# METALS X LIMITED

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.

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# **OUARTERLY REPORT** FOR THE PERIOD ENDING 30 SEPTEMBER 2015 OVERVIEW

- It was a milestone quarter with several new acquisitions adding life and capacity to the gold division. The Mt Henry and Georges Reward acquisitions were completed, and subsequent to the end of the quarter, the Fortnum (Grosvenor) acquisition was completed.
- The operating performance of the gold division during the quarter was slightly below expectations as timing delays and an anticipated lower grade zone at the Trident underground mine coincided to impact gold output and costs. Subsequent to the end of the quarter, the processing plant at the Central Murchison Gold Project (CMGP) was successfully commissioned and gold production has commenced.
- The tin division had a solid quarter with excellent cost and output control. Despite low tin prices, the mine remained profitable and generated modest earnings.
- Subsequent to the end of the quarter Metals X moved a step closer in its strategy to expand its diversified resource and production base with an off-market takeover offer for all the shares in Aditya Birla Minerals Limited.

# HIGHLIGHTS OF THE QUARTER

- Produced 36,038 ounces of gold at cash cost of \$1,298 per ounce and generated \$8.20 million in EBITDA (un-audited).
- Commenced mine production at the CMGP and subsequent to the end of the quarter successfully commissioned the process plant and poured its first gold bar.
- Completed a gold hedge of 245,000 ounces with equal deliveries from September 2015 to September 2018 at a price of A\$1631.23 per ounce.
- Completed acquisition of Mt Henry and Georges Reward gold projects.

#### TIN DIVISION

• Produced 1,645 tonnes of tin metal at a cash cost of sales of A\$17,454 per tonne of tin metal and generated \$3.15 million in EBITDA (un-audited).

#### NICKEL DIVISION

• Submitted the Public Environmental Review document and public consultation processes commenced. Advanced discussions with Korean parties on application of new technology.

#### **EXPLORATION**

• More bonanza Copper-Gold results from Rover 1 with hole WGR1D060 returning 5.46 m at 15.8 g/t Au, 4.03% Cu, 0.96% Bi, 0.06% Co from 937 m.

#### CORPORATE

- Annual Dividends of \$12.27 million paid (including \$2.48 million re-invested in DRP).
- Cash, working capital and share investments as at 30 September 2015 were \$92.6 million.

#### **ENQUIRIES**

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# GOLD DIVISION

# Overall production from the gold division for the September 2015 quarter was 36,038 ounces (guidance 37,500 ounces). As was foreshadowed in the June quarter, the Trident underground mine was entering an overall lower grade zone and the HBJ mine was transitioning to the stoping phase. Timing delays and consequently lower production impacted overall productivity and costs. Total cash costs of sales for the quarter was higher at A\$1,290 per ounce (guidance \$1,100/oz) and cash flow generated was temporarily lower at \$8.20 million.

Significant progress was made at the CMGP where open pit mining started in June 2015. The development of the Paddy's Flat underground commenced in late August with first ore production expected in the next quarter. Refurbishment and repairs to the process plant were completed and commissioning of the plant commenced on 9 October 2015.

The Mt Henry Project acquisition was completed adding a significant resource base to the Higginsville Gold Operations (HGO).

The Fortnum (Grosvenor) project acquisition was completed on 19 October 2015 subsequent to the end of the quarter. Metals X will refer to this project as Fortnum. Development studies and requirements to start the project are underway. Prior to sale, RNI NL had completed a feasibility study and had announced a Total Mineral Resource estimate of 34.3 million tonnes at 1.79 g/t Au containing 1.97 million ounces of gold.

Deep diamond drilling program at Rover 1 was completed.

Production guidance for the ensuing quarter for the gold division is 43,000 ounces at a cash cost of sales of \$1,200 per ounce.

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

Productivity and operational performance was hampered by the coincidence of known lower grade zones. The Trident underground mine had a number of issues with stope drilling and paste fill which delayed/deferred some production sources impacting the overall productivity. Whilst this shortfall was topped up with open pit ore stocks, the lower grade impacted the overall gold output and the costs.

The process plant operated on a full time basis for the entire quarter and some excess ore was also trucked to the South Kalgoorlie Operations for processing during the quarter. Key physical outputs for the quarter are summarised below:

		September 15 Quarter	Previous Quarter	Rolling 12 Months
Mine Production	Source			
Trident -Ore Tonnes (t)	Trident U/g	120,524	164,895	574,003
Trident Grade (g/t Au)		4.22	5.07	5.16
Cowan Pits - Tonnes (t)	Cowan Pits	62,332	187,707	541,035
Cowan Grade (g/t Au)		1.72	1.98	1.95
Total Mine Production	Tonnes	182,856	352,602	1,115,038
	Grade	3.37	3.43	3.60
Plant Production				
Ore Processed	Tonnes	338,631	319,824	1,151,064
Head Grade	g/t gold	2.63	3.55	3.52
Recovery	%	88.2	91.8	90.8
Gold Produced	Ounces	25,288	33,575	118,851

# QUARTERLY REPORT 2

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

	September 15 Quarter	Previous Quarter	Rolling 12 Months
Imputed Revenue (\$M)	38.43	51.51	179.1
Gold Price Received (\$/oz)	1,518	1,532	1,506
Cash Operating Cost (\$/oz)	1,133	806	883
Total Cash Cost of Sales (\$/oz)	1,245	922	983
Cash Operating Surplus (EBITDA) \$M	7.19	20.56	62.65
Depreciation & Amortisation (\$/oz)	284	245	254
Total Cost of Sales (\$/oz)	1,529	1,167	1,237

Capital re-investment in HGO has continued with quarterly re-investment as follows:

	September 15 Quarter	Previous Quarter	Rolling 12 Months
Capital Mine Development (\$M)	4.81	4.92	18.45
Exploration (\$M)	1.63	0.75	4.02
Property Plant & Equipment (\$M)	0.13	0.30	0.68

#### ACQUISITION OF THE MT HENRY PROJECT (MHP)

The transaction to acquire the MHP was completed at the end of the quarter. MHP is located approximately 70 km south of HGO and has a combined total mineral resource estimate of 43.18 million tonnes at 1.19 g/t Au containing 1.654 million ounces (refer overleaf for details).

The MHP consists of three main deposits, namely Mt Henry, Selene and North Scotia, all of which are simple open pit mining propositions. Metals X has commenced studies to integrate this project into HGO. The open pits sources are being re-worked at higher cut-off grades and by ore oxidation state. An initial phase of mining of the oxide and transition ores is being planned and metallurgical studies on processing the sulphide ores co-incident with a plant capacity increase is underway.

The acquisition cost for the MHP was 22 million new fully paid ordinary shares in Metals X Limited.

The table overleaf summarises the Mineral Resource and Ore Reserve inventory as at 30 June 2015 as publicly disclosed in the Matsa Resources Limited 2015 Annual Report.\*

\* The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources and Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

MHP - Mineral Resource Estimate (as at 30 June 2015)				
Deposit	Category	Tonnes	Grade (g/t Au)	Gold (oz)
Selene	Indicated	16,416,000	1.17	617,550
	Inferred	4,951,000	0.93	148,050
	Sub-total	21,367,000	1.11	765,600
Mt Henry	Indicated	14,981,000	1.27	611,750
	Inferred	6,336,000	1.141.23	232,250
	Sub-total	21,317,000	3.11	844,000
North Scotia	Indicated	357,000	1.95	35,780
	Inferred	138,000	2.79	8,650
	Sub-total	496,000	1.19	44,430
Total	All	43,180,000	1.19	1,654,080

MHP - Ore Reserve Estimate (as at 30 June 2015)					
Deposit	Category	Tonnes	Grade (g/t Au)	Gold (oz)	
Selene	Probable	11,545,000	1.37	508,500	
	Sub-total	11,545,000	1.37	508,500	
Mt Henry	Indicated	8,496,000	1.45	395,500	
	Sub-total	8,496,000	1.45	395,500	
North Scotia	Indicated	179,000	3.30	18,900	
	Sub-total	179,000	3.30	18,900	
Total	All	20,220,000	1.42	922,900	

#### **HGO EXPLORATION & DEVELOPMENT**

Underground resource development work at HGO has continued to focus on providing adequate orebody definition in advance of mining at the high-grade Trident underground mine.

Diamond drilling aimed at expanding the down-plunge continuity of the high-grade Artemis and Helios lodes at the Trident underground mine was completed with results such as 4.3 m at 71.46 g/t from 155 m in TUG2611 (Artemis), 13.6 m at 7.01 g/t from 144 m in TUG2621 (Helios) and 2.3 m at 7.74 g/t from 228 m in TUG2592 at Pluto returned.

Exploration work on conceptual targets by way of land-based aircore programs and specialist salt-lake based air core drilling was successfully completed. Highly encouraging first pass results were received from aircore drilling at the Igloo target on Lake Cowan, such as 20 m at 571 ppb Au from 20 m in LKCA795, 56 m at 503 ppb Au from 12 m in LKCA800, 26 m at 1,478 ppb Au from 8 m in LKCA812 and 20 m at 919 ppb Au from 2 m in LKCA813.

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

Operations at SKO continued with the processing of ore sourced from the Erebus north and south open pits near the process plant which were blended with existing low-grade ore stocks and some HBJ underground ore.

The development of HBJ underground advanced significantly with new decline development and the refurbishment of the historic mining area in the central ore zone (COZ) and southern ore zone (SOZ). The second level of development on the SOZ was completed. Development into the COZ commenced and the first stoping ore was fired toward the end of the quarter.

Mining also commenced at the Stage 1 - Cannon Open Pit Mine (Bulong) where Metals X has a mine contracting and profit share arrangement with Southern Gold Limited. To date some 34,929 tonnes at an estimated grade of 2.97 g/t sits on the ROM pad ready for trucking and processing. The Cannon stage 1 pit will be expanded in a co-operation agreement that allows for mining ores sterilised by the Cannon Pit northern lease boundary. This will enable an expansion of the existing agreement and allow access for Metals X to mine and process its wholly owned Georges Reward deposit. Together with the HBJ underground ore, these two have the process plant full until the end of CY 2016. Processing of Cannon ore will commence in early November.

		September 15 Quarter	Previous Quarter	Rolling 12 Months
Mine Production	Source			
Underground Mines (t)	HBJ	72,472	10,687	83,159
Ore Grade (g/t Au)	-	2.05	1.77	2.01
Open Pits (t)	Erebus	146,370	171,338	372,213
Ore Grade (g/t Au)	Group	1.38	1.54	1.42
	Cannon	34,929	0	34,929
	Stage 1	2.97	0.00	2.97
Total Mine Production	Tonnes	253,771	182,025	490,301
	Grade	1.79	1.55	1.63
Plant Production				
Ore Processed	Tonnes	270,171	188,001	856,846
Head Grade	g/t gold	1.37	1.42	1.07
Recovery	%	90.5	86.6	86.4
Gold Produced	Ounces	10,750	7,483	25,758

Key physical outputs for the quarter are summarised below:

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

	September 15 Quarter	Previous Quarter	Rolling 12 Months
Imputed Revenue (A\$ million)	16.33	11.71	39.24
Avg. Gold Price Received (A\$/oz)	1,492	1,557	1506
Cash Operating Cost (A\$/oz)	1,398	1,181	1315
Cash Cost of Sales(after tolling credits) (A\$/oz)	1,425	1,217	1348
Cash Operating Surplus(after tolling credits) (EBITDA \$M)	1.01	2.91	4.81
Depreciation & Amortisation (A\$/oz)	190	96	223
Total Cost of Sales (A\$/oz)	1,615	1,313	1571

Total capital reinvestment into SKO for the quarter is summarised:

	September 15 Quarter	Previous Quarter	Rolling 12 Months
Capital Mine Development (\$M)	3.93	6.57	17.5
Exploration (\$M)	5.46*	1.42	8.2
Property Plant & Equipment (\$M)	0.98	1.33	3.9

\* Includes \$4.8 million cash acquisition cost of Georges Reward.

#### SKO EXPLORATION AND DEVELOPMENT

At SKO strong results continue to be returned from extensional and definition drilling at the HBJ underground project. Better results were results 42.35 m at 1.42 g/t Au from 16.5 m and 13.37 m at 4.06 g/t Au from 113.6 m in HBJUG0074 as well as 51.46 m at 2.98 g/t from 92.0 m in HBJUG0080 have reaffirmed the significant potential of this very large gold system.

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

The CMGP entered its pre-production phase during the quarter with all staff and contractors arriving at site in readiness for plant commissioning in early October 2015.

Open pit mining with an owner-operator fleet commenced in June 2015 at the Whangamata and Batavia open pits with the camp and catering contractor firing up the village at the same time.

Underground mining using mine contractors ACM commenced at Paddy's Flat in August and by the end of the quarter the portal was established, all site services and infrastructure was in place and the decline had begun to advance. The first ore drives were intercepted in the third week of October 2015.

The refurbishment and re-fit of the process plant was nearing completion at the end of the quarter and subsequently dry commissioning started on 9 October and wet commissioning commenced on 17 October with the first gold bars poured on 26 October.

		September 15 Quarter	Previous Quarter	Rolling 12 Months
Mine Production	Source			
Underground Mines (t)	Paddy's Flat	-	-	-
Ore Grade (g/t Au)		-	-	-
Open Pits (t)	Yaloginda	145,208	-	145,208
Ore Grade (g/t Au)	Group	1.48	-	1.48
Total Mine Production	Tonnes	145,208	0.0	145,208
	Grade	1.48	0.0	1.48

Key physical outputs for the quarter are summarised below:

Note: In addition to the mine production approximately 120,000 tonnes of low grade ore stocks were available, some of which will be used in plant commissioning.

The Consolidated Mineral Resource estimate for the CMGP was announced to the ASX on 25 August 2015 and totalled 127 million tonnes at 2.07 g/t Au containing 8.4 million ounces of gold in 72 separate gold deposits. The Mining Reserves estimate for the CMGP is 20.5 million tonnes at 2.58 g/t Au containing 1.7 million ounces.

The mining schedule has been re-jigged such that the Reedy open pits will commence next and prior to commencement of a second underground mine. This will start with the three pits of Callisto, Rand and Jack Ryan next to be mined. It is expected that an open pit contractor will be engaged for these works. It is expected that the Triton and South Emu mines will soon be added to this schedule. Plans to recommence mining at the Bluebird and the Surpise Pits near the plant at Yaloginda will also be added and operated by our owner-miner open pit crews.

The overall long term development strategy for the CMGP is unchanged with a long term objective to have the historic underground mines which dominated that region again being the main source of production.

The planned underground developments over the initial five years of the development plan include the key mines listed overleaf. Paddy's Flat will be the first of these to start with a commencement date of late August expected.

#### 1. The Paddy's Flat (Fenian's, Consol's and Prohibition) line of lode.

Historic Production from the underground mines totals 1.54 million tonnes at a recovered grade of 16.8 g/t Au producing 832,000 ounces to an average depth of only 300 m. Production was dominated by the Fenian-Consols Mine which itself produced 1.29 million tonnes at a recovered grade of 16.5 g/t Au producing 684,000 ounces to a depth of 400 m and over a strike length of only 300 m of the Paddy's Flat line-of-lode.

The Total Mineral Resource estimate for the area under consideration for underground mining is 7.9 million tonnes at 3.5 g/t Au containing 886,000 ounces of gold.\*

#### 2. The Great Fingall & Golden Crown Reef System.

Historic Production from the high-grade quartz lodes of the Great Fingall & Golden Crown mines collectively totals 1.49 million ounces at an average recovered grade of 18.4 g/t gold. The lodes were developed to 850 m vertical depth and the Total Mineral Resource remaining in drilled lode extensions and remnant areas is 3.4 million tonnes @ 6.1 g/t containing 663,000 ounces of gold.\*

#### 3. The Big Bell Underground Mine

Historic Production from the Big Bell mining centre totals 2.7 million ounces. The Big Bell ore system is a wide (up to 40 m), sub-vertical shear zone where extensive open pit and bulk-extraction style underground mining has exploited the orebody to a maximum depth of 585 m.

The Total Mineral Resource inventory at Big Bell underground mine is 28.7 million tonnes at 2.8 g/t Au containing 2.57 million ounces (estimated for a bulk-mining scenario at a cut-off grade of 1.5 g/t Au).

For comparison the Total Mineral Resource estimate for a selective mining approach at a cut-off grade of 2.5 g/t Au is 5.16 million tonnes at 4.5 g/t Au containing 0.75 million ounces.\*

#### 4. The Emu & Rand Mines at Reedy's.

Historic production from the underground mines totalled 730,000 tonnes at a recovered grade of 9.9 g/t Au producing 230,000 ounces of gold. This was dominated by the Triton mine which produced 228,000 ounces of gold. In the past three decades, open pit production has produced a further 200,000 ounces of gold at an average grade of 3.8 g/t.

The Total Mineral Resource estimate for the area under consideration for underground mining is 3.3 .million tonnes at 3.0 g/t Au containing 320,000 ounces of gold.\*

Since acquisition for \$9.83 million in June 2014, expenditure so far on the CMGP has totalled \$38 million to the end of September 2015 compared so far against our estimate of maximum cash out to achieve sustainable and self-funding gold production in its development strategy was \$42.5 million. The project is expected at this stage to be close to that outcome.

\* Refer to Annual Update of Mineral Resource and Reserve Estimates announced to the ASX on 25 August 2015 for details.

#### **CMGP EXPLORATION**

At the Central Murchison Gold Project (CMGP) definition and extension work on the next series of underground and open pit projects has produced strong encouragement regarding future mining options. Highlights such as 4 m at 15.58 g/t Au from 25 m in 15PFRC003 adjacent to old workings at Consols, circa 100 m south the current mine plan at Paddy's Flat (currently operational), 13.53 m at 13.31 g/t Au from 279 m in 15CDRD002A at Caledonian (Nannine)and 5 m at 15.17 g/t Au from 8 m in 15TTRC006 at Turn of the Tide (Reedy) all point towards long term production from multiple sources which are beyond the inventory considered in the CMGP Feasibility Study.

# FORTNUM GOLD PROJECT (MLX 100%)

Following the announcement of the agreement to acquire the Grosvenor Project (re-badged back to its original name, Fortnum) from RNI NL on 31 July 2015, the sales was completed subsequent to the end of the quarter on 19 October 2015.

Metals X has now taken ownership and control of the Fortnum Gold Project and has commenced work on its redevelopment strategy. As previously advised, Fortnum is made up of three historic mining centres of Fortnum, Horseshoe and Peak Hill. The assets include a 1.0mtpa CIL Plant, 100 person camp, airstrip and borefield as well as an overall resource inventory of 2 million ounces (refer to past public disclosures by RNI).

The acquisition cost for the project was the allotment of 18 million new fully paid ordinary shares in Metals X.

The table below summarises the Mineral Resource Estimate as at 30 June 2014 as publicly disclosed in the RNI NL 2014 Annual Report.\*

Fortnum Gold Project - Mineral Resource Estimate (as at 30 June 2014)				
Project Area	Category	Tonnes	Grade (g/t Au)	Gold (oz)
Fortnum	Measured	42,000	1.64	2,000
	Indicated	12,668,000	1.90	772,000
	Inferred	7,319,000	1.96	462,000
	Sub-Total	20,029,000	1.92	1,236,000
Horseshoe	Measured	2,012,000	1.96	127,000
	Indicated	315,000	2.11	21,000
	Inferred	419,000	1.86	25,000
	Sub-Total	2,746,000	1.96	173,000
Peak Hill	Indicated	9,270,000	1.46	436,000
	Inferred	2,255,000	1.72	125,000
	Sub-Total	11,525,000	1.51	561,000
Total	Total	34,300,000	1.79	1,969,000

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

Drilling at the high-grade Rover 1 was completed during the quarter with yet another hole returning a spectacular intersection in this virgin deposit. The latest intercept is below the area of previous development studies with hole WGR1D060 returning 5.46 m at 15.8 g/t Au, 4.03% Cu, 0.96% Bi, 0.06% Co from 937 m. Whilst another hole was also drilled into the newly discovered Curiosity Prospect, no results had been returned at the end of the quarter.

\* The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources and Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

# TIN DIVISION RENISON PROJECT (MLX 50%)

As advised in the June Quarterly Report additional equipment was installed within the Renison tin concentrator plant at the end of June that had an immediate and positive impact on throughput and recovery. The concentrator is now operating in excess of its name plate capacity at approximately 700,000 tonnes per annum. Mined and processed tonnes were significantly higher (11% and 14% respectively) and the processing plant continues to report historically low tails and hence high recoveries.

The higher mine and plant productivity could have been better if not for a minor disruption caused by a seismic event announced in early August 2015. This limited access to the South Renison working area and resulted in the process plant being shut-down for approximately 5 days as the mine rescheduled to alternative working areas.

Quarterly tin production was 3.5% lower than the previous quarter. The financial metrics remained in line with previous quarters with cash costs of sales of \$17,454/t of tin and total costs of sales of \$19,876/t of tin compared to an average selling price of \$20,933/t of tin metal.

World tin prices rebounded from their recent lows by approximately 4.5%, however the overall price was 10% lower than was being obtained in the March quarter. Despite these lower tin prices and minor disruptions to production during the quarter, the operations still continues to remain profitable and generated a modest EBITDA.

Physical outputs for the quarter and previous quarter and rolling 12 month comparisons are summarised below:

Renison Mine (100%)	September 15 Quarter	Previous Quarter	Rolling 12 Months
Mine Production			
Ore Tonnes (t)	164,635	147,890	636,238
ROM Grade % Sn	1.37	1.59	1.51
Tin Concentrator			
Tonnes Processed (t)	171,968	150,898	645,573
Head Grade (% Sn)	1.34	1.58	1.51
Tail Grade (% Sn)	0.39	0.46	0.45
Tin Metal Produced (t)	1,645	1,704	6,887

As advised in the previous quarterly stope production from the Central Federal Bassett area commenced establishing another key production area and creating additional flexibility and contingency to future production schedules.

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

Fiscal Outcomes (MLX Share)	September 15 Quarter	Previous Quarter	Rolling 12 Months
Imputed Revenue (\$M)	17.2	17.1	75.4
Tin Price Received (\$/t Sn)	20,933	20,026	21,861
Cash Operating Cost (\$/t Sn)	14,280	14,017	14,183
Total Cash Cost of Sales (\$/t Sn)	17,454	17,167	17,506
Cash Operating Surplus (EBITDA) \$M	3.15	2.98	16.15
Depreciation & Amortisation (\$/t Sn)	2,422	2,026	2,047
Total Cost of Sales (\$/t Sn)	19,876	19,067	19,553



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

Capital Re-investments (MLX Share)	September 15 Quarter	Previous Quarter	Rolling 12 Months
Capital Mine Development (\$M)	1.39	2.16	7.19
Exploration (\$M)	0.47	0.15	0.71
Property Plant & Equipment (\$M)	0.15	0.31	1.57

#### **RENISON EXPLORATION AND DEVELOPMENT**

Renison has again produced a series of spectacular extensional and definition drilling results which befits this worldclass orebody. 6.6 m at 7.68% Sn and 0.39% Cu from 152.4 m in U5477 (Area 4), 11.5 m at 2.29% Sn and 0.75% Cu from 2.9 m in U5532 (CFB) and 5.8 m at 15.46% Sn and 0.26% Cu from 11.8 m in U5508 (Lower Federal) are amongst the standout results this quarter.

# NICKEL DIVISION wingellina project (MLX 100%)

The final Public Environmental Review document was completed and approved by the Environmental Protection Agency for release to the public for an 8 week review period on 14 September 2015. This represents a significant milestone for the development of the massive Wingellina Nickel-Cobalt-Iron project as it is the main documentation required for final approvals.

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

Mapping of the Lewis Calcrete deposit approximately 30 km from the project was completed indicating a significant deposit of calcrete over a 4 km x 4 km area. Previous drilling indicated an average thickness of the deposit of approximately 3.5 m. Calcrete is one of the main reagents to be used in the processing of ore that is used for neutralisation.

#### **COMPETENT PERSONS STATEMENTS**

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

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

# CORPORATE

The Company paid a 26% franked dividend of 2.95 cents per share with a record date of 2 September and paid on 25 September 2015 for a total value of \$12.27 million. Some 2,170,099 shares were issued under the Dividend Reinvestment Plan at a 5% discount to the 5 day VWAP prior to reinvestment at \$1.14095 per share.

An additional \$4.8 million in cash was outlaid on the Georges Reward Project purchase.

Metals X ended the September quarter with unaudited cash, working capital and investments of \$92.6M. The Group has no corporate debt.

## **INVESTMENTS**

Metals X holds the following investments in other listed entities:

Brainchip Holdings Limited	8.17% share holding
Mongolian Resource Corporation Limited (suspended)	14.76% share holding

# **CAPITAL STRUCTURE**

The Company has the following equities on issue as of 30 September 2015:

Fully Paid Ordinary Shares	440,181,039
Performance Rights	1,637,020
Fully Diluted Equity	441,818,059

Note: The above numbers include the allotment of the 22 million fully paid ordinary shares for the acquisition of the Mt Henry Project but do not include the 18 million fully paid ordinary shares are planned to be allotted in mid-October as settlement for the RNI-Fortnum/Grosvenor transaction.

# **MAJOR SHAREHOLDERS**

The major shareholders of the Company as of 30 September 2015 are:

APAC Resources (HKEX:1104)	22.70%
Jinchuan Group	10.0 %
BlackRock Group	8.0%

End

# **APPENDIX 1 – SOUTH KALGOORLIE OPERATIONS**

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

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
НВЈ	HBJUG0047	6,565,890	366,794	201	14.52m at 1.70g/t	195.4	-40	43
	HBJUG0048A	6,565,890	366,794	201	10.83m at 0.59g/t	200.4	-50	45
					3.2m at 1.72g/t	224.3		
					8.98m at 4.14g/t	231.5		
	HBJUG0049	6,565,889	366,794	201	4.17m at 1.49g/t	207.3	-45	52
					14.96m at 2.11g/t	213.5		
	HBJUG0050	6,565,889	366,794	201	13.24m at 1.18g/t	204.4	-49	48
					9.9m at 1.56g/t	234.1		
	HBJUG0051	6,565,889	366,794	201	7.96m at 1.73g/t	207.0	-39	60
	HBJUG0052	6,565,889	366,794	201	6.65m at 2.04g/t	214.9	-46	58
					9.14m at 2.43g/t	224.1		
	HBJUG0053	6,565,889	366,794	201	2.94m at 2.18g/t	216.2	-49	65
	HBJUG0053	6,565,889	366,794	201	8.24m at 3.71g/t	222.2	-49	65
	HBJUG0054	6,565,889	366,794	201	3.65m at 3.88g/t	222.0	-51	65
					7.33m at 1.66g/t	239.9		
					4.42m at 5.41g/t	249.0		
	HBJUG0055	6,565,889	366,794	201	6.31m at 3.83g/t	190.8	-43	73
					3.29m at 2.64g/t	199.1		
	HBJUG0056	6,565,888	366,794	201	4.65m at 3.61g/t	208.0	-49	73
					4.52m at 5.99g/t	235.5		
	HBJUG0057	6,566,017	366,727	181	7.75m at 1.12g/t	126.7	-37	78
					8.28m at 3.25g/t	151.4		
					3.3m at 7.03g/t	171.7		
	HBJUG0059	6,566,017	366,727	181	8m at 0.76g/t	165.0	-50	78
	HBJUG0060	6,565,888	366,794	201	16.09m at 1.18g/t	139.2	-24	81
					16.68m at 3.93g/t	157.2		
					12.45m at 3.49g/t	182.0		
					4.17m at 2.72g/t	201.5		
	HBJUG0064	6,565,732	366,890	223	8.95m at 1.51g/t	158.6	-39	47
					10.5m at 2.08g/t	172.8		
	HBJUG0065	6,565,732	366,890	223	5.9m at 2.43g/t	180.8	-44	40
					3.35m at 3.28g/t	192.6		
					4.95m at 1.44g/t	211.5		
					1.1m at 7.55g/t	229.0		

# SOUTH KALGOORLIE OPERATIONS (CONTINUED)

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

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
HBJ (Continued)	HBJUG0069	6,566,016	366,854	148	9.7m at 0.95g/t	13.2	32	114
					5.99m at 1.00g/t	24.7		
	HBJUG0070	6,566,016	366,854	148	4.31m at 1.34g/t	12.7	4	114
					10.99m at 1.02g/t	28.4		
	HBJUG0074	6,566,437	366,545	114	42.35m at 1.42g/t	16.5	-44	109
					8.66m at 1.14g/t	76.0		
					22.97m at 1.17g/t	88.7		
					13.37m at 4.06g/t	113.6		
	HBJUG0080	6,566,437	366,545	114	28.21m at 1.81g/t	24.8	-62	82
					11m at 0.91g/t	55.0		
					51.46m at 2.98g/t	92.0		
	HBJUG0087	6,566,030	366,875	146	14.24m at 2.04g/t	-	-11	243
	HBJUG0087A	6,566,030	366,875	146	15.18m at 1.74g/t	-	-10	243
	HBJUG0088	6,566,030	366,875	146	4.11m at 2.45g/t	-	-11	228
					6.61m at 0.89g/t	12.8		
	HBJUG0090	6,566,029	366,876	146	19.74m at 0.91g/t	-	-9	189
	HBJUG0091	6,566,029	366,876	145	9.8m at 1.31g/t	-	-34	196
	HBJUG0092	6,566,031	366,875	145	7m at 1.07g/t	-	-51	247
					3.36m at 1.60g/t	25.0		
					4m at 5.94g/t	37.2		
	HBJUG0093	6,566,030	366,875	145	3m at 0.60g/t	-	-50	224
	HBJUG0094	6,566,030	366,876	145	3m at 2.09g/t	-	-47	204
					6.5m at 2.53g/t	38.9		

#### SKO - Resource Development - Significant (>5gm metres) Intercepts for September 2015 Quarter

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Noble	N0C013	6,569,309	332,388	355	7m at 1.88g/t	16.0	-56	162
Resolution	REC025	6,564,916	369,903	321	11m at 0.92g/t	22.0	-56	127
	RECO30	6,564,794	369,908	321	10m at 2.70g/t	20.0	-61	82

SKO - Grass Roots Exploration - Significant (>5gm metres) Intercepts for September 2015 Quarter

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Water Reserve	WRA069	6,562,430	368,967	315	3m at 6.25g/t	17.0	-60	244

# **HIGGINSVILLE GOLD OPERATIONS**

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

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Ares	TUG2624A	6,489,987	379,990	674	3.5m at 1.7g/t	71	39	222
	TUG2628	6,489,987	379,990	675	2.7m at 17.06g/t	54	57	241
	TUG2629	6,489,987	379,990	673	5.7m at 4.12g/t	53	33	251
	TUG2630	6,489,987	379,990	672	3.3m at 1.9g/t	62	7	235
	TUG2633	6,489,987	379,990	672	3m at 2.28g/t	61	-2	273
	TUG2634B	6,490,010	379,979	677	1.3m at 6.27g/t	49	70	226
	TUG2635A	6,490,022	379,972	676	3.9m at 3.23g/t	26	52	235
	TUG2636	6,490,021	379,972	674	3.6m at 3.22g/t	27	11	252
	TUG2638	6,490,023	379,971	675	3.8m at 8.22g/t	25	33	290
	TUG2639	6,490,022	379,971	673	3.6m at 2.02g/t	31	-5	280
	TUG2641	6,490,047	379,966	675	3.5m at 2.26g/t	23	13	246
	TUG2642	6,490,049	379,967	675	6.5m at 1.22g/t	23	16	276
	TUG2643	6,490,049	379,967	674	7.8m at 2.54g/t	32	-9	271
	TUG2645	6,490,050	379,968	674	3.4m at 3.63g/t	35	-4	302
Artemis	TUG2596A	6,489,935	379,948	385	3m at 2.09g/t	147	-5	242
	TUG2597	6,489,937	379,947	385	2.4m at 5.5g/t	131	-27	275
	TUG2600	6,489,938	379,948	384	0.6m at 10.5g/t	170	-45	296
	TUG2607	6,489,940	379,948	384	0.4m at 58.7g/t	146	-35	305
	TUG2608	6,489,940	379,948	384	2.2m at 4.53g/t	176	-40	316
	TUG2609	6,489,939	379,948	384	3.8m at 1.45g/t	190	-40	322
	TUG2611	6,489,939	379,948	384	4.3m at 71.46g/t	155	-33	315
	TUG2613A	6,489,939	379,948	384	1.5m at 4.65g/t	184	-35	326
	TUG2615	6,489,940	379,948	384	2.1m at 51.75g/t	150	-30	319
	TUG2616	6,489,940	379,948	384	1.3m at 8.11g/t	140	-27	310
	TUG2617	6,489,938	379,947	385	1.9m at 35.35g/t	125	-21	306
	TUG2650	6,489,935	379,948	386	2.9m at 3.89g/t	148	0	242
	TUG2651	6,489,935	379,948	385	3m at 2g/t	150	-12	242
Helios Core	TUG2573	6,490,081	379,958	407	7m at 8.35g/t	164	-24	329
	TUG2614	6,489,939	379,948	384	4.2m at 5.7g/t	157	-32	321
	TUG2620	6,489,940	379,948	384	3.5m at 6.45g/t	146	-23	324
	TUG2621	6,489,941	379,947	384	13.6m at 7.01g/t	144	-20	327
	TUG2622	6,489,940	379,947	384	4.7m at 2.9g/t	135	-17	322

# HIGGINSVILLE GOLD OPERATIONS (CONTINUED)

HGO - Grass Roots Exploration Significant Results - September 2015 Quarter (Continued)

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Helios Shear	TUG2620	6,489,940	379,948	384	33.2m at 1.253g/t	141	-23	324
	TUG2621	6,489,941	379,947	384	20.2m at 2.543g/t	137	-20	327
	TUG2622	6,489,940	379,947	384	27.5m at 3.36g/t	130	-17	322
Pluto	TUG2592	6,490,112	379,996	408	3.7m at 3.32g/t	213	-47	302
					2.3m at 7.74g/t	228		
	TUG2594	6,490,112	379,997	408	9.2m at 1.04g/t	256	-51	314
Pluto East	TUG2594	6,490,112	379,997	408	1.8m at 3.05g/t	266	-51	314
	TUG2595	6,490,112	379,997	408	1.8m at 6.16g/t	256	-54	314

HGO - Grass Roots Exploration Significant Results - September 2015 Quarter

Exploration Prospect	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Higginsville North	HIGA7335	378,820	6,499,220	300	8m at 21ppb Au	13	-90	0
	HIGA7336	378,365	6,499,215	300	5m at 23.5ppb Au	9	-60	270
	HIGA7337	378,260	6,499,800	300	4m at 26ppb Au	16	-60	270
	HIGA7338	378,420	6,499,800	300	4m at 30ppb Au	13	-60	270
					16m at 29ppb Au	26		
					4m at 25ppb Au	58		
	HIGA7339	378,580	6,499,800	300	4m at 36ppb Au	19	-60	270
Jazz	SISA2214	407,162	6,481,594	300	4m at 169ppb Au	27	-90	0
	SISA2217	407,040	6,480,836	300	4m at 29ppb Au	17	-90	0
	SISA2235	406,650	6,478,765	300	4m at 43ppb Au	12	-90	0
	SISA2238	406,576	6,478,156	300	4m at 30ppb Au	9	-90	0
	SISA2242	406,290	6,477,815	300	8m at 44ppb Au	42	-90	0
	SISA2243	406,230	6,477,815	300	4m at 71ppb Au	44	-90	0
	SISA2244	405,800	6,478,820	300	4m at 34ppb Au	8	-90	0
Igloo	LKCA784	399,790	6,490,160	300	4m at 37ppb Au	40	-90	0
	LKCA786	399,900	6,489,960	300	2m at 83ppb Au	24	-90	0
	LKCA788	400,000	6,489,960	300	4m at 25ppb Au	28	-90	0
	LKCA790	400,650	6,490,950		6m at 39ppb Au	64	-90	0
	LKCA792	400,686	6,490,860	300	19m at 58ppb Au	32	-90	0
	LKCA794	400,650	6,490,750	300	4m at 29ppb Au	32	-90	0
	LKCA795	400,700	6,490,750	300	20m at 571ppb Au	20	-90	0
	LKCA796	400,750	6,490,750	300	4m at 554ppb Au	32	-90	0
					8m at 25ppb Au	48	-90	0

APPENDIX 1 – TABLES OF RESULTS FOR THE QUARTER **16** 

# **HIGGINSVILLE GOLD OPERATIONS** (CONTINUED) HGO - Grass Roots Exploration Significant Results - September 2015 Quarter (Continued)

Exploration Prospect	Hole	Collar N	Collar E	Collar RL	Intercept	From (m)	Dip	Azi
					(True Width)		P	
Igloo (Continued)	LKCA797	400,750	6,490,650	300	20m at 166ppb Au	28	-90	0
					2m at 253ppb Au	64	-90	0
	LKCA798	400,650	6,490,650	300	8m at 37ppb Au	16	-90	0
	LKCA799	400,650	6,490,550	300	12m at 74ppb Au	8	-90	0
	LKCA800	400,700	6,490,550	300	56m at 503ppb Au	12	-90	0
	LKCA801	400,750	6,490,550	300	24m at 212ppb Au	24	-90	0
					4m at 52ppb Au	56	-90	0
	LKCA802	400,800	6,490,550	300	4m at 63ppb Au	48	-90	0
	LKCA803	400,740	6,490,460	300	8m at 127ppb Au	56	-90	0
	LKCA804	400,640	6,490,460	300	17m at 532ppb Au	52	-90	0
	LKCA808	400,750	6,490,350	300	4m at 40ppb Au	44	-90	0
	LKCA809	400,800	6,490,350	300	8m at 27ppb Au	40	-90	0
	LKCA810	400,700	6,490,245	300	16m at 25ppb Au	36	-90	0
	LKCA811	400,650	6,490,245	300	15m at 274ppb Au	24	-90	0
	LKCA812	400,687	6,490,160	300	26m at 1478ppb Au	8	-90	0
	LKCA813	400,700	6,490,060	300	20m at 919ppb Au	2	-90	0
	LKCA815	400,600	6,490,060	300	4m at 747ppb Au	10	-90	0
	LKCA817	400,587	6,489,357	300	20m at 212ppb Au	34	-90	0
	LKCA818	400,625	6,489,260	300	8m at 88ppb Au	16	-90	0
	LKCA819	400,575	6,489,260	300	8m at 52ppb Au	16	-90	0
	LKCA822	400,525	6,489,160	300	16m at 50ppb Au	26	-90	0
					5m at 444ppb Au	54	-90	0
	LKCA823	400,575	6,489,160	300	40m at 68ppb Au	19	-90	0
					24m at 48ppb Au	19	-90	0
	LKCA825	400,680	6,489,160	300	40m at 556ppb Au	6	-90	0
	LKCA825A	400,675	6,489,160	300	17m at 345ppb Au	3	-90	0
	LKCA826	400,725	6,489,060	300	24m at 77ppb Au	2	-90	0
	LKCA827	400,675	6,489,060	300	16m at 231ppb Au	8	-90	0
	LKCA828	400,625	6,489,060	300	28m at 102ppb Au	19	-90	0
	LKCA830	400,687	6,488,957	300	8m at 91ppb Au	12	-90	0
					24m at 101ppb Au	44	-90	0
	LKCA831	400,787	6,488,957	300	8m at 21ppb Au	10	-90	0
		;	.,,		4m at 248ppb Au	30	-90	0

# HIGGINSVILLE GOLD OPERATIONS (CONTINUED)

HGO - Grass Roots Exploration Significant Results - September 2015 Quarter (Continued)

Exploration Prospect	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Igloo (Continued)	LKCA833	400,775	6,488,860	300	4m at 171ppb Au	65	-90	0
	LKCA834	400,725	6,488,860	300	16m at 39ppb Au	70	-90	0

# **CENTRAL MURCHISON GOLD PROJECT**

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

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Aladdin	15ADRC001	7,027,409	633,824	464	3m at 2.31g/t	90	-60	181
	15ADRC001	7,027,409	633,824	464	6m at 1.92g/t	94	-60	181
	15ADRCOO1	7,027,409	633,824	464	3m at 3.59g/t	121	-60	181
	15ADRCOO1	7,027,409	633,824	464	5m at 1.29g/t	152	-60	181
	15ADRCOO1	7,027,409	633,824	464	5m at 1.08g/t	161	-60	181
	15ADRC002	7,027,403	633,845	464	2m at 1.74g/t	81	-60	180
	15ADRC002	7,027,403	633,845	464	7m at 2.55g/t	109	-60	180
	15ADRC002	7,027,403	633,845	464	4m at 10.01g/t	119	-60	180
	15ADRC003	7,027,446	633,819	469	2m at 3.4g/t	109	-60	180
	15ADRC003	7,027,446	633,819	469	4m at 2.44g/t	112	-60	180
	15ADRC003	7,027,446	633,819	469	6m at 3.2g/t	135	-60	180
	15ADRC003	7,027,446	633,819	469	6m at 1.52g/t	149	-60	180
	15ADRC003	7,027,446	633,819	469	7m at 2.39g/t	167	-60	180
Caledonian	15CDRD002A	7,025,673	633,313	453	13.53m at 13.31g/t	279	-66	90
	15CDRD003	7,025,549	633,300	453	4m at 3.29g/t	52	-60	90
	15CDRD004	7,025,745	633,371	454	4.38m at 1.67g/t	229	-59	90
	15CDRD004	7,025,745	633,371	454	4.11m at 1.65g/t	234	-59	90
Consols	15PFRC002	7,055,900	649,812	474	2m at 3.46g/t	12	-68	51
	15PFRC003	7,055,913	649,834	474	4m at 15.58g/t	25	-78	43
Rand	15RARCOO1	6,998,781	625,862	492	8m at 1.64g/t	-	-62	276
	15RARCOO1	6,998,781	625,862	492	11m at 2.33g/t	257	-62	276
	15RARCOO2	6,998,879	625,852	492	13m at 1.86g/t	152	-62	276
	15RARC003	6,998,941	625,867	492	4m at 2.24g/t	142	-60	276
	15RARC004	6,999,371	626,035	486	9m at 1.85g/t	213	-48	275
	15RARCOO4	6,999,371	626,035	486	5m at 3.37g/t	223	-48	275

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

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Turn of the Tide	15TTRC004	7,003,379	633,692	472	4m at 4.35g/t	12	-60	290
	15TTRC006	7,003,343	633,671	472	5m at 15.17g/t	8	-70	290
	15TTRC006	7,003,343	633,671	472	4m at 2.42g/t	24	-70	290
	15TTRC007	7,003,407	633,728	472	7m at 1.41g/t	19	-60	290
	15TTRC010	7,003,370	633,715	472	5m at 1.36g/t	22	-60	290
	15TTRC011	7,002,572	633,514	477	3m at 1.74g/t	27	-60	290
	15TTRC013	7,002,592	633,444	475	5m at 1.73g/t	15	-60	290
	15TTRC015	7,002,522	633,432	476	1m at 8.9g/t	84	-60	290
	15TTRC018	7,002,491	633,390	475	3m at 1.76g/t	21	-60	290
	15TTRC019	7,002,441	633,407	476	5m at 4.96g/t	28	-60	290
	15TTRC025	7,002,243	633,365	478	1m at 13.34g/t	32	-60	290
	15TTRC028	7,002,204	633,357	479	7m at 1.86g/t	32	-60	290
	15TTRC031	7,002,162	633,352	479	7m at 5.11g/t	45	-60	290
	15TTRC037	7,002,069	633,257	479	2m at 3.61g/t	14	-60	290
	15TTRC040	7,001,548	633,109	488	3m at 1.9g/t	40	-60	289
	15TTRC040	7,001,548	633,109	488	4m at 4.68g/t	162	-60	289
	15TTRC041	7,001,625	633,128	486	5m at 1.28g/t	145	-60	289
					11.4 m at 2.72 g/t	347		

# **RENISON TIN PROJECT**

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

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
Area 4	U5431	66,470.7	44,591.2	1,177.0	3.4m at 4.48% Sn and 0.12% Cu	89.0	-51	244
	U5432	66,485.5	44,605.7	1,186.2	9.8m at 2.08% Sn and 0.14% Cu	68.3	-57	252
					4.5m at 1.69% Sn and 0.05% Cu	93.5	-57	252
					6.8m at 3% Sn and 0.15% Cu	111.1	-57	252
	U5435	66,455.3	44,583.5	1,181.6	1m at 3.46% Sn and 0.19% Cu	96.5	-42	235
	U5438	66,499.9	44,596.8	1,203.2	3.2m at 4% Sn and 0.02% Cu	62.7	-44	273
	U5440	66,474.4	44,577.2	1,180.5	4.5m at 2.03% Sn and 0.1% Cu	92.0	-43	251
	U5441	66,467.6	44,607.0	1,214.3	2.6m at 0.89% Sn and 0.02% Cu	55.0	-37	231
					4.5m at 2.2% Sn and 0.26% Cu	99.0	-37	231
					2.8m at 2.28% Sn and 0.21% Cu	144.6	-37	231
	U5445	66,427.6	44,591.7	1,170.8	2.8m at 0.99% Sn and 0.11% Cu	114.1	-43	219
	U5468	66,382.0	44,538.9	1,180.5	3.5m at 0.69% Sn and 0.09% Cu	174.6	-21	217
	U5471	66,420.3	44,584.4	1,178.1	1.5m at 1.99% Sn and 0.75% Cu	125.5	-34	215
	U5477	66,598.5	44,601.8	1,142.7	2.2m at 1.34% Sn and 0.09% Cu	139.0	-46	334
					6.6m at 7.68% Sn and 0.39% Cu	152.4	-46	334
	U5478	66,484.0	44,585.9	1,143.4	3.1m at 1.08% Sn and 0.17% Cu	117.1	-61	257
	U5479	66,379.5	44,562.8	1,141.2	0.9m at 1.62% Sn and 0.18% Cu	175.8	-38	217
	U5490	66,383.6	44,526.3	1,199.9	5.8m at 1.32% Sn and 0.13% Cu	165.3	-18	228
	U5491	66,435.0	44,536.5	1,237.7	1.2m at 1.54% Sn and 0.1% Cu	121.6	-5	243
					2.5m at 3.49% Sn and 0.13% Cu	145.0	-5	243
CFB	U5495	65,911.2	44,486.8	1,460.9	1.6m at 1.87% Sn and 0.17% Cu	45.7	-3	204
					2.4m at 3.78% Sn and 0.22% Cu	54.0	-3	204
	U5496	65,984.5	44,474.0	1,465.9	2.3m at 2.44% Sn and 0.07% Cu	25.6	4	276
	U5498	66,018.9	44,493.1	1,463.4	1.9m at 3.03% Sn and 0.32% Cu	1.9	4	303
	U5499	66,044.6	44,489.1	1,464.1	4.9m at 1.13% Sn and 0.15% Cu	5.0	7	306
	U5500	66,101.1	44,512.5	1,464.9	3.4m at 5.18% Sn and 0.4% Cu	10.3	12	90
	U5502	66,319.9	44,493.6	1,460.2	2.3m at 2.27% Sn and 0.27% Cu	0.2	-25	91
	U5529	66,156.7	44,497.2	1,502.0	8.8m at 2.07% Sn and 1.4% Cu	5.1	-8	96
	U5530	66,140.9	44,495.2	1,502.0	3.3m at 2.25% Sn and 1.09% Cu	2.0	-0	99
					2.1m at 4.13% Sn and 0.37% Cu	13.2	-0	99
	U5531	66,139.6	44,482.0	1,501.7	3m at 0.97% Sn and 1.73% Cu	2.0	-25	285
	U5532	66,120.7	44,502.7	1,497.3	11.5m at 2.29% Sn and 0.75% Cu	2.9	-25	104

## **RENISON TIN PROJECT**

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

Lode	Hole	Collar N	Collar E	Collar RL	Intercept (True Width)	From (m)	Dip	Azi
CFB (Continued)	U5533	66,119.4	44,470.1	1,502.9	1.7m at 5.72% Sn and 0.15% Cu	17.3	-	273
(continued)	U5534a	66,119.4	44,479.1	1,495.7	3.9m at 3.09% Sn and 0.49% Cu	9.0	-39	277
	U5536	66,085.3	44,486.1	1,497.8	2m at 2.03% Sn and 0.1% Cu	7.0	-26	292
					1.2m at 2.27% Sn and 0.62% Cu	12.3	-26	292
	U5540	66,038.5	44,491.4	1,500.1	8.2m at 2.98% Sn and 0.06% Cu	-	-22	295
					2.9m at 2.5% Sn and 0.16% Cu	35.7	-22	295
	U5541	66,038.0	44,490.9	1,504.3	6.8m at 3.97% Sn and 0.06% Cu	-	18	290
	U5542	66,034.9	44,491.2	1,499.9	4.9m at 4.25% Sn and 0.15% Cu	-	-25	254
Lower Federal	U5449	65,987.4	44,562.0	1,194.2	1.1m at 1.71% Sn and 0.06% Cu	104.0	-16	53
					5.5m at 1.65% Sn and 0.19% Cu	139.9	-16	53
	U5506	66,025.9	44,599.0	1,223.4	1.5m at 2.45% Sn and 1.09% Cu	18.3	4	87
	U5507	66,006.8	44,591.3	1,222.8	3.3m at 2.26% Sn and 0.19% Cu	7.0	4	86
	U5508	65,987.7	44,585.0	1,221.0	3.6m at 1.53% Sn and 0.24% Cu	-	1	108
					5.8m at 15.46% Sn and 0.26% Cu	11.8	1	108
Upper Federal	U5459	65,580.8	44,342.4	1,946.2	10.4m at 1.16% Sn and 0.45% Cu	50.2	18	98
	U5465	65,678.9	44,346.2	1,939.0	10.4m at 1.4% Sn and 0.26% Cu	-	11	90
	U5521	65,707.4	44,348.1	1,939.6	7.9m at 1.31% Sn and 0.27% Cu	-	16	90
	U5523	65,735.0	44,353.5	1,949.5	9.8m at 0.65% Sn and 0.15% Cu	3.0	13	76
	U5561	65,634.0	44,329.0	1,942.4	0.7m at 1.43% Sn and 0.12% Cu	7.4	33	297

### **TENNANT CREEK**

Rover 1 - Significant ( > 5g metre) Intercepts for September 2015 Quarter

Prospect	Hole	Collar N	Collar E	Collar RL	Intercept (Downhole Width)	From (m)	Dip	Azi
Rover 1	WGR1D060	7,787,345	359,225	296	5.46m at 15.8g/t Au, 4.03% Cu, 0.96% Bi, 0.06% Co	937.0	-39.0	3.4
	WGR1D060-2	7,787,345	359,225	296	10.42m at 1.6 g/t Au, 1.57% Cu, 0.84% Bi, 0.13% Co	927.7	-34.2	3.2
	WGR1D060-3	7,787,345	359,225	296	6.96m at 1.36g/t Au, 3.4% Cu, 0.12% Bi, 0.13% Co	950.5	-35.0	0.3

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

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

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Diamond Drilling         The bulk of the data used in resource calculations at Trident has been gathered from diamond core. Four types of diamond core sample have been historically collected. The predominant sample method is half-core NQ2 diamond with half-core LTK60 diamond, Whole core LTK48 diamond and whole core BQ also used. This core is logged and sampled to geologically relevant intervals.     </li> <li>The bulk of the data used in resource calculations at Chalice has been gathered from diamond core. The predominant drilling and sample type is half core NQ2 diamond. Occasionally whole core has been sampled to streamline the core handling process. Historically half and whole core LTK60 and half core HQ diamond have been used. This core is logged and sampled to geologically relevant intervals.</li> </ul>
Drilling techniques Drill sample recovery	<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> <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>	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. All exposures within the prebadu are sampled

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

Criteria	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>	<ul> <li>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.</li> </ul>
	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>	<ul> <li>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.</li> </ul>
	Quality control procedures adopted for all sub-sampling stages to maximise representivity	• The un-sampled half of diamond core is retained for check sampling if required.
	<ul> <li>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>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.</li> </ul>
		<ul> <li>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.</li> </ul>
		• Core and underground face samples are taken to geologically relevant boundaries to ensure each sample is representative of a geological domain. Sludge samples are taken to nominal sample lengths.
		• The sample size is considered appropriate for the grain size of the material being sampled.
		• For RC, RAB and Aircore chips regular field duplicates are collected and analysed for significant variance to primary results.
		RAB and Aircore sub-samples are collected through spear sampling.
		SKO
		• NQ2 and HQ diameter core is sawn half core using a diamond-blade saw, with one half of the core consistently taken for analysis. Smaller sized core (LTK48 and BQ) are whole core sampled. The un-sampled half of diamond core is retained for check sampling if required.
		• SKO staff collect the sample in pre-numbered calico sample bags which are then submitted to the laboratory for analysis. Delivery of the sample is by a SKO staff member.

Criteria	JORC Code Explanation	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>
		<ul> <li>Blast holes -Sampled via splitter tray per individual drill rods.</li> </ul>
		<ul> <li>RAB / AC chips - Combined scoops from bucket dumps from cyclone for composite. Spli 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.
		Diamond Drilling - Half-core niche samples, sub-set via geological features as appropriate Grade control holes may be whole-cored to streamline the core handling process if required
		Chips / core chips undergo total preparation.
		<ul> <li>Samples undergo fine pulverisation of the entire sample by an LM5 type mill to achieve a 75 product prior to splitting.</li> </ul>
		<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.
		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	<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>HG0</li> <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 PAL1000B 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 of 0.01ppm Au content in the original sample. This method is appropriate for the type and magnitude of mineralisation at Higginsville.</li> <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 adequated.</li> </ul>

Criteria	JORC Code Explanation	Cor	nmentary
			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	• The verification of significant intersections by either independent or alternative company	No independent or alternative verifications are available.
assaying	<ul> <li>personnel.</li> <li>The use of twinned holes.</li> </ul>	<ul> <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> </ul>
	<ul> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Primary data is collected utilising LogChief. The information is imported into a SQL database server and verified.</li> </ul>
		• All data used in the calculation of resources and reserves are compiled in databases (underground and open pit) which are overseen and validated by senior geologists.
		No adjustments have been made to any assay data.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys),	HGO
	<ul> <li>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>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</li> </ul>
		resource in question.
		<ul> <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> </ul>
		<ul> <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> </ul>
		<ul> <li>Down-hole surveys for underground diamond drill-holes were taken at 15 – 30 m intervals by Reflex single-shot cameras.</li> </ul>
		• 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.
		• Topographic control is generated from RTK GPS. This methodology is adequate for the resources in question.

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

Criteria	JORC Code Explanation	Con	nmentary
		•	Mount Marion:
			Drill-spacing ranges from 20 m x 20 m to no greater than 60 m x 60 m for the reported resource Given that the geological and mineralisation understanding is well established via mining operations, this drill-spacing is considered adequate for the classifications applied to the resource.
			Compositing is carried out based upon the modal sample length of each project.
			CMGP
		•	Data spacing is variable dependent upon the individual orebody under consideration. A lengthy history of mining has shown that this approach is appropriate for the Mineral Resource estimation process and to allow for classification of the resources as they stand.
		•	Compositing is carried out based upon the modal sample length of each individual domain.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	•	Drilling intersections are nominally designed to be normal to the orebody as far as underground infrastructure constraints / topography allows.
	• If the relationship between the drilling orientation and the orientation of key mineralised	1	Development sampling is nominally undertaken normal to the various orebodies.
	structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	•	Where drilling angles are sub optimal the number of samples per drill hole used in the estimation has been limited to reduce any potential bias.
		•	It is not considered that drilling orientation has introduced an appreciable sampling bias.
Sample security	• The measures taken to ensure sample security.	•	The core is transported to the core storage facility by either drilling company personnel or geological staff. Once at the facility the samples are kept in a secure location while logging and sampling is being conducted. The storage facility is enclosed by a fence which is locked at night or when the geology staff are absent. The samples are transported to the laboratory facility or collection point by geological staff.
Audits or reviews	The results of any audits or reviews of sampling techniques and data		HGO
		•	A review of the grade control practices on site has been undertaken by an external consultant. No formal external audit or review has been performed on the resource estimate. Site generated resources and reserves and the parent geological data is routinely reviewed by the Metals X Corporate technical team.
			SKO
		•	No formal external audit or review has been performed on the sampling techniques and data. Site generated resources and reserves and the parent geological data is routinely reviewed by the Metals X Corporate technical team.
			CMGP
		•	Site generated resources and reserves and the parent geological data is routinely reviewed by the Metals X Corporate technical team.

## **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	<ul><li>HGO</li><li>State Royalty of 2.5% of revenue applies to all tenements.</li></ul>
	<ul> <li>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 Trident Resource is located within mining leases M15/0642, M15/0351 and M15/0348. M15/0351 and M15/0642 also incur the Morgan Stanley royalty of 4% of revenue after 100,000 oz of production and the Morgan Stanley price participation royalty at 10% of incremental revenue for gold prices above AUD\$600/oz. M15/0642 is also subject to the Mitchell Royalty at AUD\$32/oz.</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.
		• 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.
		• 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.
		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.
		Metals X work has generally confirmed the veracity of historic exploration data.
Geology	Deposit type, geological setting and style of mineralisation.	HGO
		• Trident is hosted primarily within a thick, weakly differentiated gabbro with subordinate mafic and ultramafic lithologies and comprises a series of north-northeast trending, shallowly north-plunging mineralised zones. The deposit comprises two main mineralisation styles; large wallrock-hosted ore-zones comprising sigmoidal quartz tensional vein arrays and associated metasomatic wall rock alteration hosted exclusively within the gabbro;
		• and thin, lode-style, nuggetty laminated quartz veins that formed primarily at sheared lithological contacts between the various mafic and ultramafic lithologies.
		<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> <li>SKO</li> </ul>
		HBJ:     The UD Linder from ment of a mold mineral lined content of a Double Laforer share see a set of a mold mineral line double set of
		The HBJ lodes form part of a gold mineralised system along the Boulder-Lefroy shear zone that is over 5km long and includes the Celebration, Mutooroo, HBJ and Golden Hope open- pit and underground mines. The lodes are hosted within a steeply-dipping, north-northwest striking package of mafic, ultramafic and sedimentary rocks and schists that have been intruded by felsic to intermediate porphyries. Gold mineralisation is structurally controlled and is focused along lithological contacts, within stockwork and tensional vein arrays and within shear zones. The main mineralised zone has a length in excess of 1.9 km and an average width of 40 m in the Jubilee workings but is generally narrower to the north in the Hampton -Boulder workings.
		Mount Marion:
		• The Mount Marion deposit is located on the eastern side of the Coolgardie Domain within a flexure in the Karramindie Shear Zone. It is hosted within a sub-vertical sequence of meta-komatiites intercalated with metasediments that have been metamorphosed to amphibolite facies. Gold mineralisation occurs in a footwall and hangingwall lode, each ranging in thickness from 2 to 15 m. The mineralisation plunges steeply to the west and is open at depth.
		Mount Martin:
		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
		<ul> <li>Pernatty: The Pernatty deposit is hosted within a granophyric phase of a gabbro and is controlled by a structurally complex interaction of a number of major shear zones. Shearing has altered the original granophyric quartz dolerite to a biotite-carbonate-plagioclase-pyrite schist. The sequence has also been intruded by mafic and felsic porphyritic dykes, which are also mineralised. CMGP</li> </ul>
		<ul> <li>The CMGP is located in the Achaean Murchison Province, a granite-greenstone terrane in the northwest of the Yilgarn Craton. Greenstone belts trending north-northeast are separated by granite-gneiss domes, with smaller granite plutons also present within or on the margins of the belts.</li> </ul>
		<ul> <li>Mineralisation at Big Bell is hosted in the shear zone (Mine Sequence) and is associated with the post-peak metamorphic retrograde assemblages. Stibnite, native antimony and trace arsenopyrite are disseminated through the K-feldspar-rich lode schist. These are intergrown with pyrite and pyrrhotite and chalcopyrite. Mineralisation outside the typical Big Bell host rocks (KPSH), for example 1,600N and Shocker, also display a very strong W-As-Sb geochemical halo.</li> </ul>
		<ul> <li>Numerous gold deposits occur within the Cuddingwarra Project area, the majority of which are hosted within the central mafic-ultramafic ± felsic porphyry sequence. Within this broad framework, mineralisation is shown to be spatially controlled by competency contrasts across, and flexures along, layer-parallel D2 shear zones, and is maximised when transected by corridors of northeast striking D3 faults and fractures.</li> </ul>
		<ul> <li>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.</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:	• 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 statement to this effect (eg 'down hole length, true width not known').</li> </ul>	are not normal to the orebody.
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.	
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	<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 (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	JC	DRC Code explanation	C	ommentary
Mineral tenement and land tenure	•	Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests,	•	The CMGP comprises 6 granted exploration leases, 10 granted general purpose leases, 31 granted mis- cellaneous leases, 210 granted mining leases and 14 granted prospecting leases.
status		historical sites, wilderness or national park and environmental settings.	•	Native title interests are recorded against several CMGP tenements.
	•	The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.	•	The CMGP tenements are held by the Big Bell Gold Operations (BBGO) of which Metals X has 100% own- ership.
			•	Several third party royalties exist across various tenements at CMGP, over and above the state govern- ment 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.
Exploration done by	•	Acknowledgment and appraisal of exploration by other parties.	•	The CMGP area has an exploration and production history in excess of 100 years.
other parties			•	On balance, BBGO work has generally confirmed the veracity of historic exploration data.

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

Criteria	J	ORC Code explanation	Сс	ommentary
Drill hole Informa- tion	•	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</li> <li>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 should clearly explain why this is the case.</li> </ul>	•	Presented in tables above. Excluded results are non-significant and do not materially affect understanding of the CMGP deposits.
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. 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.	•	Results are reported on a length weighted average basis. Results are reported above a 5g/m Au cut-off. Results reported may include up to two metres of internal dilution below a 0.5 g/t Au cut-off. No metal equivalent values are reported.
Relationship between minerali- sation widths and intercept lengths	•		•	Interval widths are downhole width unless otherwise stated.
Diagrams Balanced reporting	•	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. Where comprehensive reporting of all Exploration Results is not practicable, representative re-	•	Images are presented in the body of the text as appropriate. Excluded results are non-significant and do not materially affect understanding of the CMGP deposit.
Other substantive exploration data	•	<ul> <li>porting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	•	Relevant information presented in the body of the above.
Further work	•	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	•	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 in this section apply to all succeeding sections.)

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<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.     </li> </ul>
	<ul> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>NQ and HQ core sizes have been recorded as being used at Mount Bischoff. This core is geologically logged and subsequently halved for sampling.</li> <li>There is no diamond drilling for the Rentails Project.</li> <li>Face Sampling</li> <li>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 /</li> </ul>
Drilling techniques	<ul> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	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.
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>	<ul> <li>Sludge Drilling</li> <li>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.</li> <li>There is no sludge drilling for the Mount Bischoff Project. There is no sludge drilling for the</li> </ul>
		<ul> <li>Rentails Project.</li> <li>RC Drilling</li> <li>RC drilling has been utilised at Mount Bischoff.</li> <li>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>There is no RC drilling for the Renison Project.</li> </ul>

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 material been noted.
Logging	Whether core and chip samples have been geologically and geotechnically logged to a level of	Diamond core is logged geologically and geotechnically.
	detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	RC chips are logged geologically.
		Development faces are mapped geologically.
	• Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging is qualitative in nature.
	The total length and percentage of the relevant intersections logged	All holes are logged completely, all faces are mapped completely.
Sub-sampling techniques and 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>Drill core is halved for sampling. Grade control holes may be whole-cored to streamline the core handling process.</li> <li>Samples are dried at 90°C, then crushed to &lt;3 mm. Samples are then riffle split to obtain a sub-sample of approximately 100g which is then pulverized to 90% passing 75um. 2g of the pulp sample is then weighed with 12g of reagents including a binding agent, the weighed 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 appropriate for the style of mineralisation being considered.</li> <li>QA/QC is ensured during the sub-sampling stages process via the use of the systems of an independent NATA / ISO accredited laboratory contractor.</li> <li>The sample size is considered appropriate for the grain size of the material being sampled.</li> <li>For RC chips regular field duplicates are collected and analysed for significant variance to primary results.</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>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> <li>Specific gravity / density values for individual areas are routinely sampled during all diamond drilling where material is competent enough to do so.</li> </ul>

Criteria	JORC Code Explanation	Commentary
Verification of sampling and assaying Location of data points	<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> </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 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</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>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 appropriate for the Mineral resource as it stands.</li> <li>Compositing is carried out based upon the modal sample length of each individual domain.</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>underground infrastructure constraints / topography allows.</li> <li>Development sampling is nominally undertaken normal to the various orebodies.</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.	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	<ul> <li>The results of any audits or reviews of sampling techniques and data</li> </ul>	• 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>All Tasmania resources are hosted within 12M1995 and 12M2006. Both tenements are standard Tasmanian mining leases.</li> <li>No native title interests are recorded against the Tasmanian tenements. Native title interests are recorded against the Queensland tenements.</li> <li>Tasmanian tenements are held by the Bluestone Mines Tasmania Joint Venture of which Metals X has 50% ownership.</li> <li>No royalties above legislated state royalties apply for the Tasmanian tenements.</li> <li>Bluestone Mines Tasmania Joint Venture operates in accordance with all environmental conditions set down as conditions for grant of the mining 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>The Renison and Mount Bischoff areas have an exploration and production history in excess of 100 years.</li> <li>Bluestone Mines Tasmania Joint Venture work has generally confirmed the veracity of historic exploration data.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>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.</li> </ul>
		<ul> <li>Mount Bischoff is the second of three major Skarn, carbonate replacement, pyrrhotite- cassiterite deposits within western Tasmania. The Mount Bischoff Mine area is situated within the Dundas Trough, a province underlain by a thick sequence of Neoproterozoic- Cambrian siliciclastic and volcaniclastic rocks. At Mount Bischoff folded and faulted shallow-dipping dolomite horizons host replacement mineralisation with fluid interpreted to be sourced from the forceful emplacement of a granite ridge and associated porphyry intrusions associated with the Devonian Meredith Granite, which resulted in the complex brittle / ductile deformation of the host rocks. Lithologies outside the current mining area are almost exclusively metamorphosed siltstones. Major porphyry dykes and faults such as the Giblin and Queen provided the major focus for ascending hydrothermal</li> </ul>
		• fluids from a buried ridge of the Meredith Granite. Mineralisation has resulted in tin-rich sulphide replacement in the dolomite lodes, greisen and sulphide lodes in the porphyry and fault / vein lodes in the major faults. All lodes contain tin as cassiterite within sulphide mineralisation with some coarse cassiterite as veins throughout the lodes.
		• The Rentails resource is contained within three Tailing Storage Facilities (TSF's) that have been built up from the processing of tin ore at the Renison Bell mine over the period 1968 to 2013.

Criteria	JORC Code Explanation	Commentary
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>	• 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> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</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>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.	<ul> <li>Presented above.</li> <li>Excluded results are non-significant and do not materially affect understanding of the Renison deposit.</li> </ul>
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	No relevant information 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>	<ul> <li>Exploration assessment and normal mine extensional drilling continues to take place at Renison.</li> <li>Exploration assessment continues to progress at Mount Bischoff.</li> <li>Project assessment continues to progress at Rentails.</li> </ul>

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

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

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate</li> </ul>	All data used in resource calculations at the Tennant Creek Project has been gathered from diamond core. Multiple sizes have been used historically. This core is geologically logged and subsequently halved for sampling.
	<ul> <li>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>	this is assessment of sample recovery. No defined relationship exists between sample recovery and grade. Nor has sample bias due to preferential loss or gain of fine or coarse material been noted.
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>	
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>	
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>	<ul> <li>Diamond core is logged geologically and geotechnically.</li> <li>Logging is qualitative in nature.</li> <li>All holes are logged completely.</li> </ul>

Criteria	JORC Code Explanation	Comme	entary
Sub-sampling techniques and	If core, whether cut or sawn and whether quarter, half or all core taken.	• Di	iamond Drilling - Half-core niche samples, sub-set via geological features as appropriate.
sample preparation	• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	• Co	ore undergoes total preparation.
	• For all sample types, the nature, quality and appropriateness of the sample preparation	• Th	ne sample preparation process consists of:
	technique.	»	Crushing using a vibrating jaw crusher to achieve a maximum sample size of 4mm.
	• Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	»	The sample is then weighed, and if the sample weight is greater than 3.2kg, the sample is split into two using a Jones-type Riffle splitter.
	<ul> <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>	»	The crushed sample is then pulverised in a Labtech LM5 Ring Mill for 6 minutes. For samples weighing greater than 3.2kg the first portion is removed and second portion is
			homogenised in the same machine. Once complete the first portion is put back in the LM5 and both portions are homogenised.
		»	From the pulverised sample, approximately 200g is taken as a master sample which stays in Alice Springs, while a second sample of approximately 150g taken and sent to for assaying. These samples are collected via a scoop inserted to the bottom of the bowl. The remaining sample is transferred to a calico bag for storage.
		»	For every 20th sample, an approximately 25g sample is screened to 75 microns to check that homogenising has achieved 80% passing 75 microns.
			A/QC is ensured during sampling via the use of sample ledgers, blanks, standards and epeats.
			A/QC is ensured during the assays process via the use of blanks, standards and repeats at NATA / ISO accredited laboratory.
		• Th	ne sample sizes are considered appropriate to the grainsize of the material being sampled.
		• Th	ne un-sampled half of diamond core is retained for check sampling if required.
Quality of assay data and		• Ar	nalysis of drill core for Au, Ag, Cu, Pb, Zn was carried out in Perth in the following manner;
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> </ul>	»	Gold (Au-AA25 scheme – lower detection limit = 0.01ppm, upper detection limit = 100ppm). A 30g charge of prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents and then cupelled to yield a precious metal bead.
	<ul> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	>>	The bead is then dissolved in acid and analysed by atomic absorption spectroscopy against matrix-matched standards.
		»	Samples returning assay values in excess of 100g/t Au were repeated using the Au- AA26 method.
		»	Ag, Cu, Pb, Zn (ME-0G62) - A prepared sample is digested using a 4 acid digest.
		»	The subsequent solution is analysed by inductively coupled plasma - atomic emission spectroscopy or by atomic absorption spectrometry.
		• No	o significant QA/QC issues have arisen in recent drilling results.
		• Th	nese assay methodologies are appropriate for the resource 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>	<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 with no significant issues highlighted.</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 are compiled in databases which are overseen and validated by senior geologists.</li> <li>No primary assays data is modified in any way.</li> </ul>
Location of data points	<ul> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>All 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.</li> <li>All drilling and resource estimation is undertaken in MGA grid.</li> <li>Topographic control is generated from a combination of remote sensing methods and ground-based surveys. This methodology is adequate for the resource in question.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Data spacing is variable dependent upon the individual orebody under consideration. This approach is appropriate for the Mineral Resource estimation process and to allow for classification of the resource as it stands.</li> <li>Compositing is carried out based upon the modal sample length of each individual domain.</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 normal to the orebody as far topography / economics allows.</li> <li>Development sampling is nominally undertaken normal to the various orebodies.</li> <li>It is not considered that drilling orientation has introduced an appreciable sampling bias.</li> </ul>
Sample security Audits or reviews	<ul> <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>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.</li> <li>Site generated resources and reserves and the parent geological data is routinely reviewed by the Metals X Corporate technical team.</li> </ul>

### **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>Native title interests are recorded against the Tennant Creek tenements.</li> <li>The Tennant Creek tenements are held by Castile with is 100% Metals X owned.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other partie	<ul> <li>The Tennant Creek area has an exploration and production history in excess of 100 years The Rover area in particular has an intensive exploration history stretching from the 1970's.</li> <li>On balance, Castile work has generally confirmed the veracity of historic exploration data.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Tennant Creek Project is located in the 1860-1850Ma Warramunga Province is approximately centred on the township of Tennant Creek, and contains the</li> <li>Palaeoproterozoic Warramunga Formation. This is a weakly metamorphosed turbidities succession of partly tuffaceous sandstones and siltstones which includes argillaceous banded ironstones locally referred to as 'haematite shale'.</li> </ul>
		<ul> <li>Copper in the form of chalcopyrite occurs around the upper margins of the quartz magnetite ironstones and in the silicified BIF or haematitic shales that often form an alteration transition to the adjacent chlorite alteration envelope. Although copper levels in the upper quartz magnetite portion of the ironstones is usually very low, pervasive sub-economic copper levels can persist throughout this zone. Economic levels of copper are dominantly contained in the lower massive magnetite portion or in massive magnetite "veins" identified in the magnetite quartz zones. The massive magnetite zones grade laterally and at depth into magnetite chlorite alteration decreases and there is an increase in early haematite dusted quartz veins and indurated sediments and fine chlorite veining related to the mineralisation phase. The transition from massive magnetite copper mineralisation to magnetite quartz chlorite stringer gold mineralisation is also the zone of increased bismuthinite mineralisation</li> </ul>
		<ul> <li>Lead and zinc mineralisation at Explorer 108 is associated with a brecciated dolomitised sediment unit, consisting of irregular, generally narrow, domains or veins of semi-massive sulphides (sphalerite and galena). A basal "high-grade" zone is present at the contact of the dolomite and lower felsic units.</li> </ul>

Criteria	JORC Code Explanation	Commentary
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>	Excluded results are non-significant and do not materially affect understanding of the Rover 1 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> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Results are reported on a length weighted average basis.</li> <li>Results are reported above a 5gm Au / Au Eq. cut-off / 2.5%m Cu.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	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.
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.	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>	Project.