

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**

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# **QUARTERLY REPORT**

# **FOR THE PERIOD ENDING 31 MARCH 2016**

# **HIGHLIGHTS OF THE QUARTER**

#### **OPERATIONS**

- Significant progress made on the off-market takeover offer for copper producer Aditya Birla Minerals Limited (ABY) with acceptances of 29.8 % received. Subsequent to the end of the quarter (announced 26 April 2016), agreement was reached with ABY's major shareholder, Hindalco (51%) to irrevocably accept the offer and the board of ABY to recommend acceptance. Pursuant to this, Metals X has agreed to increase its offer ratio to one (1) MLX share for each four and a half (4.5) ABY shares and to pay each acceptor to its offers eight (8c) cents per share. The payment of increased consideration is subject to no superior offer arising before 2 May 2016 and Hindalco receiving Reserve Bank of India (RBI) approval.
- The Gold Division produced 47,951 ounces at a cash cost of A\$1,217 per ounce and an AISC of A\$1,388 per ounce reflecting the various stages its individual gold projects were at. Gold sales averaged A\$1,616 for the quarter.
- The Tin Division saw the Renison mine (MLX 50%) produce 1,676 tonnes of tin metal at a cash cost of A\$14,455 per tonne of tin metal and an AISC of A\$19,311 per tonne of tin metal. An unaudited cash inflow of \$3.12M was generated. Tin sales averaged a price of A\$21,170 per tonne for the quarter and have since risen to approximately A\$23,000 per tonne.
- Within the Nickel Division significant progress with the Public Environmental Review (PER) process was made and a final approval is expected to be imminent. Operationally, a revised high-grade cut-off model for the deposit was completed showing that using a 1.30% cut-off grade, the higher grade resource component is 25 million tonnes at 1.45% Ni, 0.1% Co and 53.5% Fe203. Initial mining studies suggest that this higher grade resource can be mined with an estimated 1.5:1 (waste:ore) stripping ratio.

#### **CORPORATE**

- Metals X closed the quarter with a cash and working capital (and investments excluding ABY) position of \$60.38 million.
- 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 29.77%.
- Shares on issue total 477,820,914. Shares allotted during the quarter were 19.6 million to accepting ABY shareholders under the off-market takeover offer.

#### **ENQUIRIES**

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# **GOLD DIVISION**

#### **OVERVIEW**

Total gold production for the quarter was 47,591 ounces (including Cannon 3,505 ounces) at a cash cost of \$A1,217 per ounce and an AISC of A\$1,388 per ounce reflecting the various phases the individual gold operations are at.

Overall Performance for the gold group was temporarily dented by continued lower performance from the Trident Underground Mine at Higginsville, a slower than anticipated shift to ore stoping at Paddy's Flat (CMGP) and also a poor reconciliation from the Whangamata Open Pit(CMGP). However, all are short-term performance matters and are now behind the operations. Of particular significance is the capital intensive phases at CMGP and the HBJ Underground Mine are beginning to significantly reduce.

Highlights of the Gold Division were:

- Significant progress was made in the production build at CMGP with the Paddy's Flat transitioning to ore stoping on the Vivian-Consols Lodes after delayed establishment of mine ventilation and emergency egress networks.
- An increase in productivity, grade and mine-life at South Kal and the completion of a long-term mine ventilation network.
- The re-start plan for the Fortnum Project made good progress with engineering and approvals works nearing completion. A re-modelling of ore sources in the initial 3 years of ore feed was completed as was the successful drilling of existing low grade ore stockpiles.
- Detailed infill drilling at Mt Henry of the top 30 metres returned better than expected results and the project is advancing to replace the Trident Underground Mine as the main source of feed for the Higginsville operations in the second half of this calendar year.
- The Cannon Mine continued to progress with excellent reconciliations and cost outcomes. Metals X continues to play banker to the project and has profit share of 50% of the surplus after all cost are repaid. The latest indications are that AISC of around \$1,000 per ounce are achievable from the pit which will be complete early in 2017.
- An agreement to buy the Gunga Mine, 30km west of Jubilee mill was made. The acquisition price is \$1.5M in cash and
  a further \$1M in a milestone payment when production exceeds 30,000 oz. The current resource at Gunga is 1.33
  million tonnes at 1.7 g/t Au containing 73,000 oz. Gunga is expected to provide a blended feed for the plant post
  Cannon until mid-2018.
- Gold hedging at the end of the quarter stood at 208,750 ounces (including the gold prepay 21,250 oz @ A\$1,490.6 per ounce) at an average price of A\$1,624.2 per ounce.
- Excellent exploration results across the operations were received including the following outstanding hits:

**HBJ Underground** 5.3 m at 12.30 g/t Au from 66.1 m in HBJUG0083

 Mt Henry
 16 m at 6.6 g/t Au from 12 m in MHGC0127

 Paddy's Flat
 13 m at 13.7 g/t Au from 6 m in 16VIDD048

3 m at 297.56 g/t Au from 52 m in 16VIDD05

**Trident** 3.3 m at 24.32 g/t Au from 153 m in TUG2779

		Higginsville	South Kal	СМБР	Group
Physical Summary	Units				
UG Ore Mined	t	159,607	86,565	37,825	283,996
UG Grade Mined	g/t	3.03	2.41	2.66	2.79
OP BCM Mined	ВСМ	323,237	572,613	2,310,990	3,206,840
OP Ore Mined	t	66,679	54,078	183,432	304,189
OP Grade Mined	g/t	2.11	2.77	1.28	1.73
Ore Processed	t	232,532	238,410	371,327	842,270
Head Grade	g/t	2.64	1.87	1.12	1.75
Recovery	%	92.82%	90.37%	92.14%	91.83%
Gold Produced	OZ	18,783	13,006	12,296	44,086
Gold Sold	OZ	21,673	11,293	12,605	45,570
Achieved Gold Price	A\$/oz	1,616	1,616	1,616	1,616
Cost Summary					
Mining	A\$/oz	756	829	733	771
Processing	A\$/oz	326	282	514	366
Admin	A\$/oz	124	61	240	138
Stockpile Adj	A\$/oz	-41	-153	18	-58
C1 Cash Cost (produced oz)	A\$/oz	1,165	1,020	1,506	1,217
Royalties	A\$/oz	158	51	62	100
Marketing/Cost of sales	A\$/oz	2	2	0	2
Sustaining Capital	A\$/oz	30	72	116	67
Reclamation & other adj.	A\$/oz	0	0	0	0
Corporate Costs	A\$/oz	8	0	0	3
All-in Sustaining Costs	A\$/oz	1,363	1,145	1,684	1,388
Project Startup Capital	A\$/oz	166	296	1,004	438
Exploration Holding Cost	A\$/oz	27	17	344	112
All-in Cost	A\$/oz	1,556	1,458	3,031	1,938
Depreciation & Amortisation	A\$/oz	301	245	135	238

The two major projects in the Gold division that are not in production are the Fortnum Gold Project and the Rover Copper-Gold Project.

Activity levels on Fortnum were high with detailed engineering, planning, approvals and exploration drilling taking place. Due to the wet season, no field activity was undertaken at Rover. A review of the resource modelling to include the recently received bonanza copper-gold results from the last drill program commenced.

Safety stats for the Gold Division for the quarter are summarised below:

Operation	LTI's (for quarter)	LTIFR	TRIFR
Higginsville	0	1.27	93.12
South Kalgoorlie	1	1.8	99.9
CMGP	2	3.8	89.01
Fortnum	0	0	0

Year to date Gold Division output is summarised:

		Higginsville	South Kal	CMGP	Group
Physical Summary	Units				
UG Ore Mined	t	506,442	310,657	101,506	918,605
UG Grade Mined	g/t	3.30	2.29	1.57	2.77
OP BCM Mined	ВСМ	1,158,030	1,068,977	4,171,727	6,398,734
OP Ore Mined	t	221,472	209,781	636,263	1,067,517
OP Grade Mined	g/t	1.64	1.80	1.12	1.36
Ore Processed	t	821,665	685,824	658,804	2,166,293
Head Grade	g/t	2.72	1.74	1.09	1.91
Recovery	%	90.66%	90.32%	91.54%	90.82%
Gold Produced	OZ	65,892	34,643	21,230	121,766
Gold Sold	OZ	66,002	32,046	17,781	115,829
Achieved Gold Price	A\$/oz	1,584	1,584	1,584	1,584
Cost Summary					
Mining	A\$/oz	729	858	731	766
Processing	A\$/oz	315	298	397	324
Admin	A\$/oz	121	75	185	119
Stockpile Adj	A\$/oz	-65	-18	30	-35
C1 Cash Cost (produced oz)	A\$/oz	1,100	1,212	1,343	1,174
Royalties	A\$/oz	121	34	53	84
Marketing/Cost of sales	A\$/oz	2	2	0	2
Sustaining Capital	A\$/oz	71	108	67	81
Reclamation & other adj.	A\$/oz	0	0	0	0
Corporate Costs	A\$/oz	9	0	0	5
All-in Sustaining Costs	A\$/oz	1,303	1,357	1,464	1,346
Project Startup Capital	A\$/oz	119	435	1,876	515
Exploration Holding Cost	A\$/oz	32	33	487	112
All-in Cost	A\$/oz	1,453	1,825	3,827	1,973
Depreciation & Amortisation	A\$/oz	300	260	224	275

### **HIGGINSVILLE GOLD OPERATIONS (HGO)** [MLX 100%]

The HGO remained in a transition period where the tail end of the Trident mine's Artemis and Helios lodes is being mined. This area has lower overall grade, is approximately 1100m deep and is enduring spasmodic seismic events which make its extraction rates unpredictable. The ore system continues at depth with grades improving approximately 100m further down plunge into the Pluto lodes. The establishment of the decline access to this area requires significant capital investment including a major upgrade to the ventilation network and inequitable royalty imposts as the gold price increases. Consequently, a decision has been made to defer this development in favour of open pit ores from the Mt Henry gold mine, approximately 75km south of the plant. The Trident Mine will move to a care and maintenance mode.

Open pit mining from the Lake Cowan region continued and a cut-back to the Fairplay Pit just south of the plant commenced during the quarter. Open pit mining at Mt Henry is scheduled to start by mid-year. Infill drilling during the quarter significantly upgraded and confirmed the continuity of the near surface resource with the first stage of the open pit. This will have a low strip ratio with a grade above 2.3 g/t expected.

Quarterly gold production dropped to 18,783 ounces at a cash operating costs of A\$1,165 per ounce and an AISC of A\$1,363 per ounce. Financial year-to-date gold production now totals 65,892 ounces at a cash cost of A\$1,100 per ounce and an AISC of A\$1,303 per ounce.

#### **HGO EXPLORATION**

At HGO drilling continues to be focused on the Trident Underground Mine, with work this quarter being a combination of conceptual targeting and definition of future stoping panels. 3.3m at 24.32g/t Au from 153m in TUG2779 within the producing Artemis orebody, and 6.8m at 4.47g/t Au from 203m in TUG2810 testing the Pluto target have provided encouragement that Trident will continue to produce a significant volume of high margin ounces over its remaining Life of Mine. Importantly, significant advances have been made in preparing the recent Mount Henry acquisition for mining in the coming financial year.

Infill drilling to validate the recent Metals X resource model is ongoing, with the results returned to date validating our view that selective mining of a higher-grade portion of the Mount Henry resource is possible. Results such as 16m at 6.6g/t Au from 12m in MHGC0127, 22m at 4.35g/t Au from 7m in MHGC0141 and 22m at 5.28g/t Au from 10m in MHGC0230 have reinforced Metals X's enthusiasm for the project, and positively reinforced the vision of Mount Henry as a long-term source of open pit ore feed for the Higginsville operation.

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

A relatively steady performance from SKO during the quarter with directly attributable (excluding Cannon 3,505 oz) ore processed totaling 238,410 tonnes at  $1.87 \, \text{g/t}$  Au and a 90.37% recovery to yield 13,006 ounces.

Underground production from HBJ was steady and focused on the lower grade remnant stoping positions. Overall productivity was hampered by delays in establishing the primary ventilation circuit which was completed subsequent to the end of the quarter. The refurbishment of the old decline advanced to be in a position to access the first virgin lodes under historic mining late in the ensuing quarter which should see an overall increase in mine head grade.

HBJ ore was supplemented by open pit mining at the wholly owned Georges Reward Pit at Bulong and low-grade stocks. Open pit production was 54,078 tonnes at 2.77g/t Au and some 100,102 existing tonnes of low grade stocks were drawn.

Quarterly gold production increased to 13,006 ounces at a cash operating costs of A\$1,020 per ounce (excluding Cannon) and an AISC of A\$1,145 per ounce. Financial year-to-date gold production now totals 34,643 ounces at a cash cost of A\$1,212 per ounce and an AISC of A\$1,357 per ounce.

#### SKO EXPLORATION

At South Kalgoorlie, drilling has concentrated on firming-up mining panels in the HBJ mine as ongoing underground development opens up access to multiple mining fronts within the orebody. Better results at HBJ this quarter have included 5.26m at 12.30g/t Au from 66.1m in HBJUG0083, 3m at 3.23g/t Au from 69m in HBJUG0106 and 4.98m at 9.29g/t Au from 72m in HBJUG0150. Aside from the encouragement provided by the raw assay results, the geology revealed by the core in combination with exposures provided by underground development are adding significantly to the geological understanding of the mineralised system at HBJ. This will translate to better mining and exploration targeting outcomes moving forward.

#### **CANON GOLD MINE** (MLX 50% PROFIT SHARE)

Metals X has a financing and profit sharing agreement with Southern Gold Limited (SAU) over the Cannon Mine at Bulong in Western Australia. Pursuant to this agreement, Metals X will manage all technical aspects of the mining operation as well as fund all costs involved with the operation of the mine.

All ore from the mine is batched processed through the SKO Mill and all revenue first goes to repay costs. On the completion of mining surplus funds will be split on 50:50 basis (the profit share). In addition Metals X has made loan funds available to SAU of up to \$2.5 million to fund its other working capital requirements. The loan funds earn interest at 8% per annum and are secured by a mortgage over the Cannon Mining Tenement. To date SAU has drawn on \$1 million of these loan funds.

Mining has been underway at Cannon since September 2015. The current mine plan will see mining and processing continue until February 2017, after which assessment of underground mining opportunities will take place. Pit to date statistics are:

		March 2016 Qtr	Pit To Date	Estimated Remaining
Physicals	Units			
Total Volume Moved	m³	784,121	1,947,926	2,007,490
Waste Volume	m³	779,742	1,881,638	1,878,717
Ore Volume	m³	4,379	66,288	128,773
Ore Tonnes Mined	t	11,796	142,258	336,862
Ore Grade	g/t	1.83	2.54	4.29
Ore Processed	t	43,790	130,123	348,997
Head Grade	g/t	2.68	2.60	4.20
Recovery	%	92.85	92.0	85.1
Gold Production	OZ	3,505	9,979	40,091
Expenditure				
All Mining/Cartage/Admin	\$M	\$3.46	\$11.45	\$22.42
Processing	\$M	\$1.29	\$4.19	\$10.28
Royalty	\$M	\$0.14	\$0.40	\$1.90
Total	\$M	\$4.89	\$16.04	\$34.60
All in Cost (AIC)	\$/oz	\$1396/oz	\$1607/oz	\$865/oz

One parcel of ore was toll processed during the quarter which totaled 43,790 tonnes at 2.68 g/t Au and a 92.85% recovery yielding 3,505 ounces.

All mining physicals and costs are tracking according to expectations.

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

The CMGP had its first full quarter of production since commissioning in late October 2015. Output was a modest increase over the previous quarter at 12,296 ounces produced from the processing of 371,327 tonnes at a head grade of 1.12 grams per tonne and an overall recovery of 92.14%.

The overall grade reflects a combination of the decision to process all low grade ore produced on a continuous basis through the plant as opposed to only the high grade open pit ores. Further, the grade also reflects some difficult reconciliations against reserve in the first two open pits mined (Batavia & Whangamata).

At Batavia the mine reconciliation against reserves so far has been 130% of tonnes, 72% of grade and 94% of metal, resulting in a higher unit cost per ounce. An additional 28,615 tonnes of low grade (0.92 g/t) was mined and has also been processed on a marginal cost basis.

At the larger Whangamata open pit the issue of segregation of low grade and high grade ore blocks from within the oxidised shear zone has been very difficult and as a consequence a decision was made to aggregate the two categories. On the aggregated basis the reconciliation has been 176% of the tonnes (407,000t), 62% of the grade (0.84g/t) and 109% of the meta (11,709oz), again resulting in a higher unit cost of production. The impact of this to the start-up months is exacerbated as Whangamata has been 2/3rds of the ore processed so far. Whilst disappointed reconciliation, the impact of this issue is now behind us with these pits coming to an end in the near future.

The ensuing periods will have ore sourced from the Jack Ryan (at Reedy's) and the Bluebird open pits which are not having the same issues. Most of the pre-strip at Jack Ryan was excavated during the quarter. Access to the Bluebird Pit was re-established and mining recommenced there during the quarter.

At the Paddy's Flat underground mine, timing delays with the establishment of the primary vent circuit and emergency egress had delayed the onset of stoping and also the access to the Prohibition lodes which were the planned early feed sources. Whilst this matter is resolved now, the capital development was continued at a proportionally higher rate in other areas. Ore driving on the Vivian Consols lodes on the first level at Paddy's Flat delivered good exposure and ore. So far reconciliations on this very small section of the overall orebody has been encouraging with mined to ore reserve reconciliations delivering 106% of tonnes, 89% of the grade and 94% of the metal. Processing subsequent to the end of the quarter suggest milled grades are overcalling mined estimates due to the variability and nugget effect of these ores. Encouragingly, productivity from Paddy's Flat is now building and the Prohibition lodes have now been intersected with encouraging initial signs.

Dewatering at the Big Bell Underground Mine continued with re-access to the old portal expected late in the September 2016 quarter. A revised development plan using the higher cut-off resource estimate announced last quarter is underway. A development plan to commence underground mining at the Comet Mine near Cue was also commenced and submissions for statutory approvals have been lodged.

Quarterly gold production from the start up phase was 12,296 ounces at a cash operating cost of A\$1,506 per ounce taking project to date output to 21,230 ounces at a cash operating cost of A\$1,343 per ounce and an AISC of A\$1,464 per ounce.

#### **CMGP EXPLORATION**

At CMGP, significant time and resources were allocated to the first ever underground drilling campaign at the new Paddy's Flat Underground Mine. This drilling work was conducted to provide information ahead of the development front, and improve definition of ore panels ahead of the commencement of first stoping. Initial results have highlighted the significant endowment of this ore system with 2.6m at 37.11g/t Au from 96m in 16VIDD020, 13m at 13.7g/t Au from 6m in 16VIDD048 and 3m at 297.56g/t Au from 52m in 16VIDD057 being amongst the standout results. Metals X is undertaking the first modern underground ore production at Paddys Flat, where prior to 1985 over 830koz of gold was produced from handheld underground mining at an average grade of 16.8g/t.

### FORTNUM GOLD PROJECT (FGP) [MLX 100%]

During the quarter, Metals X continued to progress the Fortnum Gold Project (FGP) toward production. The FGP is a development ready project and located within historic Horseshoe, Peak Hill and Labouchere gold mining centres that were in production until 2006. The operation is leveraged to take advantages of the historical production base (+1.0Moz), synergies with Metals X's nearby Central Murchison Gold Project and by utilising the existing 1.0Mtpa processing plant and operating infrastructure base which needs refurbishment.

The FGP mining area has recent past production of 11.5 million tonnes at 2.8g/t producing just over 1 million ounces.

The Fortnum Gold Mine has further progressed in the March Quarter towards a re-start implementation plan. The development strategy being worked upon is a simple 4 phase strategy

**Phase 1** – Refurbish the plant, re-align permits and approvals, commission and operate on existing low grade ore stockpiles (expected to be able to provide an initial 12 months of feed on their own).

**Phase 2** — Commence open pit mining from planned cutbacks to the existing open pits and extensions thereof. Start the mining of these when the plant is operational and slowly replace the lower grade stocks with these higher grade open pit ores.

**Phase 3** — Dewater and recommission the Starlight Underground mine and replace/supplement the other ores with these higher grade ores increasing overall production.

**Phase 4** – Explore and develop the numerous targets and opportunities to create sustainable production from the existing 2 million ounce resource base and additions to it.

#### Progress on Phase 1

A review, replacement and application for all permits, licensing and approvals for the project to proceed. The was effectively completed during the quarter with the following key components completed:

- The clearing permits amended and transferred.
- b. The mining proposals amended and transferred.
- c. A revised/new Project Management Plan (PMP) approved.
- d. Groundwater Licences transferred.
- e. Submissions for Dangerous Goods licences lodged.
- f. Tailings Dam 2 works approval amended.
- g. Quotes for Power Supply underway.
- h. Scope of Works for Plant Refurbishment completed and tenders being assessed.
- i. Workers Village partially refurbished.
- Mine dewatering strategy and quotes underway.
- k. Detailed Geotechnical and Hydrological studies nearing completion.

The LOW-CAPEX re-start plan was confirmed to be achievable with current estimates of \$10-\$15m being backed with firm quotations.

The strategy to commence ore processing on low grade stocks (only) was validated with drill testing of existing low grade stocks. So far 810,000 tonnes of low grade stock averaging 0.81 g/t has been confirmed with drilling and have been slotted into a plan. A further 500,000t (approx.) of existing stockpiles from past mining are under evaluation and will be check drilled or sampled before being slotted into the development plan. The following table summarises the results and progress:

LG Stocks Confirmed	Cut-off (g/t)	Tonnes	Grade	0z
ROM	0.6	51,000	1.30	2,132
Skyway	0.6	57,000	0.75	1,466
Eldorardo	0.6	107,000	0.71	2,408
Toms	0.6	250,000	0.62	4,823
Yarlarweelor LG	0.6	162,000	0.64	3,125
Horseshoe-Cassidy	0.8	178,000	1.20	6,867
	Sub-total	810,000	0.81	20,858
LG Stocks to be Confirmed	Cut-off (g/t)	Tonnes	Grade	Oz
Peak Hill	0.8	100,000	0.90	2,894
Harmony	0.8	190,000	0.90	5,498
Labouchere	0.6	75,000	0.90	2,170
Nathans/Wilthorpe	0.6	108,000	1.00	3,472
	Sub-total	473,000	0.92	14,034
Total LG Stocks	Total	1, 283,000	0.84	34,892

#### **Phase 2 Progress**

The ore reserves estimates for the three open pits closest to the process plant (direct haul) were revised during the quarter. In the case of the southerly extension to the Yarlarweelor Pit, this included a round of validation drilling top confirm the resource model. The results of this drilling is included in Appendix 1. This enabled the planned mining of the first 3 pits to be slotted into the development plan with the following outcomes:

Open Pit	Cut-off	Category	Tonnes	Grade	0z	Strip Ratio
Toms	0.9	Probable	162,000	1.92	10,016	3.3
Yarlarweelor	0.9	Probable	2,123,000	1.90	129,800	11.5
Callies	0.9	Probable	211,000	2.03	13,729	9.3
Total			2,496,000	1.91	153,544	

Works are continuing on a number of additional open pit opportunities including Horseshoe, Cassidy, Jubilee, Harmony, 5-Ways, Nathans and Labouchere.

#### **Progress on Phase 3**

The data for the previously mined Starlight underground has been collated and is under evaluation. The mine produced 612,000 tonnes at 5.8 g/t (113,000 ounces) from its first 4 levels when it was abruptly stopped by Perilya in 2004. Initial reviews suggest excellent potential to recover remnants and re-start the operation on known extensions and newly outline parallel lodes.

Metals X expects to be in a position to present a complete development plan in the ensuing quarter.

# **ROVER GOLD PROJECT (MLX 100%)**

Due to the wet season in the Tennant Creek Region, no field activity was undertaken at Rover during the quarter. Works did commence on a revised resource model integrating the bonanza high grade gold and copper hits received during the last drill program which targeted the 600-900 m vertical depth area.

# TIN DIVISION

### **RENISON PROJECT (MLX 50%)**

Tin production for the quarter was 1,676 tonnes, a 12% fall from the previous quarter but in-line with expectations from the mining schedule. The cash costs of tin sales was A\$14,455 per tonne of tin metal and the AISC was A\$19,311 per tonne of tin metal produced. The project remains cash positive with an unaudited cash inflow of A6.24M generated for the quarter (MLX 50% share \$3.12M).

World tin prices had a modest gain (3%) for the quarter and currently sits in the A\$22,000 – A\$23,000 range. Whilst the price is improving and reported stocks are low, the price continues to remain soft and in-line with the general poor sentiment of commodities overall

In a focus to produce tin at the lowest possible cost, the Joint Venture (JV) made a decision not to re-new the underground mining contract at the end of its term (end of April 2016) and is moving to an owner-operator position. The company believes that the operations have reached a long-term steady-state production level and with the changing landscape of a hungry labour-pool in the Tasmanian mining sector the time is right for such transition. A predominantly new fleet of underground equipment has been acquired and the employment of an owner miner's team is advanced. It is expected that additional cost saving will be achieved moving forward despite some one-off costs in the next quarter associated with contractor de-mobilisiation.

Tin Division output is summarised:

		March Quarter	Year to Date
Physical Summary	Units		
UG Ore Mined	t	171,143	513,160
UG Grade Mined	g/t	0.013	0.014
Ore Processed	t	173,729	524,985
Head Grade	g/t	1.33%	1.36%
Recovery	Sn%	72.29%	72.61%
Tin Produced	t	1,676	5,209
Tin Sold	t	1,914	5,032
Achieved Tin Price	A\$/t Sn	21,170	21,054
Cost Summary			
Mining	A\$/t Sn	9,179	8,931
Processing	A\$/t Sn	4,180	3,931
Admin	A\$/t Sn	896	839
Stockpile Adj	A\$/t Sn	201	335
C1 Cash Cost (produced t)	A\$/t Sn	14,455	14,035
Royalties	A\$/t Sn	547	571
Marketing/Cost of sales	A\$/t Sn	1,882	1,949
Sustaining Capital	A\$/t Sn	2,409	2,441
Reclamation & other adj.	A\$/t Sn	14	33
Corporate Costs	A\$/t Sn	3	11
All-in Sustaining Costs	A\$/t Sn	19,311	19,041
Project Startup Capital	A\$/t Sn	-	-
Exploration Holding Cost	A\$/t Sn	-	-
All-in Cost	A\$/t Sn	19,311	19,041
Depreciation & Amortisation	A\$/t Sn	2,357	2,355

#### RENISON EXPLORATION AND DEVELOPMENT

At Renison, work around the producing Area 4 and Lower Federal Zones continues to highlight exciting near-term production opportunities, with outstanding true width results such as 13.5m at 5.41% Sn from 90.7m (U5626) in Area 4 and 4.2m at 18.22% Sn from 4.7m (U5611) in Lower Federal returned this quarter. In addition a hole drilled into Lower Federal appears to have clipped the boundary of a dolomite replacement horizon for a significant portion of its length (making the judgement of true width difficult). This hole has returned an interval averaging above 1% Sn for a length of over 60m, which illustrates the scale of the future opportunity in this massive mineralised system (62.9m at 1.02% Sn from 243.6m in U5492). Renison remains open at depth, along strike and up-plunge.

#### **RENTAILS PROJECT (MLX 50%)**

The operating JV completed review of the Rentails tin fuming technologies during the quarter. The planned Ausmelt technology for tin fuming was compared against the proprietary Box-fumer technology of Yunnan Tin Group. The conclusions were that any saving in capital and/or operating costs were offset by the copper credit from tapping a copper matte from the Ausmelt top-lance furnace.

The JV partners agreed to review and update the feasibility study for Rentail's and refresh its capital cost and construction methodology as the Australian dollar tin price was approaching a level that made the development feasible and bankable.

# **NICKEL DIVISION**

### **WINGELLINA PROJECT (MLX 100%)**

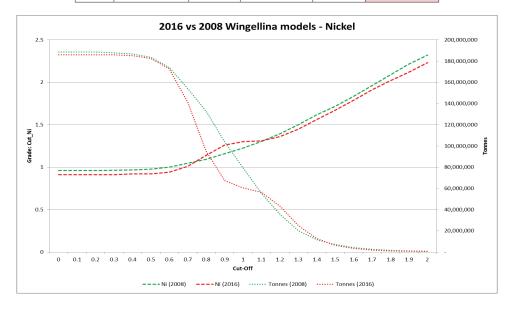
As advised in the December quarterly report the final Public Environmental Review (PER) document was completed and approved by the EPA for release to the public for an 8 week review period on 14 September 2015 and ended on 9 November 2015. There was a total of 6 submissions received by the department of which none of the submission raised any specific issues that required a response from Metals X. The Board of the EPA has now considered the PER and the Office of the Department of the EPA is now currently finalizing its recommendations for final approval. This is a significant milestone for the Wingellina Nickel-Cobalt project as it completes a further significant step towards the development of the project.

Interaction with the State and Federal Governments in relation to infrastructure requirements within Central Australia continued during the quarter. An application has been submitted to the NT Government to obtain "Significant Project Status" for the road and gas infrastructure, which will result in further cooperation by the territory. Strong support from the other states and Commonwealth is ongoing.

During the quarter a review of the resource model was completed at varying cut-off grades as part of determining the capability of a smaller but higher grade resource to be mined and processed using new pyro-metallurgical processes for nickel recovery.

The revised model used geostatistical analysis specific to mining on a selective basis. Objectively, using a 1.30% cut-off grade, the higher grade resource component is 25 million tonnes at 1.45% Ni, 0.1% Co and 53.5% Fe203. Initial mining studies suggest that this higher grade resource can be mined with an estimated 1.5 : 1 (waste:ore) stripping ratio. Comparisons of both resource models are made below:

Cut-Off	Tonnes (2008)	Ni (2008)	Tonnes (2016)	Ni (2016)	Variance
0.5	183,438,428	0.977	182,560,403	0.92	-0.5%
0.6	174,017,516	1	172,589,722	0.94	-0.8%
0.7	154,005,117	1.045	141,102,473	1.01	-8.4%
0.8	132,803,853	1.092	95,075,111	1.14	-28.4%
0.9	103,814,638	1.16	67,410,122	1.26	-35.1%
1	79,466,830	1.225	60,391,690	1.3	-24.0%
1.1	55,320,911	1.303	56,304,727	1.31	1.8%
1.2	35,632,223	1.392	43,330,568	1.36	21.6%
1.3	20,199,888	1.503	24,803,631	1.45	22.8%
1.4	11,611,152	1.616	12,578,261	1.56	8.3%
1.5	7,270,272	1.717	6,445,265	1.67	-11.3%
1.6	4,352,112	1.835	3,425,558	1.79	-21.3%
1.7	2,649,456	1.96	1,942,585	1.91	-26.7%
1.8	1,649,808	2.091	1,156,401	2.02	-29.9%



For completeness, and because of the importance of co-mineralisation and hence co-product production, estimates of associated Cobalt and Iron oxides were completed and compared at a 1.2% Ni cut-off grade with the following outcomes and categorisation:

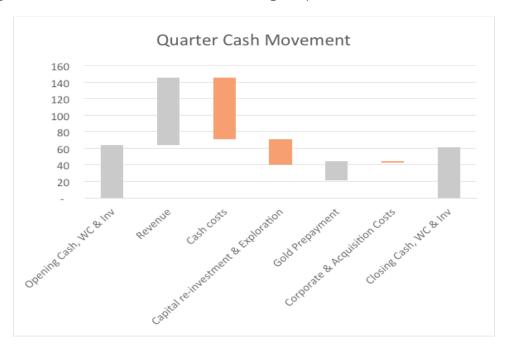
		20	008			20	16	
		Tonnes	Grade	Metal		Tonnes	Grade	Metal
	Measured	14,989,824	1.40	209,408	Measured	11,329,092	1.37	155,209
Ξ	Indicated	17,436,240	1.39	242,538	Indicated	29,327,045	1.36	398,848
Z	Inferred	3,206,160	1.37	44,053	Inferred	2,674,431	1.32	35,302
	Total	35,632,224	1.39	495,999	Total	43,330,568	1.36	589,359
	Measured	14,989,824	0.10	15,440	Measured	11,329,092	0.099	11,216
Co	Indicated	17,436,240	0.10	16,913	Indicated	29,327,045	0.106	31,087
S	Inferred	3,206,160	0.09	2,757	Inferred	2,674,431	0.088	2,353
	Total	35,632,224	0.10	35,110	Total	43,330,568	0.10	44,656
	Measured	14,989,824	52.48	7,867,109	Measured	11,329,092	53.31	6,039,539
Fe <sub>2</sub> 0 <sub>3</sub>	Indicated	17,436,240	51.24	8,934,155	Indicated	29,327,045	54.65	16,027,230
Fe	Inferred	3,206,160	47.58	1,525,363	Inferred	2,674,431	49.45	1,322,506
	Total	35,632,224	51.43	18,326,627	Total	43,330,568	53.98	23,389,275

In addition a significant amount of scandium (40-60ppm) exists within the higher grade component which is recoverable as a co-product. It is not reported in the tables as the level of sampling relates to bulk composites only.

# CORPORATE

Metals X closed the quarter with cash, working capital and investments of \$60.38 million.

The following waterfall chart shows cash movements during the quarter:



#### **GOLD HEDGING**

Metals X replenished its gold pre-pay facility during the quarter adding an additional 15,000 oz at A\$1,550 per ounce [\$23.25m] with Citibank.

Metals X continued with the strategy of always selling at the highest possible gold price including the pre-delivery into its flat forward hedges if required.

Metals X has the following gold hedges across the group as at the end of the March quarter which provide sound revenue protection aligned with the gold division's capital investment strategy.

Туре	Volume & Price	Term
Flat Forward	6,250 per month @ A\$1,637.7/oz	29 months (May 2016 to Aug 2018)
Spot Contract	6,250 ounces @ A\$1,685.2/oz	May 2016
Gold Prepay	1,250 per month @ A\$1,490.6/oz	17 months (May 2016 to Sep 2017)

Total Ounces Covered	208,750
Average Covered Price	A\$1,624.16/oz

#### DIESEL HEDGING

Metals X has significant exposure to the diesel price for its electricity generation. Metals X has moved to protect itself from unexpected upward movement in the diesel price with some hedging via a zero cost collar protection.

At the end of the quarter the diesel hedging in place cover 10,000 barrels of (1 barrel = 159 litres) 10ppm Diesel per month from April 2016 to September 16 with call strikes at AUD\$95 and put strikes at AUD\$75. The forward curve is currently circa AUD\$70 and hedge book has a mark to market of circa -\$500k.

#### OFF MARKET TAKEOVER - ADITYA BIRLA MINERALS LIMITED

Metals X made an off-market takover for Aditya Birla Minerals Limited (ASX:ABY) in late October 2015.

So far Metals X has received acceptance of 29.77% to its now unconditional scrip offer of 1 MLX share for 4.75 ABY shares. Subsequent to the end of the quarter, Metals X concluded discussion with the Board of ABY and its major shareholder, Hindalco Industries Limited (**Hindalco**) and has agreed to increase its consideration to one (1) MLX share for every four and one-half (4.5) ABY shares plus an additional 8 cents per ABY share in cash, subject to Hindalco acceptance. The ABY board has recommended acceptance of the offer. Hindalco have conditionally advised of their intent to accept the offer pending Reserve Bank of India (**RBI**) approval and no superior offer materialising before 2 May 2016 (5 days from agreement). Metals X will pay the increased consideration to all acceptees when Hindalco's acceptance is received.

The offer has been extended until 29 July 2016 to enable adequate time for RBI approval.

#### **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.

# APPENDIX 1 — SIGNIFICANT EXPLORATION RESULTS FOR THE QUARTER HIGGINSVILLE GOLD OPERATIONS

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Ares	TUG2623B	379,999	6,489,971	-675	1.7m at 3.68g/t Au	84	60	232
	TUG2755	380,050	6,489,921	-719	1.9m at 1.33g/t Au	96	26	282

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Artemis	TUG2779	379,948	6,489,939	384	3.3m at 24.32g/t Au	153	-30	318
Helios Sh	TUG2657	379,945	6,490,130	336	21.2m at 2.65g/t Au	55	-30	237
	TUG2659	379,946	6,490,132	336	29.6m at 0.23g/t Au	75	-29	298
Pluto	TUG2810	379,946	6,490,132	336	6.8m at 4.47g/t Au	203	-69	262
Pluto FW	TUG2810	379,946	6,490,132	336	5.8m at 1.48g/t Au	65	-69	262
Pluto ED's	TUG2687	379,947	6,490,135	336	5.5m at 5.08g/t Au	29	-34	343

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Int Width)	From (m)	Dip	Azi
Cocytus	HIGRO83	382,281	6,480,724	320	10m at 0.37g/t Au	270	-60	270
	HIGRO85	382,237	6,480,785	320	8m at 1.15g/t Au	270	-60	270
Cocytus S	HIGRO81	382,218	6,480,438	320	5m at 0.8g/t Au	270	-60	270
Igloo	IGLR002	400,650	4,689,160	320	2m at 1.09ppm Au	090	-60	090
					2m at 1.19ppmAu			

# MT HENRY GOLD PROJECT

Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
MHGC0007	385,863	6,417,002	275	7m at 5.02g/t Au	16	-60	92
				15m at 3.88g/t Au	27		
MHGC0055	385,907	6,417,664	302	13m at 3.9g/t Au	1	-60	92
MHGC0081	385,878	6,416,946	272	18m at 1.76g/t Au	20	-60	92
MHGC0082	385,885	6,416,946	273	15m at 2.75g/t Au	18	-60	92
MHGC0088	385,874	6,416,952	272	19m at 2.44g/t Au	21	-60	92
MHGC0089	385,880	6,416,952	273	20m at 2.23g/t Au	17	-60	92
MHGC0095	385,883	6,416,957	274	30m at 3.13g/t Au	12	-60	92
MHGC0100	385,878	6,416,964	274	15m at 2.42g/t Au	15	-60	92
MHGC0101	385,885	6,416,964	275	13m at 5.76g/t Au	12	-60	92
MHGC0102	385,891	6,416,964	275	11m at 6.3g/t Au	10	-60	92
MHGC0106	385,874	6,416,971	274	10m at 3.15g/t Au	22	-60	92
MHGC0107	385,881	6,416,971	275	10m at 4.11g/t Au	17	-60	92
MHGC0108	385,886	6,416,971	275	15m at 3.31g/t Au	9	-60	92
MHGC0114	385,886	6,416,977	276	10m at 3.46g/t Au	11	-60	92

# MT HENRY GOLD PROJECT (CONTINUED)

Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
MHGC0118	385,867	6,416,984	275	15m at 2.7g/t Au	28	-60	92
MHGC0120	385,880	6,416,983	276	12m at 3.11g/t Au	15	-60	92
MHGC0121	385,886	6,416,983	277	15m at 3.86g/t Au	7	-60	92
MHGC0127	385,879	6,416,989	276	16m at 6.6g/t Au	12	-60	92
MHGC0128	385,885	6,416,989	277	22m at 2.88g/t Au	0	-60	92
MHGC0129	385,891	6,416,989	278	18m at 2.05g/t Au	0	-60	92
				8m at 4.26g/t Au	28		
MHGC0133	385,873	6,416,996	276	18m at 2.37g/t Au	12	-60	92
MHGC0134	385,880	6,416,996	277	20m at 4.27g/t Au	5	-60	92
MHGC0135	385,886	6,416,996	278	22m at 2.33g/t Au	0	-60	92
MHGC0136	385,893	6,416,996	279	18m at 2.04g/t Au	0	-60	92
MHGC0139	385,868	6,416,971	274	18m at 2.89g/t Au	23	-60	92
MHGC0141	385,875	6,417,002	277	22m at 4.35g/t Au	7	-60	92
MHGC0142	385,882	6,417,002	278	20m at 2.89g/t Au	0	-60	92
MHGC0143	385,889	6,417,002	279	19m at 1.71g/t Au	0	-60	92
MHGC0147	385,869	6,417,015	276	8m at 5.28g/t Au	13	-60	92
MHGC0153	385,867	6,417,021	276	8m at 6.05g/t Au	13	-60	92
MHGC0154	385,873	6,417,021	277	11m at 2.87g/t Au	2	-60	92
MHGC0161	385,871	6,417,027	276	10m at 4.44g/t Au	4	-60	92
MHGC0167	385,870	6,417,034	276	21m at 1.55g/t Au	6	-60	92
MHGC0172	385,865	6,417,040	275	15m at 2.35g/t Au	24	-60	92
MHGC0187	385,858	6,417,052	275	21m at 1.86g/t Au	28	-60	92
MHGC0189	385,872	6,417,052	277	19m at 1.61g/t Au	11	-60	92
MHGC0194	385,868	6,417,058	277	13m at 3.25g/t Au	19	-60	92
MHGC0199	385,873	6,417,065	278	30m at 1.85g/t Au	8	-60	92
MHGC0205	385,866	6,417,071	277	12m at 2.68g/t Au	24	-60	92
MHGC0211	385,866	6,417,077	277	14m at 2.35g/t Au	23	-60	92
MHGC0222	385,867	6,417,090	278	17m at 2.19g/t Au	14	-60	92
MHGC0230	385,868	6,417,096	277	22m at 5.28g/t Au	10	-60	92
MHGC0231	385,873	6,417,096	278	22m at 3.1g/t Au	0	-60	92
MHGC0272	385,864	6,417,177	282	10m at 3.74g/t Au	19	-60	92
MHGC0274	385,854	6,417,184	280	13m at 3.43g/t Au	30	-60	92
MHGC0279	385,865	6,417,196	283	14m at 2.16g/t Au	17	-60	92
MHGC0280	385,871	6,417,196	284	18m at 1.92g/t Au	8	-60	92

# MT HENRY GOLD PROJECT (CONTINUED)

Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
MHGC0283	385,871	6,417,202	284	14m at 2.44g/t Au	10	-60	92
MHGC0284	385,878	6,417,202	285	20m at 2.79g/t Au	1	-60	92
MHGC0285	385,854	6,417,209	282	25m at 2.73g/t Au	26	-60	92
MHGC0286	385,866	6,417,208	284	20m at 1.7g/t Au	16	-60	92
MHGC0287	385,873	6,417,208	285	20m at 2.99g/t Au	8	-60	92
MHGC0288	385,879	6,417,208	286	23m at 2.74g/t Au	5	-60	92
MHGC0291	385,881	6,417,214	287	18m at 2.9g/t Au	2	-60	92
MHGC0293	385,874	6,417,215	286	17m at 3.17g/t Au	7	-60	92
MHGC0294	385,883	6,417,221	289	16m at 3.13g/t Au	0	-60	92
MHGC0296	385,868	6,417,215	285	16m at 2.04g/t Au	14	-60	92
MHGC0297	385,877	6,417,221	288	17m at 2.45g/t Au	3	-60	92
MHGC0298	385,886	6,417,227	291	14m at 2.77g/t Au	0	-60	92
MHGC0299	385,871	6,417,221	286	18m at 1.78g/t Au	7	-60	92
MHGC0300	385,880	6,417,227	290	18m at 2.61g/t Au	1	-60	92
MHGC0303	385,865	6,417,233	287	25m at 2.31g/t Au	14	-60	92
MHGC0304	385,876	6,417,239	290	19m at 2.37g/t Au	9	-60	92
MHGC0305	385,882	6,417,239	292	12m at 3.66g/t Au	2	-60	92
MHGC0307	385,869	6,417,240	288	14m at 3.62g/t Au	19	-60	92
MHGC0310	385,879	6,417,246	291	18m at 2.59g/t Au	6	-60	92
MHGC0314	385,867	6,417,246	289	17m at 2.78g/t Au	19	-60	92
MHGC0315	385,879	6,417,252	293	17m at 2.27g/t Au	7	-60	92
MHGC0316	385,873	6,417,252	291	19m at 2.96g/t Au	15	-60	92
MHGC0318	385,866	6,417,252	289	19m at 2.5g/t Au	19	-60	92
MHGC0319	385,881	6,417,258	294	15m at 2.55g/t Au	7	-60	92
MHGC0321	385,868	6,417,258	290	20m at 3.2g/t Au	19	-60	92
MHGC0322	385,875	6,417,258	293	17m at 2.81g/t Au	14	-60	92
MHGC0323	385,884	6,417,264	296	12m at 2.5g/t Au	1	-60	92
MHGC0325	385,871	6,417,271	294	19m at 2.39g/t Au	17	-60	92
MHGC0326	385,881	6,417,271	296	19m at 1.86g/t Au	5	-60	92
MHGC0327	385,885	6,417,271	297	10m at 3.97g/t Au	0	-60	92
MHGC0329	385,883	6,417,277	298	21m at 1.54g/t Au	0	-60	92
MHGC0330	385,878	6,417,277	297	18m at 1.83g/t Au	5	-60	92
MHGC0332	385,873	6,417,277	295	19m at 2.49g/t Au	12	-60	92
MHGC0333	385,882	6,417,283	298	15m at 2.1g/t Au	4	-60	92

# MT HENRY GOLD PROJECT (CONTINUED)

Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
MHGC0336	385,882	6,417,289	299	21m at 1.45g/t Au	0	-60	92
MHGC0337	385,877	6,417,289	298	25m at 1.51g/t Au	2	-60	92
MHGC0338	385,869	6,417,283	296	21m at 2.27g/t Au	14	-60	92
MHGC0339	385,868	6,417,277	294	19m at 2.48g/t Au	17	-60	92
MHGC0340	385,867	6,417,290	296	20m at 2.16g/t Au	17	-60	92
MHGC0341	385,872	6,417,290	297	22m at 1.93g/t Au	10	-60	92
MHGC0342	385,869	6,417,296	298	24m at 1.48g/t Au	13	-60	92
MHGC0344	385,880	6,417,296	299	16m at 1.97g/t Au	1	-60	92
MHGC0352	385,877	6,417,302	299	23m at 1.58g/t Au	5	-60	92
MHGC0355	385,883	6,417,308	300	20m at 1.87g/t Au	0	-60	92
MHGC0356	385,859	6,417,309	295	22m at 2.29g/t Au	22	-60	92
MHGC0358	385,878	6,417,308	299	20m at 1.97g/t Au	5	-60	92
MHGC0360	385,872	6,417,315	298	17m at 1.89g/t Au	11	-60	92

# **SOUTH KALGOORLIE OPERATIONS**

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
НВЈ	HBJUG0083	366,742	6,566,097	14	6.56m at 1.18 ppm	37.2	-35	32
					5.26m at 12.30 ppm	66.1	-35	32
	HBJUG0098	366,546	6,566,435	116	32.97m at 1.53 ppm	16.9	-11	59
					8.11m at 5.44 ppm	72.7		
	HBJUG0100	366,547	6,566,434	115	40.9m at 1.30 ppm	11.1		
					27.77m at 2.94 ppm	60.0		
	HBJUG0101	366,546	6,566,435	116	79.51m at 1.21 ppm	10.6		
	HBJUG0102	366,547	6,566,433	115	3.26m at 2.68 ppm	6.0	-15	89
					22.81m at 1.12 ppm	11.5		
					26.57m at 0.77 ppm	61.5		
					7.22m at 5.08 ppm	90.1		
	HBJUG0103	366,546	6,566,435	115	45.67m at 1.21 ppm	10.3	-28	66
					21.05m at 1.28 ppm	58.7		
					9.8m at 2.60 ppm	92.4		
	HBJUG0104	366,547	6,566,434	115	84.62m at 1.38 ppm	10.5		
	HBJUG0105	366,547	6,566,434	115	29.57m at 1.16 ppm	11.3		
					11.68m at 0.80 ppm	68.8		
					13.27m at 0.55 ppm	88.0		

# **SOUTH KALGOORLIE OPERATIONS (CONTINUED)**

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
HBJ (Continued)	HBJUG0106	366,547	6,566,434	115	4.28m at 4.18 ppm	23.3	-42	12
					53m at 3.23 ppm	69.0		
					28.67m at 0.54 ppm	141.7		
	HBJUG0107	366,547	6,566,434	115	9.6m at 1.03 ppm	29.4		
					69.46m at 1.38 ppm	45.5		
					23.3m at 1.13 ppm	124.0		
	HBJUG0144	366,613	6,566,189	61	3.6m at 6.55 ppm	83.7	-20	18
					10.5m at 1.53 ppm	118.0		
	HBJUG0145	366,613	6,566,189	60	2.98m at 1.67 ppm	87.4		
					10.34m at 1.55 ppm	117.4		
	HBJUG0146	366,615	6,566,189	60	9.77m at 0.90 ppm	125.2		
					13.5m at 1.20 ppm	148.0		
	HBJUG0147	366,615	6,566,188	60	8.32m at 1.15 ppm	85.8		
					7.78m at 4.21 ppm	128.9		
	HBJUG0148	366,616	6,566,188	60	2.46m at 3.90 ppm	100.6		
					10.71m at 1.42 ppm	119.9		
	HBJUG0150	366,743	6,566,097	17	6m at 2.14 ppm	19.0	32	45
					5.84m at 1.59 ppm	54.6		
					4.98m at 9.29 ppm	72.0		
					6.49m at 1.04 ppm	79.0		
	HBJUG0152	366,743	6,566,097	15	8m at 0.67 ppm	19.1	-9	65
	HBJUG0152	366,743	6,566,097	15	4m at 2.76 ppm	42.0	-9	65
					3.22m at 8.48 ppm	52.6		
					4.27m at 1.42 ppm	59.6		
	HBJUG0153	366,745	6,566,096	15	7.37m at 0.86 ppm	25.0	-10	102
					7.88m at 2.69 ppm	58.0		
	HBJUG0154	366,745	6,566,095	15	6.03m at 3.22 ppm	32.6		
					4.8m at 5.37 ppm	67.5		
	HBJUG0155	366,743	6,566,097	14	4.82m at 4.30 ppm	63.2		
	HBJUG0156	366,743	6,566,096	14	6.52m at 5.91 ppm	64.8		
	HBJUG0157	366,745	6,566,096	14	14.74m at 3.91 ppm	72.0		
	HBJUG0158	366,745	6,566,095	14	7.44m at 3.52 ppm	72.0		
					4.78m at 6.97 ppm	81.4		
	HBJUG0162	366,735	6,566,141	19	5.17m at 7.14 ppm	39.4		

# **SOUTH KALGOORLIE OPERATIONS (CONTINUED)**

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
HBJ (Continued)	HBJUG0163	366,736	6,566,141	19	4.52m at 3.50 ppm	26.8	-20	49
	HBJUG0184	366,568	6,566,400	47	45.27m at 1.03 ppm	12.9	-2	128
					17m at 0.92 ppm	61.2		
					7.83m at 1.64 ppm	80.2		
	HBJUG0185	366,568	6,566,400	47	20.59m at 1.35 ppm	10.9	-2	115
					15m at 1.19 ppm	38.0		
					24.89m at 0.89 ppm	55.6		
	HBJUG0186	366,568	6,566,400	47	28.7m at 1.46 ppm	11.5	-15	121
					15m at 1.11 ppm	62.0		
	HBJUG0187	366,568	6,566,400	47	24.4m at 2.04 ppm	14.6	-32	125
					1.94m at 4.94 ppm	1.8		
	HBJUG0189	366,568	6,566,400	47	19m at 0.51 ppm	22.0		
					4.27m at 1.85 ppm	57.5		
	HBJUG0190	366,568	6,566,400	47	30.77m at 2.17 ppm	13.2	-45	123
					12m at 1.69 ppm	57.0		
	HBJUG0192	366,568	6,566,400	47	37.13m at 1.80 ppm	13.8	-53	115
					19.83m at 1.33 ppm	60.9		
					7.07m at 2.47 ppm	129.5		

# **CENTRAL MURCHISON GOLD PROJECT**

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Vivian-Consols	15VIDD021	7,056,068	650,015	421	1.76m at 3.39 ppm	59	-15	306
	15VIDD023	7,056,068	650,015	421	1m at 7 ppm	100	-65	306
	16VIDD001	7,056,394	650,187	423	1m at 14.6 ppm	7	0	37
	16VIDD004	7,056,394	650,186	424	1m at 6.6 ppm	5	0	48
					5m at 2.27 ppm	18		
					1m at 5.3 ppm	33		
					0.8m at 22.1 ppm	69		
	16VIDD005	7,056,394	650,187	423	0.85m at 6.51 ppm	30	-8	48
	16VIDD006	7,056,050	649,906	418	6.2m at 3.25 ppm	2	-30	143
					2.9m at 9.67 ppm	13		
	16VIDD014	7,056,303	650,136	402	1.2m at 8.35 ppm	72	2	32
					1m at 6.6 ppm	88		
	16VIDD016	7,056,364	650,156	422	2.6m at 5.2 ppm	26	-46	59

# **CENTRAL MURCHISON GOLD PROJECT (CONTINUED)**

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Vivian-Consols					0.9m at 7.95 ppm	32		
	16VIDD017	7,056,364	650,156	425	1m at 7.99 ppm	13	30	31
	16VIDD019	7,056,369	650,259	422	1m at 7.9 ppm	74	-8	281
					0.3m at 56.02 ppm	75		
					0.4m at 68.03 ppm	78		
	16VIDD020	7,056,369	650,259	423	1m at 6.63 ppm	90	9	269
		7,056,369	650,259	423	2.6m at 37.11 ppm	96		
	16VIDD029	7,056,370	650,260	423	4.5m at 6.23 ppm	66	15	321
	16VIDD031	7,056,349	650,153	423	4.46m at 1.33 ppm	3	6	301
	16VIDD035	7,056,228	650,106	423	6.5m at 3.05 ppm	19	20	323
					5.5m at 3.45 ppm	27		
					5m at 1.44 ppm	35		
	16VIDD036	7,056,238	650,110	423	3m at 1.75 ppm	7	27	324
					5.5m at 3.91 ppm	12		
	16VIDD037	7,056,254	650,118	423	2m at 2.71 ppm	10	29	310
					4m at 1.41 ppm	19		
	16VIDD040	7,056,033	649,906	419	2.1m at 4.9 ppm	4	-1	208
					6.1m at 9.89 ppm	8		
					3m at 7.34 ppm	24		
	16VIDD041	7,056,033	649,906	419	3.4m at 3.62 ppm	6	-1	228
					6m at 1.99 ppm	21		
	16VIDD042	7,056,056	649,908	418	1m at 5.77 ppm	7	-55	112
	16VIDD043	7,056,065	649,910	417	9.5m at 2.32 ppm	8	-52	139
					5.05m at 1.44 ppm	20		
	16VIDD044	7,056,064	649,919	419	2.7m at 3.36 ppm	2	19	212
	16VIDD045	7,056,064	649,919	419	2.5m at 5.07 ppm	2	19	208
					4m at 9.74 ppm	23		
					10.57m at 5.03 ppm	30		
					5.7m at 2.6 ppm	58		
					4.8m at 3.91 ppm	69		
					0.2m at 25.9 ppm	75		
	16VIDD046	7,056,065	649,919	420	3m at 8.3 ppm	1	20	219
					0.7m at 16.61 ppm	31		
					6m at 5.77 ppm	37		

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Vivian-Consols					1.65m at 14.04 ppm	49		
					0.6m at 13.16 ppm	53		
	16VIDD047	7,056,078	649,930	418	0.85m at 21.62 ppm	11	-16	230
					11m at 0.79 ppm	14		
					1m at 11.79 ppm	34		
	16VIDD048	7,056,078	649,930	418	13m at 13.7 ppm	6	-21	228
	16VIDD055	7,056,033	649,905	418	2m at 2.81 ppm	2	-36	228
	16VIDD056	7,056,033	649,905	419	4.2m at 1.68 ppm	6	-21	208
					2m at 9.99 ppm	21		
	16VIDD057	7,056,033	649,905	420	4.6m at 1.19 ppm	0	17	208
					7m at 3.73 ppm	25		
					13m at 2.67 ppm	35		
					3m at 297.56 ppm	52		
	16VIDD058	7,056,291	650,099	401	7m at 1.09 ppm	46	7	153
	16VIDD059	7,056,291	650,099	401	19.37m at 1.77 ppm	27	7	172
	16VIDD060	7,056,293	650,094	402	15.48m at 3.57 ppm	37	3	181
	16VIDD067	7,056,291	650,099	401	7m at 1.82 ppm	30	-1	163
					8.3m at 4.03 ppm	45		
	16VIDD068	7,056,291	650,099	401	21m at 1.94 ppm	31	-5	181
	16VIDD072	7,056,493	650,271	424	1m at 67 ppm	2	21	43
					3.4m at 1.56 ppm	36		
					5m at 1.05 ppm	56		
Mudlode	16VIDD063	7,056,342	650,239	425	4.35m at 13.73 ppm	0	68	299
	16VIDD066	7,056,369	650,266	423	1m at 5.4 ppm	4	16	107

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Jess	16JSRC001	7,044,734	642,595	473	20m at 2.89 ppm	3	-90	0
	16JSRC002	7,044,753	642,629	473	7m at 0.73 ppm	11	-60	333

# **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	U5434	66,483.3	44,617.5	1,172.5	3.3m at 1.97% Sn and 0.22% Cu	78.3	-69	244
					2.7m at 2.14% Sn and 0.15% Cu	164.3		
	U5587	66,373.8	44,634.3	1,109.1	1.8m at 1.69% Sn and 0.01% Cu	155.4	-63	194
					4.5m at 4.26% Sn and 0.14% Cu	211.0		
					2.3m at 5.34% Sn and 0.11% Cu	347.0		
	U5624	66,688.3	44,553.3	1,201.5	8.2m at 4.78% Sn and 0.13% Cu	94.0	-5	89
	U5625	66,717.7	44,609.3	1,128.3	0.4m at 9.12% Sn and 0.64% Cu	177.3	-27	76
	U5626	66,703.3	44,524.1	1,187.7	0.8m at 7.75% Sn and 0.99% Cu	74.5	-18	74
					13.5m at 5.41% Sn and 0.13% Cu	90.7		
					2.2m at 6.19% Sn and 0.35% Cu	161.5		
	U5627	66,758.1	44,604.9	1,164.5	1.1m at 6.64% Sn and 1.46% Cu	172.6	-15	65
	U5628	66,795.6	44,578.3	1,189.4	0.6m at 2.5% Sn and 0.41% Cu	166.7	-7	47
	U5659	66,407.3	44,612.2	1,203.9	0.3m at 5.15% Sn and 0.03% Cu	70.1	-37	225
	U5659	66,396.2	44,600.9	1,190.9	0.3m at 6.23% Sn and 0.03% Cu	90.7	-37	225
	U5660	66,394.7	44,595.3	1,162.5	1.4m at 6.76% Sn and 0.21% Cu	114.4	-48	227
	U5661	66,348.3	44,587.1	1,160.9	0.4m at 2.37% Sn and 0.08% Cu	145.4	-35	213
					6.9m at 1.89% Sn and 0.36% Cu	206.2		
CFB	U5651	66,284.0	44,483.1	1,505.6	0.7m at 6.78% Sn and 0.33% Cu	0.8	-10	290
	U5652	66,265.1	44,487.2	1,504.5	5.2m at 1.51% Sn and 0.8% Cu	0.8	-11	290
					4.7m at 0.91% Sn and 0.87% Cu	24.0		
	U5653	66,262.8	44,493.1	1,503.6	4m at 0.43% Sn and 1.11% Cu		-11	111
	U5654	66,249.3	44,449.7	1,507.9	3.6m at 2.04% Sn and 1.1% Cu	38.5	-5	290
	U5655	66,224.7	44,496.3	1,504.3	5.5m at 2.22% Sn and 0.74% Cu	5.2	-4	89
	U5658	66,178.8	44,490.4	1,505.1	11.2m at 1.3% Sn and 0.44% Cu	2.5	-19	104
Low Federal	U5488	66,199.0	44,561.3	1,127.9	5m at 3.66% Sn and 0.22% Cu	111.0	-35	71
	U5492	66,320.2	44,681.0	1,057.3	62.9m at 1.02% Sn and 0.05% Cu	243.6	-29	55
					3.7m at 2.09% Sn and 0.07% Cu	243.6		
					12.6m at 1.31% Sn and 0.05% Cu	261.0		
					6.5m at 1.31% Sn and 0.05% Cu	261.0		
					7.4m at 2.79% Sn and 0.24% Cu	288.7		
	U5493	66,135.3	44,574.9	1,066.1	1.4m at 1.29% Sn and 0.07% Cu	158.7	-51	105
	U5494	66,209.2	44,575.3	1,061.5	1.6m at 1.52% Sn and 0.03% Cu	166.0	-50	69
					2.9m at 3.2% Sn and 0.14% Cu	185.0		

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Low Federal	U5592	66,223.1	44,551.5	1,200.5	3.1m at 2.92% Sn and 0.92% Cu		-18	100
					2.5m at 4.42% Sn and 0.15% Cu	20.7		
	U5595	66,204.0	44,554.3	1,202.0	5.7m at 1.89% Sn and 0.23% Cu		-6	100
					4.2m at 0.97% Sn and 0.35% Cu	12.0		
	U5596	66,178.1	44,565.1	1,196.5	2.7m at 1.29% Sn and 0.66% Cu	10.3	-19	99
	U5599	66,126.8	44,574.0	1,195.4	3.5m at 0.75% Sn and 0.27% Cu	8.3	-19	101
	U5601	66,088.7	44,565.2	1,200.0	3.7m at 1.7% Sn and 0.08% Cu		7	272
	U5602	66,047.2	44,594.0	1,194.7	1.6m at 0.98% Sn and 0.06% Cu	16.6	-17	98
	U5604	66,030.3	44,598.2	1,202.8	3.2m at 2.9% Sn and 0.09% Cu	17.7	6	95
	U5608	65,972.6	44,597.5	1,203.6	1m at 4.88% Sn and 0.13% Cu	8.0	9	97
	U5611	65,846.0	44,610.9	1,206.2	4.2m at 18.22% Sn and 0.16% Cu	4.7	-13	110
	U5612	66,326.2	44,528.4	1,203.3	1.5m at 2.88% Sn and 0.13% Cu	1.4	-3	276
	U5630	66,343.4	44,530.3	1,180.2	2.8m at 1.08% Sn and 0.09% Cu	3.0	-7	318
	U5632	66,302.4	44,547.0	1,178.5	1.9m at 2.13% Sn and 0.1% Cu		-7	100
	U5635	66,228.6	44,551.1	1,178.4	2m at 3.05% Sn and 1.67% Cu		-2	87
					0.8m at 2.53% Sn and 0.13% Cu	29.2		
	U5637	66,189.1	44,563.6	1,177.8	0.3m at 11.63% Sn and 0.02% Cu	10.6	-2	98
					4.3m at 1.05% Sn and 0.38% Cu	15.7		
	U5638	66,165.4	44,586.7	1,179.5	2.9m at 1.02% Sn and 0.99% Cu	27.3	-2	91
					1.9m at 1.52% Sn and 0.27% Cu	37.9		
	U5641	66,057.4	44,609.6	1,177.5	1.1m at 3.63% Sn and 0.11% Cu	28.5	-1	87

# 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
Criteria  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 may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <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 N02 diamond with half-core LTK60 diamond, Whole core LTK48 diamond and whole core B0 also used. This core is logged and sampled to geologically relevant intervals.  The bulk of the data used in resource calculations at Chalice has been gathered from diamond core. The predominant drilling and sample type is half core N02 diamond. Occasionally whole core has been sampled to streamline the core handling process. Historically half and whole core LTK60 and half core H0 diamond have been used. This core is logged and sampled to geologically relevant intervals.</li> <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 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. Al exposures within the orebody are sampled.</li> <li>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.</li> <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>Dril</li></ul>
		is an open hole drilling method using water as the flushing medium, with a 6 hole diameter. Samples are taken twice per drill steel (1.9 m steel, 0.8 m said drilled at sufficient angles to allow flushing of the hole with water following prevent contamination.  RC Drilling For Fairplay, Vine, Lake Cowan, Two Boys, Mousehollow, Pioneer and Eundynidata used in the resource estimate is sourced from RC drilling. Minor RC drilling at Trident, Musket, Chalice and the Palaeochannels (Wills, Pluto, Mitchell 3 & Drill cuttings are extracted from the RC return via cyclone. The underflow

Criteria	JORC Code Explanation	Con	nmentary
		•	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	Commentary
		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 deposit at SKO.
		CMGP
		Diamond Drilling
		A significant portion of the data used in resource calculations at the CMGP has been gather from diamond core. Multiple sizes have been used historically. This core is geologically log and subsequently halved for sampling. Grade control holes may be whole-cored to stream the core handling process if required.
		Face Sampling
		At each of the major past underground producers at the CMGP, each development face / ro is horizontally chip sampled. The sampling intervals are domained by geological constra (e.g. rock type, veining and alteration / sulphidation etc.). The majority of exposures wi the orebody are sampled.
		Sludge Drilling
		Sludge drilling at the CMGP was performed with an underground production drill rig. It is open hole drilling method using water as the flushing medium, with a 64 mm (nominal) diameter. Sample intervals are ostensibly the length of the drill steel. Holes are drille sufficient angles to allow flushing of the hole with water following each interval to precontamination. 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 interv transferred via bucket to a four tiered riffle splitter, delivering approximately three kilogra of the recovered material into calico bags for analysis. The residual material is retained on ground near the hole. Composite samples are obtained from the residue material for in analysis, with the split samples remaining with the individual residual piles until required re-split analysis or eventual disposal.
		RAB / Aircore Drilling
		Combined scoops from bucket dumps from cyclone for composite. Split samples taken findividual 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 resource estimate.
		All geology input is logged and validated by the relevant area geologists, incorporated this is assessment of sample recovery. No defined relationship exists between same recovery and grade. Nor has sample bias due to preferential loss or gain of fine or commaterial been noted.

Criteria	JORC Code Explanation	Commentary
Logging	<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) photography.</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	<ul> <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> </ul>	NQ2 and LTK60 diameter core is sawn half core using a diamond-blade saw, with one half of the core consistently taken for analysis. LTK48 and BQ are whole core sampled. Sludge samples are dried then riffle split.
	<ul> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity</li> </ul>	The un-sampled half of diamond core is retained for check sampling if required.
	of samples.  • 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.	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 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 75µm 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.
		SK0
		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	Commentary
		<ul> <li>RC samples are collected at 1 m intervals with the samples being riffle split through a three- tier splitter. The samples are collected by the RC drill crews in pre-numbered calico sample bags which are then collected by SKO staff for submission. Delivery of the sample to the laboratory is by a SKO staff member.</li> </ul>
		<ul> <li>Upon delivery to the laboratory, the sample numbers are checked by the SKO staff member against the sample submission sheet. Sample numbers are recorded and tracked by the laboratory using electronic coding.</li> </ul>
		<ul> <li>Sample preparation techniques are considered appropriate for the style of mineralisation being tested for – this technique is industry standard across the Eastern Goldfields.</li> <li>CMGP</li> </ul>
		Blast holes -Sampled via splitter tray per individual drill rods.
		<ul> <li>RAB / AC chips - Combined scoops from bucket dumps from cyclone for composite. Split samples taken from individual bucket dumps via scoop.</li> </ul>
		RC - Three tier riffle splitter (approximately 5kg sample). Samples generally dry.
		Face Chips - Nominally chipped horizontally across the face from left to right, sub-set via geological features as appropriate.
		<ul> <li>Diamond Drilling - Half-core niche samples, sub-set via geological features as appropriate.</li> <li>Grade control holes may be whole-cored to streamline the core handling process if required.</li> </ul>
		Chips / core chips undergo total preparation.
		• Samples undergo fine pulverisation of the entire sample by an LM5 type mill to achieve a 75 $\mu$ product prior to splitting.
		<ul> <li>QA/QC is currently ensured during the sub-sampling stages process via the use of the systems of an independent NATA / ISO accredited laboratory contractor. A significant portion of the historical informing data has been processed by in-house laboratories.</li> </ul>
		• The sample size is considered appropriate for the grain size of the material being sampled.
		<ul> <li>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.</li> </ul>
Quality of assay data and	The nature, quality and appropriateness of the assaying and laboratory procedures used and	HGO
laboratory tests	<ul> <li>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)</li> </ul>	<ul> <li>At the Intertek on-site facility, analysis is performed using a 500g PAL method. The accurately weighed sub-sample is further processed utilising a PAL 1000B to grind the sample to a nominal 90% passing 75µm particle size, whilst simultaneously extracting any cyanide amenable gold liberated into a Leachwell liquor. The resulting liquor is then analysed for gold content by organic extraction with flame AAS finish, with an overall method detection limit</li> </ul>
	laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	of 0.01ppm Au content in the original sample. This method is appropriate for the type and magnitude of mineralisation at Higginsville.
	nave seen established.	<ul> <li>Quality 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, while blanks are employed to test for contamination during the sample preparation stage. The analyses have confirmed the analytical process employed at Higginsville is adequately precise and accurate for use as part of the mineral resource estimation.</li> </ul>

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.
			CMGP
		•	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> <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>	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
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>H60</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 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	Con	mmentary
			СМБР
		•	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.		HG0
	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.
			SK0
		•	HBJ:
			Drill spacing ranges from $10 \text{ m x} 5 \text{ m}$ grade control drilling to $100 \text{ m x} 100 \text{ m}$ at deeper levels of the resource. The majority of the Indicated Resource is estimated using a maximum drill spacing of $40 \text{ m x} 40 \text{ m}$ . The resource has been classified based on drill density with mining of the $2.2 \text{km}$ 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	Commentary
		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
		<ul> <li>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.</li> </ul>
		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.	<ul> <li>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.</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data	HGO
		<ul> <li>A review of the grade control practices on site has been undertaken by an external consultant.</li> <li>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.</li> </ul>
		SKO
		<ul> <li>No formal external audit or review has been performed on the sampling techniques and data.</li> <li>Site generated resources and reserves and the parent geological data is routinely reviewed by the Metals X Corporate technical team.</li> </ul>
		CMGP
		Site generated resources and reserves and the parent geological data is routinely reviewed by the Metals X Corporate technical team.

### **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>HGO</li> <li>State Royalty of 2.5% of revenue applies to all tenements.</li> </ul>
		<ul> <li>The Trident Resource is located within mining leases M15/0642, M15/0351 and M15/0348.</li> <li>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.</li> </ul>
		• The Chalice Resource is located on mining lease M15/0786. There are no additional royalties.
		• Lake Cowan is located on mining lease M15/1132. Lake Cowan is subject to an additional royalty (Brocks Creek) of \$1/tonne of ore.
		SKO
		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 SKO'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 associated with tenements with no current Resources and/or Reserves.
		<ul> <li>Private 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.</li> </ul>
		<ul> <li>SKO 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.</li> </ul>
		There are no known issues 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 Bell Gold Operations (BBGO) of which Metals X has 100% ownership.
		Several third party royalties exist across various tenements at CMGP, over and above the state government royalty.
		BBGO 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.

Criteria	JORC Code Explanation	Commentary
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 SKO 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.  HG0
		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.
		<ul> <li>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.</li> </ul>
		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 openpit 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:
		The 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
		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.
		CMGP
		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.
		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.
		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.
		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>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> </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</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	<ul> <li>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 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>	Appropriate diagrams are provided in the body of the 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.	
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.	
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>	continuing mining activities at Metals X Gold Operations.

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 CMGP comprises 6 granted exploration leases, 10 granted general purpose leases, 31 granted miscellaneous leases, 210 granted mining leases and 14 granted prospecting leases.</li> <li>Native title interests are recorded against several CMGP tenements.</li> <li>The CMGP tenements are held by the Big Bell Gold Operations (BBGO) of which Metals X has 100% ownership.</li> <li>Several third party royalties exist across various tenements at CMGP, over and above the 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>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>The CMGP area has an exploration and production history in excess of 100 years.</li> <li>On balance, BBGO work has generally confirmed the veracity of historic exploration data.</li> </ul>

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>
		• 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.
		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 intermediate sills and dykes.     </li> </ul>
		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 synand post-tectonic granitoid complexes. Structurally controlled the gold occurs at the sheared contacts of dolerite, basalt, ultramafic schist, quartz-feldspar porphyry, and shale.

Criteria	JORC Code explanation	Commentary
Drill hole Informa- tion	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>Presented in tables above.</li> <li>Excluded results are non-significant and do not materially affect understanding of the CMGP deposits.</li> </ul>
	<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> <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</li> </ul>	
Data aggregation methods	<ul> <li>should clearly explain why this is the case.</li> <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>	<ul> <li>Results are reported on a length weighted average basis.</li> <li>Results are reported above a 5g/m Au cut-off.</li> </ul>
	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.	<ul> <li>Results reported may include up to two metres of internal dilution below a 0.5 g/t Au cut-off.</li> <li>No metal equivalent values are reported.</li> </ul>
	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.	
	• 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	<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	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.	Excluded results are non-significant and do not materially affect understanding of the CMGP 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.	Relevant information presented in the body of the above.
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>	Exploration and mine planning assessment continues to take place at the CMGP.

# **APPENDIX 3 – JORC 2012 TABLE 1 – TIN DIVISION** (RELATING TO EXPLORATION RESULTS) **SECTION 1 SAMPLING TECHNIQUES AND DATA**

Criteria	JORC Code Explanation	Commentary
Criteria 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 may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<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 N02 (45.1 mm nominal core diameter), LTK60 (45.2 mm nominal core diameter) and LTK48 (36.1 mm nominal core diameter), with N02 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.             N0 and H0 core sizes have been recorded as being used at Mount Bischoff. This core is geologically logged and subsequently halved for sampling.             There is no diamond drilling for the Rentails Project.</li> <li>Face Sampling             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.             There is no face sampling for the Rentails Project.</li> <li>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.</li> </ul> <li>RC Drilling         RC Drilling         RC drilling has been utilised at Mount Bischoff.     </li>

Criteria	JORC Code Explanation	Commentary
		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
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.  Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.  The total length and percentage of the relevant intersections logged	<ul> <li>RC chips are logged geologically.</li> <li>Development faces are mapped geologically.</li> <li>Logging is qualitative in nature.</li> <li>All holes are logged completely, all faces are mapped completely.</li> </ul>
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> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</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
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and 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>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 the resource in question.</li> <li>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 ensure quality control.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Criteria  Verification of sampling and assaying  Location of data points  Data spacing and distribution	<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> <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>Anomalous intervals as well as random intervals are routinely checked assayed as part of the internal QA/QC process.</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 operating environment.</li> <li>Primary data is loaded into the drillhole database system and then archived for reference.</li> <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 primary assays data is modified in any way.</li> <li>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.</li> <li>All drilling and resource estimation is undertaken in local mine grid at the various sites.</li> <li>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.</li> <li>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.</li> <li>Drilling at Mount Bischoff is variably spaced. 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.</li> <li>Drilling at Rentails is usually carried out on a 100 m centres. This is appr</li></ul>
Orientation of data in relation	Whether the orientation of sampling achieves unbiased sampling of possible structures and	Compositing is carried out based upon the modal sample length of each individual domain.
to geological structure	<ul> <li>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> </ul>	underground infrastructure constraints / topography allows.
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.

### **SECTION 2 REPORTING OF EXPLORATION RESULTS**

(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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	•	All Tasmania resources are hosted within 12M1995 and 12M2006. Both tenements are standard Tasmanian mining leases.  No native title interests are recorded against the Tasmanian tenements. Native title interests are recorded against the Queensland tenements.  Tasmanian tenements are held by the Bluestone Mines Tasmania Joint Venture of which
				Metals X has 50% ownership.  No royalties above legislated state royalties apply for the Tasmanian tenements.
			•	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.
			•	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
			•	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	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:  Beasting and northing of the drill hole collar  Belevation or RL (Reduced Level — elevation above sea level in metres) of the drill hole collar  Belevation or RL (Reduced Level — elevation above sea level in metres) of the drill hole collar  Belevation of the hole  Belevation depth and interception depth  Belevation 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.	Excluded results are non-significant and do not materially affect understanding of the Renison deposit.
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> </ul>	<ul> <li>Results are reported on a length weighted average basis.</li> <li>Results are reported above a 4%m Sn cut-off.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> <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>	Interval widths are true width unless otherwise stated.
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 reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Presented above.  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	<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>	Renison.

## APPENDIX 4 – JORC 2012 TABLE 1 – MOUNT HENRY SECTION 1 SAMPLING TECHNIQUES AND DATA

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>	drilling (DD) techniques. The Mt Henry (MH) resource database subset contains 743 RC &
	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
	• 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	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 of mineralisation types (eg submarine nodules) may warrant disclosure of detailed information	gold analysis by FA50 (Fire Assau) technique. Of the historical RC & DD gold assays in the
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).	
	Method of recording and assessing core and chip sample recoveries and results assessed.	• The DD drilling was typically NQ (47.6mm), and more recently NQ2 (50mm) and HQ (63.5mm) diameter core.
		HQ size core was typically drilled as geotechnical holes from surface by Panoramic.
Drill sample recovery	Measures taken to maximise sample recovery and ensure representative nature of the samples.	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%.
	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.	<ul> <li>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.</li> </ul>
		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 or	
	detail to support appropriate Mineral Resource estimation, mining studies and metallurgica studies.	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</li> </ul>	<ul> <li>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.</li> <li>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.</li> </ul>
	<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> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>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.</li> <li>Quality control procedures have included the insertion of standards, blanks and duplicates to monitor the sampling and analytical process.</li> <li>The sample sizes used are accepted industry standard sizes used extensively throughout the goldfields and are appropriate for the style of deposit.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and 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>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 recorded technique or are by technique other than Fire Assay. Where non gold analyses exist they are either by AAS or ICP OES determination.</li> <li>No other geophysical or analytical tools have been used to estimate grade.</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>	'

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 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> <li>The results of any audits or reviews of sampling techniques and data</li> </ul>	<ul> <li>Virtually all drilling has been completed perpendicular to the main strike of the deposit geometry and angled to best intercept the west dipping mineralisation.</li> <li>No sampling bias is apparent from the direction of drilling.</li> <li>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.</li> <li>No audits or review of the Panoramic sampling procedures and protocols has been completed.</li> </ul>
Audits of reviews	• Ine results or any audits or reviews of sampling techniques and data	• No audits or review of the Panoramic sampling procedures and protocols has been completed.

### **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	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 titl	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 parties	Acknowledgment and appraisal of exploration by other partie	Central Norseman Gold Corporation held most of the tenements in the Mount Henry region until 1980. Exploration was then carried out by:
parties		ESSO Australia [1980–82].
		· · · · ·
		Australis Mining NL (1982–88).      Australis Mining NL (1983–88).
		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.	• The Mt Henry Project covers 347km² of the prolific South Norseman-Wiluna Greenstone belt of the Eastern Goldfields in Western Australia.
		<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>
		• 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.
		• 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.
		• 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.
		<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>
		The mineralisation is infrequently cut by flat lying, dilational pegmatite dykes and sills.
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:     asting and northing of the drill hole collar  Belevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	No exploration information is being presented in this release.
	<ul> <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.	

Criteria	JORC Code Explanation	Commentary
Data aggregation methods	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.	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	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	Database integrity is maintained via the use of DataShed software which restricts access to the SQL database. DataShed prevents the import of invalid data.
	purposes.  • Data validation procedures used.	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> </ul>	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.
	<ul> <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> </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.
	The factors affecting continuity both of grade and geology.	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 as well as density, and various estimation parameters that are subsequently used to assist in resource categorisation. The block sizes used in the model will vary depending on orebody geometry, minimum mining units, 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</li></ul>
Moisture	<ul> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	The tonnages are reported as dry tonnes.

Criteria	JORC Code Explanation	Commentary
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.
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>	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.
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.	
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>	grant of the respective mining leases.
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>	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 & 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.

Criteria	JORC Code Explanation	Commentary
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>	
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> <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>	<ul> <li>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>

## 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	JORC Code Explanation	Commentary
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 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 to meet specification, etc.	
	The allowances made for royalties payable, both Government and private.	
Revenue factors	The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	No reserve information is being presented in this release.
	The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	
Market assessment	The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.	No reserve information is being presented in this release.
	A customer and competitor analysis along with the identification of likely market windows for the product.	
	Price and volume forecasts and the basis for these forecasts.	
	For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	
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, discount rate, etc.	No reserve information is being presented in this release.
	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 to 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 and classification of the Ore Reserves:	No reserve information is being presented in this release.
	Any identified material naturally occurring risks.	
	The status of material legal agreements and marketing arrangements.	
	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 which extraction of the reserve is contingent.	

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	<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>	

### APPENDIX 5 - JORC 2012 TABLE 1 - CENTRAL MUSGRAVE PROJECT SECTION 1 SAMPLING TECHNIQUES AND DATA

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 '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>	A small portion of the data used in resource calculations at the Central Musgrave Project (CMP) has been gathered from diamond core. This core is geologically logged prior to sampling.  RC Drilling RC drilling has been utilised extensively at the CMP. 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.
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>	A variety of drilling methods were employed by INCO, including churn drilling (102 holes) DDH (19 holes) RAB Drilling (2,643 holes) Vacuum (77 holes) Becker Drilling (102 holes).  Sample recovery from early drilling by INCO is not known. Sample recovery from RC drilling carried out from RC drilling after 2001 was generally very good, except where the drill hole
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>	encountered strong water flow from the hole.  • All geology input is logged and validated by the relevant area geologists, incorporated into
Logging	<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) photography.</li> <li>The total length and percentage of the relevant intersections logged</li> </ul>	

Criteria	JOR	C Code Explanation	Com	nmentary
Sub-sampling techniques and sample preparation	•	If core, whether cut or sawn and whether quarter, half or all core taken.  If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	•	A sample of each 5ft of drilling from INCO drilling were quartered and forwarded for assay, either to AMDEL in Adelaide, or to INCO's in-house laboratory at Blackstone.
	•	For all sample types, the nature, quality and appropriateness of the sample preparation technique.  Quality control procedures adopted for all sub-sampling stages to maximise representivity	•	Samples of RC drilling taken prior to 2006 were composited on 3 or 4m basis, and the composite assayed. A 1m riffle-split sample was also taken for each metre drilled, and was submitted for analysis if the composite assayed >0.4%Ni.
		of samples.	•	Sub sampling for the 2006 and later RC drilling were riffle split each 2m sample drilled.
	•	Measures taken to ensure that the sampling is representative of the in situ material collected,	•	Chips / core chips undergo total preparation.
		including for instance results for field duplicate/second-half sampling.	•	QA/QC is currently ensured during the sub-sampling stages process via the use of the
	•	Whether sample sizes are appropriate to the grain size of the material being sampled.		systems of an independent NATA / ISO accredited laboratory contractor. A portion of the historical informing data has been processed by in-house laboratories.
			•	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.	•	Samples of INCO's drilling were dried and assayed by AAS either at AMDEL in Adelaide, or at INCO's in-house laboratory at Blackstone. The digest method was not specified. Samples were
	•	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.		assayed for Ni, Co and Fe. Analytical quality control was maintained by the by the insertion of standard samples and re-analysis of duplicates at separate laboratories at a frequency of two check analyses for every twenty samples.
	•	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.	•	Composite samples of RC drilling completed in 2001 were submitted to AMDEL, dried and pulverised, and assayed for Ni, Co, Ag, As, Bi, Cu, Cr, Fe, Mg, Mn, Pb, S, Sb, Ti, V, Zr, Ca and Al by HF-multi-acid digest / ICP-0ES. The 1m riffle-splits for any composite sample assaying >0.4%Ni were retrieved, and re-assayed using the same method.
			•	Composite samples from 2002-2004 were assayed for Al, Ca, Cr, Fe, Mg, Mn, Ni, Si, Ti by borate fusion ICP-0ES, and for Ag, As, Bi, Co, Cu, Ni, Pb, S, Sb, V, Zr by HF-multi-acid digest / ICP-0ES.
			•	During 2005 two-metre composite riffle-split (or spear-sampled for wet samples) samples were sent to SGS Laboratories in Perth. Each 2m composite sample was dried and pulverised to a nominal 90 per cent passing 75 microns and analysed for: As, Bi, Co, Cu, Ni, Pb, S and Zn by ICP-0ES. Samples returning >0.4%Ni were re-assayed for Ni, Co, Al203, Ca0, K20, Fe203, Mg0, Mn0, Na20, Si02, V205, Ti02, Cr, S03, Cu, Zn by fused disc XRF.
			•	After 2005 two-metre composite riffle-split (or spear-sampled) samples were sent to SGS Laboratories in Perth. Each sample was pulverised to nominal 90 per cent passing 75 micron for analysis for assay for Ni, Co, Al203, Si02, Ti02, Fe203, Mn0, Ca0, K20, Mg0, S03, Na20, V205, Cr, Cu and Zn by fused disc XRF.
			•	Duplicate samples were taken by spearing the sample pile on the ground approximately every 20 samples, and an in-house standard was inserted into the sample run every alternate 20 samples.
			•	No significant QA/QC issues have arisen in recent drilling results.
			•	These assay methodologies are appropriate for the resource in question.

Criteria	JORC Code Explanation	Commentary
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 across all sites with no significant
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> </ul>	<ul> <li>issues highlighted.</li> <li>Primary data is loaded into the drill hole database system and then archived for reference.</li> </ul>
	Discuss any adjustment to assay data.	All data used in the calculation of resources and reserves 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	<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> </ul>	All hole collar locations for RC holes drilled after 2000 were surveyed using a Real Time Kinematic GPS. This measured X, Y and Z to sub-centimetre accuracy in terms of the MGA 94, Zone 52 metric grid.
	Quality and adequacy of topographic control.	Hole collars for almost all INCO drill holes were re-located, and surveyed in using the TREK GPS. Several INCO collars could not be located, and their MGA positions are estimated from their drilled location on the original INCO Imperial local grid.
		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	<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 on a 120m x 50m spacing. This has been filled-in to 60 x 50 and 30m x 25m spacing in some areas. The data spacing is sufficient for both the estimation procedure and resource classification applied.</li> <li>Compositing of drill assay data to 2m was used in the estimate.</li> </ul>
Orientation of data in relation to geological structure	<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> </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> </ul>
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.

### **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 comprises 5 granted exploration leases and 1 granted miscellaneous lease.</li> <li>Native title interests are recorded against the CMP tenements.</li> <li>The CMP tenements are held by 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 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 (Metals X).</li> <li>On balance, Metals X work has generally confirmed the veracity of historic exploration data.</li> </ul>
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 130,000km² 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 Si0<sub>2</sub> 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, Al<sub>2</sub>0<sub>3</sub>) and metal element concentrations in the weathered profile.</li> </ul>
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:  Beasting and northing of the drill hole collar  Belevation or RL (Reduced Level — elevation above sea level in metres) of the drill hole collar  Belevation or RL (Reduced Level — elevation above sea level in metres) of the drill hole collar  Belevation of the hole  Belevation of the hole  Belevation of the hole  Belevation of the hole  Belevation depth  Belevation depth  Belevation depth  Belevation 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.	No drill hole information is being presented.

Criteria	JORC Code Explanation	Commentary
Data aggregation methods	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.	No drill hole information is being presented.
	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 drill hole information is being presented.
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 drill hole information is being presented.
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 drill hole information is being presented.
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 drill hole information is being 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).	No drill hole information is being presented.
	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	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	Drillhole data is stored in a Maxwell's DataShed system based on the Sequel Server platform which is currently considered "industry standard".
	purposes.  • Data validation procedures used.	• As new data is acquired it passes through a validation approval system designed to pick up any significant errors before the information is loaded into the master database. The information is uploaded by a series of Sequel routines and is performed as required. The database contains diamond drilling (including geotechnical and specific gravity data), and some associated metadata. By its nature this database is large in size, and therefore exports from the main database are undertaken (with or without the application of spatial and various other filters) to create a database of workable size, preserve a snapshot of the database at the time of orebody modelling and interpretation and preserve the integrity of the master database.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those	The site is manned continually by Senior Geological personnel.
	<ul><li>visits.</li><li>If no site visits have been undertaken indicate why this is the case.</li></ul>	The Competent Person has undertaken site visits in the recent past.
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> </ul>	Confidence in the geological model used to constrain the Wingellina estimate is high, with the genetic model for lateritic nickel development well understood. Logged geology has been used to drive the mineralisation interpretation, with the base of laterite defined with drill holes, or its level on a given section interpreted from surrounding drill sections. Continuity of the interpretation across and along the Wingellina deposit is for the most part good, with intersections of hard rock in drill holes, and well mapped outcropping basement the primary
	The factors affecting continuity both of grade and geology.	causes of breaks within the mineralised horizon.
		No alternative interpretations are currently considered viable.
		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.
		The protolithology is the dominant control on grade continuity at the CMP. Structural controls which influence depth of weathering are secondary controls on grade distribution.
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>Individual deposit scales vary across the CMP.</li> <li>The Wingellina deposits have a strike length of &gt;9km, a lateral extent of up to 2.5km and a depth of up to 200m.</li> </ul>

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 was carried out in three dimensions via Micromine or Surpac Vision.</li> <li>After validating the drill hole 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 drill hole database tables for compositing purposes. Drill holes 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 (using Snowden Supervisor v8.5) 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 that are subsequently used to assist in resource categorisation. The block sizes used in the model will vary depending on orebody geometry, minimum mining units, estimation parameters and levels of informing data available.</li> <li>Grade estimation is then undertaken, with the ordinary kriging estimation techniques may be used. Both by-product and deleterious elements are estimated at t</li></ul>
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	<ul> <li>mining output.</li> <li>Tonnage estimates are dry tonnes.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	The resource reporting cut-off grade is 0.5% Ni.
		The reporting cut-off used was based on MLX's current interpretation of commodity markets, and to allow peer group comparison.
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	Not considered for Mineral Resource. Applied during the Reserve generation process.
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.	Not considered for Mineral Resource. Applied during the Reserve generation process.
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>	MLX operates in accordance with all environmental conditions set down as conditions for grant of the respective leases.
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>Sampling of HQ diamond drill core was used to determine the dry density of laterite ore. Average measured dry density is 1.23t/m3 for limonite ore and 1.40t/m3 saprolite ore.</li> <li>A total of 281 triple-tube HQ core samples were collected immediately from the core barrel and measured for bulk density on site. The core length was measured for diameter and length (square-cut ends), dried for 24 hours in a gas oven at 120 C, and weighed.</li> <li>Density was calculated by dividing the weight (kg) of dry sample by the volume of the core piece.</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>

Criteria	JORC Code Explanation	Commentary
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Resource estimates are peer reviewed by the site technical team as well as Metals X's Corporate technical team.
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>	a global and local scale.
	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.	
	These statements of relative accuracy and confidence of the estimate should be compared 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	JORC Code Explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	At all projects, all resources that have been converted to reserve are classified as either an Indicated or Measured Resource. Indicated Resources are only upgraded to Probable Reserves after adding appropriate modifying factors. Some Measured Resource may be classified as Proven Reserves and some is classified as Probable Reserve based on whether is capitally or fully developed.
Site visits	<ul> <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>	<ul> <li>Irregular site visits have been undertaken. The reserve has remained consistent since the 2008 Feasibility Study was completed.</li> </ul>
Study status	<ul> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>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.</li> </ul>	A Feasibility Study utilising a combination of internal and external expertise has been undertaken to allow the conversion of Mineral Resources to Ore Reserves.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	The cut-off grade used for inclusion in the CMP Reserve were determined through the Feasibility Study process.
		Cobalt co-product revenue is considered by the Feasibility Study.

Criteria	JORC Code Explanation	Commentary
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).	Whittle 4D was used to formulate optimal pit shell, with subsequent designs being undertaken in Surpac.
	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.	<ul> <li>Mining studies indicate most material will be free digging, but an allowance has been made to blast some material.</li> <li>The material outcrops on surface and has an overall strip ratio of 1.1:1. Due to the shallow</li> </ul>
	The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.	nature and expected ground conditions, slope angles are low. Geotechnical data has been obtained through logging.
	The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).	<ul> <li>The Mineral Resource was used to formulate the Ore Reserves.</li> <li>Due to the bulk nature of the deposit, limited dilution factors have been used, combined with</li> </ul>
	The mining dilution factors used.	high recovery factors.
	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.	Based on this preliminary assessment, the Wingellina Deposit may be processed by a pressure acid leach flowsheet.
	Whether the metallurgical process is well-tested technology or novel in nature.	Pressure acid leach is a proven nickel extraction method both in Australia and globally
	The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery	Extensive test-work including at pilot plant scale has been conducted on CMP material over the period 1965 to 2013.
	factors applied.	Alternate processing options are actively being tested.
	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.	<ul> <li>Waste dumps were considered during the Feasibility Study.</li> <li>A draft Public Environmental Notice has been completed and will be published.</li> </ul>

Criteria	JORC Code Explanation	Commentary
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.	<ul> <li>Limited infrastructure is currently present. All required infrastructure was considered in the Feasibility Study.</li> <li>Infrastructure is considered standard for a remote site set-up.</li> </ul>
Costs	<ul> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<ul> <li>The Feasibility Study was completed in 2008 using both independent and internal cost estimates. These costs were updated in 2012.</li> <li>Both government and private royalties are payable. All royalties were considered as part of the Feasibility Study.</li> </ul>
Revenue factors	<ul> <li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	The Feasibility Study progressed utilising assumptions regarding foreign exchange rates and commodity prices presented below. These prices have been set by corporate management and are considered a realistic forecast of expected commodity prices and exchange rates over the initial period of projected operation at Wingellina.  Ni = US \$20,000/t  Co = US \$45,000/t  Exchange Rate (\$AUD: \$US)  US \$0.85  Head grades have been defined via Whittle optimisation and subsequent scheduling.
Market assessment	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	<ul> <li>Detailed economic studies of the nickel market and future price estimates are considered by Metals X and applied in the estimation of revenue, cut-off grade analysis and future mine planning decisions.</li> <li>There remains strong demand and no apparent risk to the long term demand for the nickel generated from the project.</li> </ul>
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, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	<ul> <li>For the CMP, which is yet to be funded, an 8% real discount rate is applied to NPV analysis.</li> <li>Sensitivity analysis of key financial and physical parameters is applied to future development project considerations and mine.</li> </ul>
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	The CMP is yet to start and will require environmental and other regulatory permitting.

Criteria	JORC Code Explanation	Commentary
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <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 which</li> </ul>	·
	extraction of the reserve is contingent.	
Classification	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	The basis for classification of the resource into different categories is made on a subjective basis. Measured Resources have a high level of confidence and are generally defined in three dimensions. Indicated resources have a slightly lower level of confidence but contain substantial drilling and are well defined from a mining perspective. Inferred resources always contain significant geological evidence of existence and are drilled, but not to the same density. There is no classification of any resource that isn't drilled or defined by substantial physical sampling works.
		Some Measured Resources have been classified as Proven and some are defined as Probable Reserves based on subjective internal judgements,.
		The result appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	Site generated reserves and the parent data and economic evaluation data is routinely reviewed by the Metals X Corporate technical team. Resources and Reserves have in the past been subjected to external expert reviews, which have ratified them with no issues. There is no regular external consultant review process in place.
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> <li>The statement should specify whether it relates to global or local estimates, and, if local,</li> </ul>	<ul> <li>Only material considered as part of the Feasibility Study has been included as part of the reserve statement.</li> <li>Limited modifying factors have been applied due to the massive nature of the deposit and the closeness to the surface.</li> </ul>
	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 0re 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 - FORTNUM GOLD PROJECT SECTION 1 SAMPLING TECHNIQUES AND DATA

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</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 (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Historic reverse circulation drilling was used to collect samples at 1m intervals with sample quality, recovery and moisture recorded on logging sheets. Bulk samples were composited to 4-5m samples by PVC spear. These composites were dried, crushed and split to produce a 30g charge for aqua regia digest at the Fortnum site laboratory.</li> <li>For Metals X (MLX) RC Drilling 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.</li> <li>In the case of grade control drilling, 1m intervals were split at the rig via a 3-tier splitter box below the cyclone and collected in calico bags with bulk samples collected into large plastic bags. These 1m splits were dried, pulverised and split to produce a 50g charge for fire assay at an offsite laboratory.</li> <li>Where composite intervals returned results &gt;0.15g/t Au, the original bulk samples were split by 3-tier riffle splitter to approximately 3-4kg. The whole sample was dried, pulverised and split to produce a 50g</li> </ul>
Drilling techniques	Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	<ul> <li>charge for fire assay at an offsite laboratory.</li> <li>Historic diamond drilling sampled according to mineralisation and lithology resulting in samples of 10cm to 1.5m. Half core pulverised and split to produce a 50g charge for fire assay at an offsite laboratory.</li> <li>All reverse circulation at nominal 5.5" diameter, utilising face sampling hammers to reduce the risk of sample contamination.</li> <li>Diamond drilling utilised 10-40m RC pre-collars to penetrate transported cover then continued as NQ</li> </ul>
Drill sample recovery	<ul> <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 may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul> <li>Reverse circulation recorded sample quality, recovery and moisture for 1m samples. The majority of samples were of good quality with ground water having minimal effect on sample quality or recovery. Statistical analysis of sample quality for samples over an Au bottom cut of 0.1ppm indicates negligible sample bias.</li> <li>Diamond drilling recorded rock hardness, recovery and RQD. Core recovery was good.</li> </ul>
Logging	<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.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	

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> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Diamond core samples to be analysed were taken as half core. Sample mark-up was controlled by geological domaining represented by alteration, mineralisation and lithology.</li> <li>Reverse circulation samples were split from dry, 1m bulk sample via a 3-tier riffle splitter. Field duplicates were inserted at a ratio of 1:20, analysis of primary vs duplicate samples indicate sampling is representative of the insitu material.</li> <li>Field Standard material was documented as being inserted at a ratio of 1:100 for both RC and diamond drilling.</li> <li>Detailed discussion of sampling techniques and Quality Control are documented in publicly available exploration technical reports compiled by prior owners (Homestake, Perilya, Gleneagle, RNI).</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and 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 (e.g. 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>Historic assaying of RC and core was done by 50g charge fire assay with Atomic Absorption Spectrometry finish at Analabs. The method is standard for gold analysis and is considered appropriate in this case. No Laboratory Certificates are available for historic assay results pre 2008 however, evaluation of the database identified the following;         Standards are inserted at a ratio of 1:100,         Assay repeats inserted at a ratio of 1 in 20.</li> <li>QAQC analysis of this historic data indicates the levels of accuracy and precision are acceptable.</li> <li>Assay of recent (post 2012) sampling was done by 40g charge fire assay with Inductively Coupled Plasma — Optical Emission Spectroscopy finish at Bureau Veritas (Ultratrace), Perth. The method is standard for gold analysis and is considered appropriate in this case. Laboratory Certificates are available for the assay results and the following QAQC protocols used include; Laboratory Checks inserted 1 in 20 samples, CRM inserted 1 in 30 samples and Assay Repeats randomly selected 1 in 15 samples.</li> <li>QAQC analysis of this data indicates the levels of accuracy and precision are acceptable with no significant bias observed.</li> <li>Detailed discussion of analytical QAQC is documented in the individual resource reports.</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>No twinned holes drilled historically.</li> <li>All sampling, geological logging, borehole location, laboratory analysis results and QA/QC data is retained in DataShed, a relational database which has thorough built-in triggers for validation of imported data. An experienced Database Administrator oversees quality control of input data.</li> <li>Borehole, geological and sampling data is captured in specifically designed spreadsheets with built invalidation for data entry fields, using established procedures.</li> <li>No adjustment to primary assay data is made.</li> </ul>

Criteria	JORC Code explanation	Commentary
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>The grid system used for historic Fortnum drilling is the established Fortnum Mine Grid. Control station locations and traverses have been verified by eternal survey consultants (Ensurv). Collar locations of boreholes have been established by either total station or differential GPS (DGPS). The Yarlarweelor, Callie's and Eldorado open pits (currently abandoned) was picked up by DGPS at the conclusion of mining. The transformation between Mine Grid and MGA94 Zone 50 is documented and well established.</li> <li>A LIDAR survey over the project area was undertaken in 2012 and results are in agreement with survey pickups of pits, low-grade stockpiles and waste dumps.</li> </ul>
		Historic drilling by Homestake was routinely surveyed at 25m, 50m and every 50m thereafter, using a single shot CAMTEQ survey tool. RC holes have a nominal setup azimuth applied. Perilya YLRC series holes had survey shots taken by Gyro every 10m. Historic drilling in the area did not appear to have any significant problems with hole deviation.
		Drilling by RNI / MLX was picked up by DGPS on MGA94. Down hole surveys were taken by digital single shot camera every 50m or via a gyro survey tool.
Data spacing and distribution  Data spacing for reporting of Exploration Results.  Whether the data spacing and distribution is sufficient to establish the degree of and grade continuity appropriate for the Mineral Resource and Ore Reserve		Borehole spacing is a nominal 40m x 40m that has been in-filled to a nominal 20m x 20m in the main zone of mineralisation at Yarlarweelor, Callie's and Eldorado with 10m x10m RC grade control within the limits of the open pit.s
	procedure(s) and classifications applied.  Whether sample compositing has been applied.	The spacing is considered sufficient to establish geological and grade continuity for appropriate Mineral Resource classification.
	,	During the historic exploration phase, samples were composited to 4m by spearing 1m bulk samples. Where the assays returned results greater than 0.15ppm Au, the original 1m bulk samples were split using a 3-tier riffle splitter and analysed as described above.
Orientation of data in relation to geological	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Multiple phases of drilling at different orientations: Homestake RC and diamond drilling oriented south east. Perilya RC drilling oriented east and vertical.
structure	<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</li> </ul>	MLX drilling intersections are nominally designed to be normal to the orebody as far as underground infrastructure constraints / topography allows.
	reported if material.	A report analysing the potential of bias between sampling types and drilling orientations was undertaken and determined no bias exists.
Sample security	The measures taken to ensure sample security.	Sample bags tagged and logged, sealed in bulka bags.
		Dispatch by third party contractor, recording consignment note for tracking.
		In-company reconciliation with laboratory sample reconciliation and assay returns.
Audits or reviews	The results of any audits or reviews of sampling techniques and data	Database compilation into DataShed for data integrity.
		Program review by external consultants.
		• QA/QC report on historic sampling and analysis is included in the individual resource reports, and verified as part of the QA/QC review process for 2016 Yarlarweelor Mineral Resource Estimate (MLX).

## **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.	The Fortnum resources are located on Mining Lease 52/132, located 170km north-northwest of Meekatharra at the Fortnum mining centre. The tenement is 100% owned by Metals X through subsidiary company Aragon Resources Pty. Ltd.
	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.	<ul> <li>The following Royalties apply to the tenement:         <ul> <li>\$10/oz after first 50,000oz (capped at \$2M)- Perilya</li> <li>State Government – 2.5% NSR</li> </ul> </li> <li>The tenure is currently in good standing.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Drilled by RAB, AC, RC and diamond coring, assayed gold only.</li> <li>Various parties not limited to RNI NL, Eagle Gold Ltd, Gleneagle Gold Ltd, Perilya Mines Ltd, Homestake Gold Mines Australia Ltd and Dominion Mining Ltd.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Fortnum deposits are Paleoproterozoic shear-hosted gold deposits within the Fortnum Wedge, a localised thrust duplex of Narracoota Formation within the overlying Ravelstone Formation. Both stratigraphic formations comprise part of the Bryah Basin in the Capricorn Orogen, Western Australia.</li> <li>The deposits are hosted within a highly siliceous and deformed unit (jasperoid) and in proximal highly sheared siltstones and felsic to intermediate volcaniclastic rocks. Primary mineralisation manifests as brecciated zones in jasperoid with associated quartz veining and pyritisation, and in surrounding shear zones as an orogenic lode style, evident as fine to coarse euhedral pyrite within sericite-quartz-carbonate-albite alteration around quartz-carbonate veining. Veins are spatially associated with high strain zones with adjacent competent rock units.</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> <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>	the announcement.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. 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>	Reported results contain no more than two contiguous matres of internal dilution below 1 a/t.
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 (e.g. '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>	1, , , , , , , , , , , , , , , , , , ,
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>	
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>	
Further work	<ul> <li>The nature and scale of planned further work (e.g. 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>	Fortnum Gold Project.

## 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	JOI	RC Code explanation	Con	mentary
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	•	Geological logging, borehole location, laboratory analysis results and QAQC data is retained in a relational database. MLX uses DataShed as the relational database which has thorough built-in triggers for validation of imported data. An experienced Database Administrator oversees quality control of data.
		Resource estimation purposes.  Data validation procedures used.	•	Borehole, Geological and Sampling data is captured in specifically designed spreadsheets with built in validation for data entry fields, using established procedures.
			•	Industry standard validation checks were conducted and included, but were not limited to:
				o No overlapping intervals.
				O Downhole surveys at 0m depth and also at the end of hole.
				o Consistency of depths between different data tables.
				O Check gaps in the data.
				o Sample number matching between field sample records and laboratory results.
			•	Additional validation checks included comparison against historic databases (2014, 2011 and 2009) and the database stored on the DMP WAMEX database system (A035439). Approximately, 10% of the original collar, survey and assay (i.e. at least three intervals per hole) information was validated against the original or scans of the original hard copies.
Site visits	•	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	•	Mr. Russell visits Metals X Gold Operations regularly
	•	If no site visits have been undertaken indicate why this is the case.		

Criteria	JORC Code explanation	Commentary
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> </ul>	<ul> <li>Three mineralisation styles have been observed:</li> <li>Sheeted and stockwork quartz-pyrite veins associated with brittle deformation of the jasperoid lithologies. The mineralisation is hosted within quartz vein stockworks and sheeted vein arrays proximal to or within brecciated zones within jasperoid units. Quartz</li> </ul>
	<ul> <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> </ul>	veins hold minimal internal grade, with the majority of mineralisation associated with coarse grained disseminated euhedral pyrite along the vein selvages and within zones of strong silicification. Jasperoid bodies are host to the majority of mineralisation are bounded within the intensely foliated, west-northwest dipping, east-northeast striking shear zones. These bodies are strongly folded on a macro scale with a pronounced moderate southwesterly plunge.
	The factors affecting continuity both of grade and geology.	<ul> <li>Structurally controlled stockwork veins within volcaniclastics. The structurally controlled vein stockworks occur in the footwall of major thrust faults and located within intermediate tuffs and tuffaceous siltstones. Gold mineralisation is associated with zones of pyritisation, silicification, albitisation or sericitisation in quartz vein selvedges.</li> </ul>
		<ul> <li>Supergene associated mineralisation.</li> </ul>
		<ul> <li>Low-grade stockpiles are derived from previous mining of the mineralisation styles outlined above.</li> </ul>
		<ul> <li>Geological matrixes were established to assist with interpretation and construction of the estimation domains.</li> </ul>
		• Confidence in the interpretation is high as the geometry, geology, alteration and tenor of the mineralised zones was observed to be consistent along strike and down dip
		<ul> <li>The interpretations was based on 10m and 20m north-south spaced sections.</li> </ul>
		• The information used in the construction and estimation of the respective resources mineralisation is based on Air Core (AC), Reverse Circulation (RC) and Diamond Drill (DDH) hole information. The AC was included in the poorly information estimation domains and this was considered during the classification of these domains.
		Oxidation surfaces were constructed from the logged information on 20m north south sections.
	The extent and variability of the Mineral Resource	• The Yarlarweelor mineral resource extends over 1,400m in strike length, 570m in lateral extent and 190m in depth.
	expressed as length (along strike or otherwise), plan	• The Callie's mineral resource extends over 1,100m in strike length, 270m in lateral extent and 180m in depth.
	width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The Eldorado mineral resource extends over 240m in strike length, 100m in lateral extent and 100m in depth.

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 byproducts.</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>the mixing these deemed acceptable. The AC drill holes were used in the estimation of the poorly informed estimation domains.</li> <li>Statistical analysis was carried out on the composited data to assist with determining estimation search parameters, top-cuts and spatial continuity. Data for some of the domains exhibit an increased degree of skewness and top cuts were applied to reduce the skewness of distribution. The appropriateness of the top cuts was assessed for each domain utilising log-probability plots, mean and variance plots histograms and univariate statistics for the composite Au variable.</li> <li>Variogram modelling was undertaken using Isatis™ software and defined the spatial continuity of gold within all domains and thes parameters were used for the interpolation process. Indicator variograms were generated within the Jasperoid related estimation domain to the used in the LIK estimation process.</li> <li>Volume models were generated in Surpac using topographic surfaces, oxidation surfaces and mineralised zone wireframes as constraints.</li> <li>Quantitative Kriging Neighbourhood Analysis was used optimise the search parameters.</li> <li>Search ellipses were aligned parallel to the maximum continuity defined during the variographic analysis. The search dimensions generally, approximated the ranges of the interpreted variograms and ranged from 50 to 100m. The minimum and maximum number of samples range from 7 to 11 and 18 to 30, respectively. Second and third pass searches were implement to fill the un-estimated cells blocks if they were not estimated during the first search pass and these search parameters involved increasing in the search distance and reducing in the minimum number of samples used in the estimation process.</li> </ul>
		APPENDIX 6 IORC 2012 TARLE 1 EORTALIM COLD PRO JECT 70

Criteria	JORC Code explana	ation	Com	mentary
			•	The estimation is validated using the following: a visual interrogation, a comparison of the mean composite grade to the mean block grade for each domain, a comparison of the wireframe volume to the block volume for each domain, Grade trend plots (moving window statistics), comparison to the previous resource estimate.  The only element of economic interest modelled is gold.  The lsatis <sup>™</sup> block models were transferred and imported to Surpac Mining Software. The transfer and importing process was validated against the lsatis <sup>™</sup> block model. The resource was then depleted for mining voids and subsequently classified in line with JORC guidelines utilising a combination of various estimation derived parameters and geological / mining knowledge.
Moisture		tonnages are estimated on a dry basis or moisture, and the method of determination re content.	•	Tonnages are estimated as dry metric.
Cut-off parameters	The basis of parameters apparameters apparameters	the adopted cut-off grade(s) or quality pplied.	•	Interpretation cut-off $\geq$ 0.50g/t. Various top-cut values have been applied to the data dependent on domains used in the 0K estimation process. No top-cutting was applied to the Jasperoid related estimation domains because of the LIK estimation methodology was implemented. The reported $\geq$ 0.7 g/t Au cutoff grade is based on surface mining techniques and was determined through interval engineering investigations. Low-grade stocks are reported globally.
Mining factors or assumptions	minimum min external) min of the proce for eventual mining metho Resources mo case, this sho	made regarding possible mining methods, ning dimensions and internal (or, if applicable, ning dilution. It is always necessary as partess of determining reasonable prospects economic extraction to consider potential ods, but the assumptions made regarding not and parameters when estimating Mineral ay not always be rigorous. Where this is the build be reported with an explanation of the nining assumptions made.	•	Conventional open cut mining with 120t class hydraulic backhoe excavators and 90t rigid dump trucks.  2m minimum mining width has been assumed.  No mining dilution or ore loss has been modelled in the Resource model or applied to the reported Mineral Resource.
Metallurgical factors or assumptions	metallurgical part of the pro for eventual metallurgical metallurgical when reportin rigorous. Whe	or assumptions or predictions regarding amenability. It is always necessary as occess of determining reasonable prospects economic extraction to consider potential methods, but the assumptions regarding treatment processes and parameters madeing Mineral Resources may not always be ere this is the case, this should be reported anation of the basis of the metallurgical made.	•	Horizons were modelled based on oxidation state of the host rocks, taken from the drilling information. These were: Transported and lateritic residuum, oxidised, transitional and fresh.  Jasperoid was flagged in the model due to it's hardness and differing heap leach characteristics as identified in recent metallurgical scoping studies.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	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.	
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>	different weathering domains and lithological domains (i.e. jasperoid domains). Density determinations were made on diamond drill core representing mineralisation utilised the water immersion method (Archimedes Principle)  • The assigned bulk densities were: transported 1.90 t/m³, oxide 2.00 t/m³, oxide Jasperoid 2.50 t/m³, transitional 2.20 t/m³, transitional Jasperoid 2.20 t/m³, fresh 2.70 t/m³ and fresh Jasperoid 2.70 t t/m³.
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>	resource drilling or 10 x1 0m grade control drilling.  The non-linear, local estimation method used is considered appropriate for the style of mineralisation and assumed mining selectivity.  A combination of gold estimation quality parameters and drill spacing were ultimately used to define resource confidence categories.  The Competent Person believes that the classification fairly represents the confidence in the resource estimates, as they are described in the JORC (2012) code.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Resource estimates are peer reviewed by the site technical team as well as Metals X's Corporate technical team.

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.	Exploration Results, Mineral Resources and Ore Reserves and reflects the relative accuracy of the Mineral Resource estimates.  • The current Mineral Resource model represents a robust estimate of the in-situ gold mineralisation for Fortnum resource reported. The method used is designed to provide an estimate of local mineable resources, based on current mining methods.
	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.  These statements of relative accuracy and confidence of the estimate should be compared 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	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	<ul> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.</li> </ul>	March 2016, with the appropriate mining, geotechnical, processing and hydrological modifying factors
Site visits	<ul> <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 Anthony Buckingham has been an employee of Metals X (and its subsidiaries) for the past 7 years and has over 15 years' experience specifically in the Western Australian mining industry. Mr Buckingham visits the Fortnum mine site on a regular fortnightly basis and is the primary engineer involved in mine planning, site infrastructure and project management.

Criteria	JORC Code explanation	Commentary
Study status	<ul> <li>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</li> <li>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</li> </ul>	The Fortnum Gold Mine Operation ceased production in May 2007 when owned by Gleneagle Gold. Previous to this the operation was operated by Perilya and Homestake, and first began commercial mining operations in the late 1980's. Extensive mining and processing records are therefore available in each of the deposits.
	have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	<ul> <li>Various open pit styles and host domains have been mined since discovery of the area by Homestake in 1980's. Mining during this time has ranged from open pit cut backs, virgin surface excavations to extensional underground developments.</li> </ul>
		The Fortnum Gold Mine Open Pit inventory had a Pre-feasibility study completed by MLX in early 2016. Additional details and a revision of the Resources (with classification) have continued since this initial financial evaluation. The Fortnum Gold Mine is therefore now at a budgetary level analysis with specific details on processing components and reagent costs, specific mining contractor cost profiles as well as site specific G&A.
Cut-off parameters	The basis of the cut-off grade(s) or quality parameters applied.	The pit rim cut off grade (COG) was determined as part of the Reserve estimation. The pit rim COG determines which material will be processed by equating the operating cost of processing, surface haulage, G&A and selling cost to the value of the mining block in terms of recovered metal and the expected selling price. The COG is then used to determine whether or not a mining block should be delivered to the treatment plant for processing or taken to the waste dump as waste.
		A COG of 0.9g/t was applied to the Reserve open pit inventory, with local Low grade piles having a 0.6g/t determinant and the regional low grade stocks of Horseshoe being cut at 0.8g/t.
		Low Grade stockpiles incurred a low cost profile than open pits for processing, because of the predominantly oxide material, as well as G&A, as the operation would have limited fixed management when milling this inventory.

Criteria	JORC Code explanation	Commentary
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).	Following consideration of the various modifying factors the following rules were applied to the reserve estimation process for the conversion of measured and indicated resource to reserve for suitable evaluation.
	<ul> <li>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.</li> <li>The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc.), grade control and pre-production drilling.</li> <li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li> <li>The mining dilution factors used.</li> <li>The mining recovery factors used.</li> <li>Any minimum mining widths used.</li> <li>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</li> <li>The infrastructure requirements of the selected mining methods.</li> </ul>	<ul> <li>The mining shape in the reserve estimation is generated by a wireframe (geology interpretation of the ore zone) which overlays the block model. Where the wire frame cuts the primary block, sub blocks fill out the remaining space to the wire frame boundary (effectively the mining shape). It is reasonable to assume that the mining method can selectively mine to the wire frame boundary with the additional dilution provision stated in point 2 below.</li> <li>Ore Reserves are based on Pit shape designs — with appropriate modifications to the original Whittle Shell outlines to ensure compliance with practical mining parameters.</li> <li>Geotechnical parameters allied to the Open Pit Reserves are either based on observed existing pit shape specifics or domain specific expectations / assumptions. Various geotechnical reports and retrospective reconciliations were considered in the 2016 design parameters. A majority of the open pits have a final design wall angle of 38-420, which is seen as conservative.</li> <li>Dilution of the ore through the mining process has been set at 15% which is considered as additional ore mined in relation to mining to the wire frame boundary as identified in point 1 above, albeit at a grade of 0.0 g/t. The amount of dilution is considered appropriate based on orebody geometry, historical mining performance and the size of mining equipment to be used to extract ore.</li> <li>Expected mining recovery of the ore has been set at 95%.</li> <li>Minimum Mining widths have been accounted for in the designs, with the utilization of 90T trucking parameters.</li> <li>No specific ground support requirements are needed outside of suitable pit slope design criteria based on specific geotechnical domains.</li> <li>Mining sequence is included in the mine scheduling process for determining the economic evaluation and takes into account available operating time and mining equipment size and performance.</li> <li>No Inferred material is included within the open pit statement, though in various pit sha</li></ul>
Metallurgical factors or assumptions	<ul> <li>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</li> <li>Whether the metallurgical process is well-tested technology or novel in nature.</li> <li>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</li> <li>Any assumptions or allowances made for deleterious elements.</li> <li>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.</li> <li>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</li> </ul>	<ul> <li>Fortnum Gold Mine has an existing conventional CIL processing plant — which has been operational in various periods since the late 1980's. The plant has a nameplate capacity of 1.0Mtpa though this can be varied between 0.8-1.2Mtpa pending rosters and material type.</li> <li>Grind size for the sulphide material has historically been 130 μm.</li> <li>An extensive database of historical CIL recoveries as well as detailed metallurgical test work is available for the various deposits and these have been incorporated into the COG analysis and financial models.</li> <li>For the 2016 Reserve, Plant recoveries of 93-95% have been utilised.</li> </ul>

Criteria	JORC Code explanation	Commentary
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.	The Fortnum Gold Mine has normal Western Australian permitting requirements.
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.	Fortnum Gold Mine, despite being under Care and Maintenance since 2007, has an existing operational infrastructure base with a 108 man camp facility, various water bores, existing TSF, a processing plant, airstrip, communications and main road access ways.
Costs	<ul> <li>The derivation of, or assumptions made, regarding projected capital costs in the study.</li> <li>The methodology used to estimate operating costs.</li> <li>Allowances made for the content of deleterious elements.</li> <li>The source of exchange rates used in the study.</li> <li>Derivation of transportation charges.</li> <li>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</li> <li>The allowances made for royalties payable, both Government and private.</li> </ul>	<ul> <li>Open Pit Mining costs have been sourced from MLX CMGP operations whereby several contracting companies are undertaking mining works. These costs include pit load and haul as well as drill and blast, dewatering and maintenance. The costs are based on recent tender submissions (early 2016) for the CMGP which is located 200km south of the Fortnum Gold Mine.</li> <li>Additional to direct mining costs, surface haulage is based on recent 2016 request for quotation. Where specific tkm rates are not available, a default value of \$0.10-0.15 /tkm has been used.</li> <li>Processing costs are based on the 2016 Pre-Feasibility costs. These costs are in line with previous operating conditions and are aligned to the cost profile seen in MLX's neighbouring operation of CMGP.</li> <li>Royalties applicable to the open pit and stockpile inventory vary pending tenement, though a summary of these are:         <ul> <li>\$10/oz after first 50,000oz (capped at \$2M)- Perilya</li> </ul> </li> <li>State Government - 2.5% NSR</li> </ul>
Revenue factors	<ul> <li>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</li> <li>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</li> </ul>	Assessed at A\$1,550 / 0z.
Market assessment	<ul> <li>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</li> <li>A customer and competitor analysis along with the identification of likely market windows for the product.</li> <li>Price and volume forecasts and the basis for these forecasts.</li> <li>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</li> </ul>	Assessed at A\$1,550 / Oz
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, discount rate, etc.</li> <li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li> </ul>	A straight undiscounted Cash Flow Model has been used to analyse the Fortnum Gold Mine. The 3 years term does not warrant extensive Discount / Inflationary modelling.

Criteria	JORC Code explanation	Commentary
Social	The status of agreements with key stakeholders and matters leading to social licence to operate.	<ul> <li>No negative social impacts noted.</li> <li>Local stakeholders have been consulted regarding MLX plan for the Fortnum Gold Mine.</li> <li>MLX continues to work with local governments, business owners and residence around the Fortnum Gold Mine.</li> </ul>
Other	<ul> <li>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</li> <li>Any identified material naturally occurring risks.</li> <li>The status of material legal agreements and marketing arrangements.</li> <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 which extraction of the reserve is contingent.</li> </ul>	<ul> <li>A Mining Proposal for the various 2016 Open Pit Reserves has been approved.</li> <li>A Project Management Plan for the re-start of the operations (processing, dewatering and mining) has been approved.</li> <li>Native Title Agreements are established in all Reserve areas.</li> </ul>
Classification	<ul> <li>The basis for the classification of the Ore Reserves into varying confidence categories.</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> <li>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</li> </ul>	<ul> <li>Only a small vertical flitch within Tom's Resources has been classified as Measured (with final grade control density drilling completed in 2007) with all other Resources having an Indicated designation.</li> <li>All Open Pit Reserves therefore have been classified as Probable.</li> <li>The LG stocks have been classified as Probable to account for material type variations as well as any possible survey and density discrepancies.</li> </ul>
Audits or reviews	The results of any audits or reviews of Ore Reserve estimates.	Various technical mining and financial analysis reports have been undertaken on the operations since May 2007 as part of re-start programs.      These external independent reports and cost models have been used as a reference for the 2016 Reserve calculation / mining modification factors in order to validate MLX assumptions and or parameters.
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> <li>The statement should specify whether it relates to global or local estimates, and, if local,</li> </ul>	Various sensitivity analyses have been undertaken on the 2016 Reserve models in order to understand and subsequently control risk.
	<ul> <li>state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <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> <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>	