.</li> </ul>	No exploration information is being presented in this release.
Other substantive exploration data	<ul> <li>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.</li> </ul>	• No exploration information is being presented in this release.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	• No exploration information is being presented in this release.

#### SECTION 3 ESTIMATION AND REPORTING OF MINERAL RESOURCES

(Criteria listed in section 1, and where relevant in section 2, 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.	• Database integrity is maintained via the use of DataShed software which restricts access to the SQL database. DataShed prevents the import of invalid data.
Site visits	<ul> <li>Data validation procedures used.</li> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	• Mr Russell has previously worked at Big Bell and undertakes regular visits to site.
Geological interpretation	<ul> <li>Confidence in (or conversely, the uncertainty of ) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul> <li>Geological interpretation of the deposit was carried out using a systematic approach to ensure that the resultant estimated Mineral Resource figure was both sufficiently constrained, and representative of the expected sub-surface conditions. In all aspects of resource estimation the factual and interpreted geology was used to guide the development of the interpretation.</li> <li>The confidence in the geological interpretation is high, as the overall form of the interpretation has been confirmed by extensive past mining of the deposit.</li> <li>Structurally controlled shoots within the overall Big Bell shear zone control internal grade distribution within the broader mineralised shear zone.</li> </ul>
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.	<ul> <li>Strike length = 3,920m</li> <li>Width = 2m to +50m</li> <li>Depth = Surface to- 1,500m at Big Bell, surface to -560m at Fender.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Criteria Estimation and modelling techniques	<ul> <li>JORC Code Explanation</li> <li>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.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>Commentary</li> <li>All modelling and estimation work undertaken by Metals X is carried out in three dimensions via Surpac Vision.</li> <li>After validating the drillhole data to be used in the estimation, interpretation of the orebody is undertaken in sectional and / or plan view to create the outline strings which form the basis of the three dimensional orebody wireframe. Wireframing is then carried out using a combination of automated stitching algorithms and manual triangulation to create an accurate three dimensional representation of the sub-surface mineralised body.</li> <li>Drillhole intersections within the mineralised body are defined; these intersections are then used to flag the appropriate sections of the drillhole database tables for compositing purposes. Drillholes are subsequently composited to allow for grade estimation. In all aspects of resource estimation the factual and interpreted geology was used to guide the development of the interpretation.</li> <li>Once the sample data has been composited, a statistical analysis is undertaken to assist with determining estimation search parameters, top-cuts etc. Variographic analysis of individual domains is undertaken to assist with determining appropriate search parameters. Which are then incorporated with observed geological and geometrical features to determine the most appropriate search parameters.</li> <li>An empty block model is then created for the area of interest. This model contains attributes set at background values for the various elements of interest as well as density, and various estimation parameters and levels of informing data available. This is determined via QKNA in Snowden's Supervisor v8.5.</li> <li>Grade estimation was then undertaken, with the ordinary kriging estimation method considered as standard. There are no assumptions made about recovery.</li> <li>The resource was then depleted for mining voids and subsequently classified in line with JORC guidelines utilising a combination of various estimation derived para</li></ul>
		mining output.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	The tonnages are reported as dry tonnes.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	<ul> <li>Interpretation cut-off = 0.5g/t (low grade); 2.0g/t (high grade)</li> </ul>
		• Reporting cut-off = 2.0g/t

Criteria	JORC Code Explanation	Commentary
Mining factors or assumptions	<ul> <li>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.</li> </ul>	<ul> <li>Mining of the "Surface" portion of the resource has been assumed to be via conventional surface mining techniques (hydraulic backhoe excavator and diesel haul tuck).</li> <li>Mining of the "Underground" portion of the resource has been assumed to be via conventional underground mining techniques.</li> <li>2m minimum mining width in both the surface and underground environment assumed.</li> </ul>
Metallurgical factors or assumptions	<ul> <li>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.</li> </ul>	No metallurgical assumptions have been built into the resource model.
Environmental factors or assumptions	<ul> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of 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.</li> </ul>	<ul> <li>Metals X operates in accordance with all environmental conditions set down as conditions for grant of the respective mining leases.</li> </ul>
Bulk density	<ul> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul> <li>Values both assumed and determined. No direct measurement by Metals X. Values adopted taken from mining records for both the Big Bell underground operation and the related open pit mines.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (i.e. 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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul> <li>Resources are classified in line with JORC guidelines utilising a combination of various estimation derived parameters, the input data and geological / mining knowledge.</li> <li>This approach considers all relevant factors and reflects the Competent Person's view of the deposit.</li> </ul>
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	<ul> <li>No external reviews have been conducted at this point.</li> <li>The resource has been subject to review by Metals X senior technical personnel.</li> </ul>

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.	• The results of the mineral resource estimate are considered robust, and representative of Big Bell on a global-scale. This is derived primarily through Metals X's understanding of the geology of the deposit and global mineralisation controls. The accuracy of the estimate is appropriate for mine design and reserve generation.
	<ul> <li>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.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared</li> </ul>	
	with production data, where available.	

#### SECTION 4 ESTIMATION AND REPORTING OF ORE RESERVES

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	JO	RC Code Explanation	Con	nmentary
Mineral Resource estimate for conversion to Ore Reserves	•	Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.	•	No reserve information is being presented in this release.
	•	Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.		
Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	No reserve information is being presented in this release.
	•	If no site visits have been undertaken indicate why this is the case.		
Study status	•	The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.	•	No reserve information is being presented in this release.
	•	The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.		
Cut-off parameters	•	The basis of the cut-off grade(s) or quality parameters applied.	•	No reserve information is being presented in this release.

Criteria	JOR	Code Explanation	Com	mentary
Mining factors or assumptions	•	The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).	•	No reserve information is being presented in this release.
	•	The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.		
	•	The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.		
	•	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).		
	•	The mining dilution factors used.		
	•	The mining recovery factors used.		
	•	Any minimum mining widths used.		
	•	The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.		
	•	The infrastructure requirements of the selected mining methods.		
Metallurgical factors or assumptions	•	The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.	•	No reserve information is being presented in this release.
	•	Whether the metallurgical process is well-tested technology or novel in nature.		
	•	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.		
	•	Any assumptions or allowances made for deleterious elements.		
	•	The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.		
	•	For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?		
Environmental	•	The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	•	No reserve information is being presented in this release.
Infrastructure	•	The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	•	No reserve information is being presented in this release.

Criteria	JORC Code Explanation	Commentary
Costs	• The derivation of, or assumptions made, regarding projected capital costs in the study.	No reserve information is being presented in this release.
	The methodology used to estimate operating costs.	
	Allowances made for the content of deleterious elements.	
	The source of exchange rates used in the study.	
	Derivation of transportation charges.	
	• The basis for forecasting or source of treatment and refining charges, penalties for failure t meet specification, etc.	0
	• The allowances made for royalties payable, both Government and private.	
Revenue factors	• The derivation of, or assumptions made regarding revenue factors including head grade, meta or commodity price(s) exchange rates, transportation and treatment charges, penalties, ne smelter returns, etc.	<ul> <li>No reserve information is being presented in this release.</li> </ul>
	• The derivation of assumptions made of metal or commodity price(s), for the principal metals minerals and co-products.	5,
Market assessment	• The demand, supply and stock situation for the particular commodity, consumption trend and factors likely to affect supply and demand into the future.	s • No reserve information is being presented in this release.
	• A customer and competitor analysis along with the identification of likely market window for the product.	s
	• Price and volume forecasts and the basis for these forecasts.	
	For industrial minerals the customer specification, testing and acceptance requirement prior to a supply contract.	s
Economic	• The inputs to the economic analysis to produce the net present value (NPV) in the study the source and confidence of these economic inputs including estimated inflation, discour rate, etc.	<ul> <li>No reserve information is being presented in this release.</li> </ul>
	• NPV ranges and sensitivity to variations in the significant assumptions and inputs.	
Social	The status of agreements with key stakeholders and matters leading to social licence t operate.	• No reserve information is being presented in this release.
Other	• To the extent relevant, the impact of the following on the project and/or on the estimation an classification of the Ore Reserves:	d • No reserve information is being presented in this release.
	Any identified material naturally occurring risks.	
	The status of material legal agreements and marketing arrangements.	
	<ul> <li>The status of governmental agreements and approvals critical to the viability of the project such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on whice extraction of the reserve is contingent.</li> </ul>	t, e d h

Criteria	JORC Code Explanation	Commentary
Classification	• The basis for the classification of the Ore Reserves into varying confidence categories.	No reserve information is being presented in this release.
	• Whether the result appropriately reflects the Competent Person's view of the deposit.	
	<ul> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	No reserve information is being presented in this release.
Discussion of relative accuracy/ confidence	<ul> <li>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</li> </ul>	• No reserve information is being presented in this release.
	• 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.	
	<ul> <li>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</li> </ul>	
	<ul> <li>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	