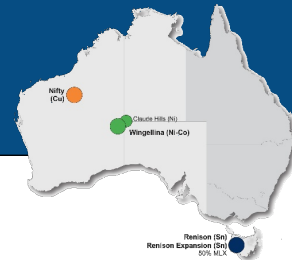


# METALS X LIMITED - QUARTERLY REPORT

## FOR THE QUARTER ENDED 31 DECEMBER 2019



Metals X Limited ("Metals X" or the "Company") presents its activities report for the quarter ended 31 December 2019.

### TIN DIVISION

- ▶ Production of 1,652t tin-in-concentrate was 19% lower than the previous quarter reflecting lower mined grades from mine sequence changes and delayed stoping from the high-grade Area 5 area.
- ▶ EBITDA of \$4.1M and net cash flow of (\$1.4M) (MLX 50% share). Net cashflow impacted by expenditure on metallurgy improvement program, mobile equipment rebuilds, and Area 5 Mining Optimisation Study.
- ▶ Production guidance for financial year 2019/20 is reaffirmed as 7,000 – 7,400t of tin-in-concentrate at an all-in sustaining cost of \$18,200 - \$19,100/t Sn.
- ▶ Updated Mineral Resource estimate announced subsequent to the end of the quarter (30 January 2020):
  - Total Renison Measured, Indicated and Inferred Mineral Resource of 18.54Mt at 1.54% Sn for 285,100t of contained tin representing a 22,100t (8%) increase in contained tin.
  - Area 5 and Bell 50 high-grade area combined Mineral Resource of 5.49Mt at 2.09% Sn for 114,700t of contained tin.
  - The updated Mineral Resource has delivered a significant 34% increase in contained tin from 85,200 to 114,700t and a significant 10% increase in grade from 1.91% Sn to 2.09% Sn for the Area 5 – Bell 50 area.
- ▶ Completion of Area 5 Mining Optimisation Study and Life of Mine Plan expected in the June 2020 quarter with increased production from the high-grade Area 5 expected in the second half of CY2020.

### COPPER DIVISION

- ▶ Placement into care and maintenance (**C&M**) in November 2019 at cost of \$10.4M in the quarter, additional \$6M over coming months and thereafter expected on-going monthly costs of approximately \$0.72M.
- ▶ Last shipment of copper completed in December with copper concentrate sales of 4,974t of contained copper with provisional payment of \$14M received.
- ▶ Strategic Review of Copper Division commenced with appointment of Canaccord and Hartleys as Joint Advisors, subsequent to the end of the quarter, to explore options including joint ventures and the partial or complete divestment of some or all of the copper assets.

### NICKEL DIVISION

- ▶ At Wingellina, infill drilling involving 25 holes for 1,416 metres completed targeting high grade cobalt-nickel areas. Results from the program are pending.

### CORPORATE

- ▶ Closing cash and working capital of \$32.3M including \$43.7M cash (\$63.1M and \$50.9M respectively at the end of the previous quarter).
- ▶ Loan facility (Citibank) balance as at 31 December 2019 of \$34M.

All currency is AUD unless stated otherwise.



THIS QUARTERLY REPORT HAS BEEN AUTHORISED BY THE  
BOARD OF DIRECTORS OF METALS X LIMITED

#### ENQUIRIES

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# TIN DIVISION

## RENISON TIN OPERATIONS (MLX 50%)

Metals X owns a 50% equity interest in the Renison Tin Operations in Tasmania (**Renison**) through its 50% stake in the Bluestone Mines Tasmania Joint Venture (**BMTJV**). All data in this report is 100% of Renison unless stated as 'MLX 50% share'.

### SUMMARY

A summary of the Renison Tin Operations production and costs for the December 2019 quarter is in Table 1.

TABLE 1 - RENISON TIN OPERATIONS PRODUCTION AND COSTS – DECEMBER 2019 QUARTER

All \$ are AUD		December 2019 Quarter	Previous Quarter	Rolling 12-months
<b>Physical Summary</b>				
Ore mined	t ore	213,539	217,110	826,375
Grade of ore mined	% Sn	1.06%	1.36%	1.21%
Ore processed	t ore	166,278	177,999	715,568
Grade of ore processed	% Sn	1.35%	1.56%	1.40%
Recovery	% Sn	73.7%	74.4%	73.9%
Tin produced	t Sn	1,652	2,056	7,418
Tin sold	t Sn	1,826	1,757	7,488
Tin price	\$/t Sn	24,364	24,871	26,880
Realised tin price (net of TC/RC)	\$/t Sn	22,036	22,593	24,419
<b>Revenue (net of TC/RC)</b>	\$	<b>36,404,000</b>	<b>46,457,000</b>	<b>181,146,000</b>
<b>Cost Summary</b>				
Mining	\$	13,582,000	13,350,000	50,228,000
Processing	\$	12,571,000	11,025,000	44,055,000
Administration	\$	2,534,000	2,378,000	9,551,000
Stockpile adjustments	\$	-1,541,000	-433,000	4,269,000
<b>C1 Cash Cost</b>	\$	<b>27,146,000</b>	<b>26,320,000</b>	<b>108,103,000</b>
	\$/t Sn	<b>16,432</b>	<b>12,800</b>	<b>14,572</b>
Royalties	\$	831,000	1,050,000	4,192,000
Other marketing costs	\$	224,000	351,000	1,003,000
Sustaining capital	\$	5,291,000	5,332,000	16,300,000
Reclamation & other adjustments	\$	33,000	8,000	61,000
Corporate costs	\$	44,000	56,000	238,000
<b>All-in Sustaining Costs (AISC)</b>	\$	<b>33,569,000</b>	<b>33,117,000</b>	<b>129,897,000</b>
	\$/t Sn	<b>20,320</b>	<b>16,105</b>	<b>17,510</b>
Project costs	\$	5,616,000	2,099,000	13,803,000
Exploration costs	\$	-33,000	254,000	347,000
<b>All-in Costs (AIC)</b>	\$	<b>39,152,000</b>	<b>35,470,000</b>	<b>144,047,000</b>
	\$/t Sn	<b>23,700</b>	<b>17,249</b>	<b>19,418</b>
<b>Depreciation &amp; amortisation</b>	\$	<b>6,884,000</b>	<b>8,505,000</b>	<b>29,909,000</b>
	\$/t Sn	<b>4,167</b>	<b>4,136</b>	<b>4,032</b>
<b>Cashflow</b>	\$	<b>-2,748,000</b>	<b>10,987,000</b>	<b>37,099,000</b>
<b>EBITDA</b>	\$	<b>8,159,000</b>	<b>18,680,000</b>	<b>67,610,000</b>
<b>MLX 50% share</b>	\$	<b>50%</b>	<b>50%</b>	<b>50%</b>
<b>Cashflow</b>	\$	<b>-1,374,000</b>	<b>5,494,000</b>	<b>18,550,000</b>
<b>EBITDA</b>	\$	<b>4,079,500</b>	<b>9,340,000</b>	<b>33,805,000</b>

Note: C1, AISC and AIC are expressed per tonne of tin produced.

### SAFETY

During the quarter, a recordable injury was sustained when a driller experienced a crushed finger while changing drilling equipment. The 12-month rolling Total Recordable Injury Frequency Rate (**TRIFR**) was 13.9 at the end of the quarter.

A significant incident occurred when an underground loader whilst remote loading from a production stope was buried from material from the hangingwall. No one was at risk when the incident occurred and the loader has been abandoned.

A safety improvement plan has been initiated with a key focus on leadership safety interactions, development and implementation of critical control standards and applicable critical management processes for all high-risk activities.

## PRODUCTION AND COSTS

Tin price averaged \$24,364/t Sn for the quarter (previous quarter \$24,871/t Sn). The margin of realised sale price over AISC reduced to 8% (previous quarter 40%) due to lower production of 1,652t of tin in concentrate (previous quarter 2,056t) and higher all-in-sustaining cost of \$20,320/t Sn (previous quarter \$16,105/t Sn).

Lower production for the quarter was driven by lower mined grade (1.06% Sn versus 1.35% Sn in the previous quarter) as a result of mine sequence changes and a delay to planned stoping from the high-grade Area 5 area. Increased production from Area 5 is expected in the second half of CY2020.

EBITDA and net cash flow for the quarter were \$4.1M and (\$1.4M) respectively (MLX 50% share). Net cashflow was impacted by planned expenditure on the metallurgy improvement program, equipment rebuilds and Area 5 Mining Optimisation Study.

Production and cost guidance for financial year 2019/20 is reaffirmed as 7,000 – 7,400t of tin-in-concentrate at an all-in sustaining cost of \$18,200 - \$19,100/t Sn.

## STRATEGY DELIVERY

The Renison strategy is to continue to convert ongoing significant exploration success into a substantial long-life mining operation with a focus on maximising cash margin through increased mining rate, grade and recovery, and improved productivity while lowering costs.

The following key focus areas were advanced during the quarter:

- Further advancement of the Area 5 Mining Optimisation Study. The Study, in conjunction with a Renison Life-of-Mine Plan, is expected in the June 2020 quarter. Progress on key work streams during the quarter is as follows:
  - Geotechnical and mine design is well advanced to support future production requirements;
  - Ventilation system design is complete with capital cost estimate underway;
  - Options to provide engineered backfill have been narrowed; and
  - Dewatering system upgrades are being scoped.
- Continuation of the metallurgical improvement program with the objective of increasing mill throughput rate and metallurgical recovery; ongoing review and updating of control systems and online analytical infrastructure, and improved training and communication of standard operating parameters.

## MINERAL RESOURCE ESTIMATE UPDATE

Since the 2019 Mineral Resource estimate (31 March 2019)<sup>2</sup>, BMTJV has completed substantial additional drilling programs utilising up to three underground diamond drilling rigs. A total of 416 new holes for 41,079 metres of drilling have been completed with a focus on infill and resource definition programs at Area 5, Bell 50, Leatherwood and Huon North areas. Drilling results to 10 December 2019 were incorporated into an updated Mineral Resource estimate, released subsequent to the end of the quarter<sup>1</sup>, as shown in Table 2.

The total Renison Bell Measured, Indicated and Inferred Resource estimate is currently 18.54Mt at 1.54% Sn for 285,100t of contained tin representing an 8% increase in contained tin (net of depletion).

Substantial Mineral Resource upgrade with an 8% increase in contained tin metal<sup>1</sup> including substantial upgrades to the Mineral Resource for Area 5 and Bell 50 (Figure 1):

- Drilling further defined the position of the cross-cutting Doliminator Fault that delineates the boundary between Area 5 and the new Bell 50 area, and as a result, the Area 5 – Bell 50 boundary has been modified from that used in the 2019 Mineral Resource estimate (31 March 2019)<sup>2</sup>.
- Area 5 Measured, Indicated and Inferred Resource is reported as 4.32Mt at 2.10% Sn for 90,700t of contained tin using the revised Area 5 – Bell 50 boundary.
- Maiden Bell 50 Measured, Indicated and Inferred Mineral Resource of 1.17Mt at 2.05% Sn for 24,000t of contained tin.
- The updated Mineral Resource has delivered a significant 34% increase in contained tin from 85,200 to 114,700t and a significant 10% increase in grade from 1.91% Sn to 2.09% Sn for the Area 5 – Bell 50 area.
- While Bell 50 is plunging towards the Pine Hill Granite, the deepest drill holes to date continue to intersect Renison Mine Sequence and further drilling down-plunge is warranted.

<sup>1</sup> Refer ASX Announcement, 30 January 2020, Renison Resource Update.

<sup>2</sup> Refer ASX Announcement, 24 May 2019, 2019 Renison Resource Update.

- Resource drilling completed into the Leatherwood Trend has further delineated significant additional tin mineralisation hosted within the Federal Bassett Fault and the No. 2 Dolomite. The Leatherwood Trend continues to build into an important new mining area.

**TABLE 2 - RENISON BELL MINERAL RESOURCE ESTIMATE AT 10 DECEMBER 2019 – COMPARISON WITH PREVIOUS**

(Note: MLX equity share is 50% of the Mineral Resource estimate shown below.)

Mineral Resource reporting date	Mineral Resource Category <sup>1</sup>	Tin			Copper		
		'000 tonnes <sup>2</sup>	Grade % Sn	Tin tonnes <sup>2</sup>	'000 tonnes	Grade % Cu	Copper tonnes <sup>2</sup>
31 March 2019 <sup>3</sup>	Measured	1,550	1.62	25,100	1,550	0.35	5,500
	Indicated	13,520	1.51	203,700	13,520	0.19	25,000
	Inferred	2,470	1.38	34,200	2,470	0.17	4,300
	<b>Total</b>	<b>17,550</b>	<b>1.50</b>	<b>263,000</b>	<b>17,550</b>	<b>0.20</b>	<b>34,800</b>
10 December 2019 <sup>4,5</sup>	Measured	1,750	1.66	29,200	1,750	0.29	5,000
	Indicated	14,270	1.53	218,200	14,270	0.19	26,600
	Inferred	2,510	1.50	37,700	2,510	0.21	5,200
	<b>Total</b>	<b>18,540</b>	<b>1.54</b>	<b>285,100</b>	<b>18,540</b>	<b>0.20</b>	<b>36,700</b>

- Mineral Resources are reported inclusive of Mineral Resources modified to produce the Ore Reserve.
- Tonnes are reported as kilo-tonnes ('000t) and rounded to the nearest 10,000; Sn and Cu tonnes are rounded to the nearest 100 tonnes; rounding may result in some slight apparent discrepancies in totals.
- As reported by Metals X in its Annual Update of Mineral Resources and Ore Reserves at 31 March 2019 as announced on ASX on 24 May 2019. Cut-off grade of 0.7% Sn.
- Mineral Resources are calculated at 10 December 2019 by Metals X, adjusted for depletion to 10 December 2019, using a cut-off grade of 0.7% Sn.
- A change in the material sterilisation method since 31 March 2019 has resulted in a net reduction of Total Resources of 790kt at 1.48%Sn and 0.21%Cu for 11.7kt of Sn metal and 1.6kt of Cu metal.

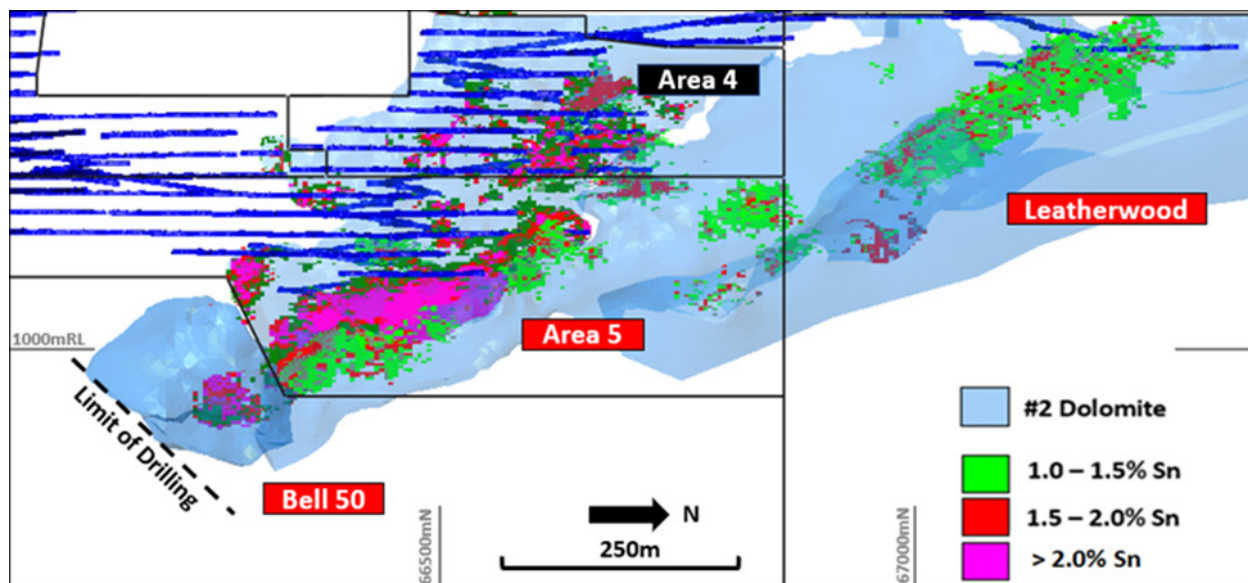


FIGURE 1 – RENISON BELL RESOURCE LONG SECTION SHOWING ONLY THE NO. 2 DOLOMITE AND ASSOCIATED TIN MINERALISATION GRADE ABOVE 1% SN

## SURFACE EXPLORATION

Surface exploration activities during the December quarter included the analysis of data and designing of drilling programs to follow up encouraging conductor plate anomalies identified in data from Downhole Electromagnetic (DHEM) surveys completed during the June quarter. Lease wide data analysis, target selection, 3D modelling and sectional interpretation was ongoing during the quarter.

## RENTAILS

The Renison Tailings Retreatment Project (**Rentails**) is currently subject to an internal BMTJV review of preferential technology options for tin fuming and development strategies. Work to date has substantially advanced the environmental approvals process with remaining studies dependent on selected fuming method. The current technology and strategic review of the project is expected to be completed later this year.

# COPPER DIVISION

## NIFTY OPERATIONS (MLX 100%)

Metals X is 100% owner of the Nifty Copper Operations (**Nifty**), located in the East Pilbara region of Western Australia.

### SUSPENSION OF OPERATIONS

In November 2019 the Company suspended mining operations at Nifty (refer to ASX Announcement of 26 November 2019) and the week following placed the mine into care and maintenance (C&M). A final concentrate shipment was made in December 2019 of 7,658t of concentrate containing 2,090t of copper.

The decision to suspend operations was made following an operational review in November 2019. The review concluded that Nifty production had plateaued well below the expectations from the Nifty Reset Plan despite the underlying fundamentals at Nifty having improved including increasing resource and reserve confidence, developing new mining areas and upgrading and rebuilding surface and underground infrastructure. Further, the review confirmed that the Company was unlikely to achieve its planned production at Nifty at an acceptable operating cost within the previously expected timeframe. On that basis, the Board considered that continuing operations at Nifty was not in the best interests of shareholders.

During the operational suspension, the Company will continue to process available drilling data to upgrade the resource base which will support further studies to investigate opportunities for a revised operational strategy.

A specific safety management plan is in place to ensure the continued safety and wellbeing of our care and maintenance team at Nifty.

### STRATEGIC REVIEW

Subsequent to the end of the quarter, on 22 January 2020, the Company announced the appointment of Canaccord Genuity (Australia) Limited (**Canaccord**) and Hartleys Limited (**Hartleys**) as Joint Advisors to a strategic review of all the Company's copper assets including Nifty (underground mine, processing, power and camp infrastructure), the Maroochydore Copper Project and the Company's substantial surrounding Paterson exploration tenure (**Copper Assets**).

Canaccord and Hartleys will, in conjunction with the Board, explore various options for the Copper Assets including joint ventures and the partial or complete divestment of some or all of the copper assets.

The Company sees significant value in the existing resource at Nifty, production-ready infrastructure, the substantial leverage to an improving outlook for copper, and significant exploration potential through its large Paterson Province regional landholding.

### CARE AND MAINTENANCE COSTS

#### Placement into Care and Maintenance

The Company incurred \$10.4M during the quarter in upfront costs of placing Nifty into C&M which was offset by the provisional payment of the last shipment of copper concentrate in December 2020 of \$14M. A further \$6M is expected to be spent in the current quarter as Nifty transition to steady state C&M.

#### Ongoing Care and Maintenance

Ongoing C&M at Nifty will be conducted with approximately 14 full time staff (from May 2020). During the C&M period the mine is being kept dry and ventilated, and all infrastructure including the power station, processing plant and camp are being maintained in a status ready for recommencement of operations. On-going costs of C&M are estimated at approximately \$0.72M per month.

Annual costs for the Copper Division have been reduced to \$13.71M comprising care & maintenance (\$8.62M), tenure holding costs (\$1.54M), insurance (\$1.18M) and residual asset finance leases (\$2.37M).

### MINERAL RESOURCE UPDATE

An updated Mineral Resource estimate will be published during the March 2020 quarter. The drilling completed since 31 March 2019 has contributed to a new geological model which includes implicit modelling of the interbedded shale units which have not been included to date; the significance of the incorporation of the shale units is that they are low grade lithologies within the middle carbonate unit (MCU) which will enable improved stope definition and mine planning.

Full results of drilling for the quarter are in Appendix 1.



TABLE 3 – NIFTY COPPER OPERATIONS PRODUCTION AND COSTS – DECEMBER 2019 QUARTER

All \$ are AUD		December 2019 Quarter	Previous Quarter	Rolling 12-months
<b>Mining</b>				
Ore mined	t ore	164,131	245,523	966,590
	% Cu	1.37%	1.25%	1.41%
	t Cu	2,244	3,080	13,649
<b>Processing</b>				
Ore processed	t ore	185,511	290,496	968,277
Grade of ore processed	% Cu	1.41%	1.29%	1.43%
Recovery	% Cu	92.1%	91.6%	92.9%
<b>Copper produced</b>	<b>t Cu</b>	<b>2,598</b>	<b>3,425</b>	<b>13,080</b>
Concentrate stocks (closing)	t Cu	-	2,617	-
<b>Copper sold</b>	<b>t Cu</b>	<b>4,974</b>	<b>4,120</b>	<b>17,560</b>
<b>Revenue</b>				
Copper price	\$/t Cu	8,489	8,538	8,613
Realised copper price (net of TC/RC)	\$/t Cu	7,475	7,531	7,588
<b>Revenue (net of TC/RC)</b>	<b>\$</b>	<b>19,419,146</b>	<b>25,792,000</b>	<b>99,252,000</b>
<b>Cost Summary</b>				
Mining	\$	15,350,000	20,769,000	68,909,000
Processing	\$	4,878,000	8,116,000	34,290,000
Administration	\$	3,092,000	4,463,000	17,573,000
Stockpile adjustments	\$	-1,554,000	2,507,000	-2,204,000
<b>C1 Cash Cost</b>	<b>\$</b>	<b>21,766,000</b>	<b>35,855,000</b>	<b>118,568,000</b>
	\$/t Cu	<b>8,379</b>	<b>10,469</b>	<b>9,065</b>
Royalties	\$	993,000	1,314,000	5,058,000
Other marketing costs	\$	1,003,000	1,325,000	5,481,000
Sustaining capital	\$	6,263,000	1,183,000	11,321,000
Reclamation & other adjustments	\$	-10,000	-9,000	20,000
Corporate costs	\$	219,000	247,000	923,000
<b>All-in Sustaining Costs (AISC)</b>	<b>\$</b>	<b>30,234,000</b>	<b>39,915,000</b>	<b>141,371,000</b>
	\$/t Cu	<b>11,638</b>	<b>11,655</b>	<b>10,808</b>
Project costs	\$	3,210,000	9,643,000	31,673,000
Exploration costs	\$	446,000	645,000	1,709,000
Care & maintenance costs	\$	10,367,000	-	10,367,000
<b>All-in Costs (AIC)</b>	<b>\$</b>	<b>44,257,000</b>	<b>50,203,000</b>	<b>185,120,000</b>
	\$/t Cu	<b>17,036</b>	<b>14,659</b>	<b>14,153</b>
<b>Depreciation &amp; amortisation</b>	<b>\$</b>	<b>4,153,000</b>	<b>4,790,000</b>	<b>18,658,000</b>
	\$/t Cu	<b>1,599</b>	<b>1,399</b>	<b>1,426</b>
<b>Cashflow</b>	<b>\$</b>	<b>-24,838,000</b>	<b>-24,411,000</b>	<b>-85,868,000</b>
<b>EBITDA</b>	<b>\$</b>	<b>-14,929,000</b>	<b>-12,949,000</b>	<b>-41,145,000</b>

Note: C1, AISC and AIC are expressed per tonne of copper produced.

## REGIONAL EXPLORATION

The Company currently has granted tenure of 2,289 km<sup>2</sup> and 713 km<sup>2</sup> in application covering stratigraphy of the Paterson Province in the North West of Western Australia. The Paterson province is a highly prospective Neoproterozoic sedimentary basin hosting world class deposits including the Nifty Cu mine, and the Telfer Au-Cu mine and recent discoveries at Winu and Haverton.

Regional exploration activities undertaken for the December quarter included the completion of the drilling program for the 2019 field season and acquisition of gravity data.

Drilling activities during the period were completed in the end of October with a total of 4035 metres drilled with 25 holes completed being NRC034 to NRC058.

Drilling was undertaken at the Noosa, Spitfire, Maroochydore and Maroochydore East targets at the Maroochydore project area and at the Juniper target on the Nifty Regional leases. Three holes were drilled at the Nifty mine targeting near mine extensions. Results of this drilling are included in the mine resource section. Planned drilling at the Rainbow, Rainbow South and Goosewhacker Prospects did not eventuate due to budget constraints.

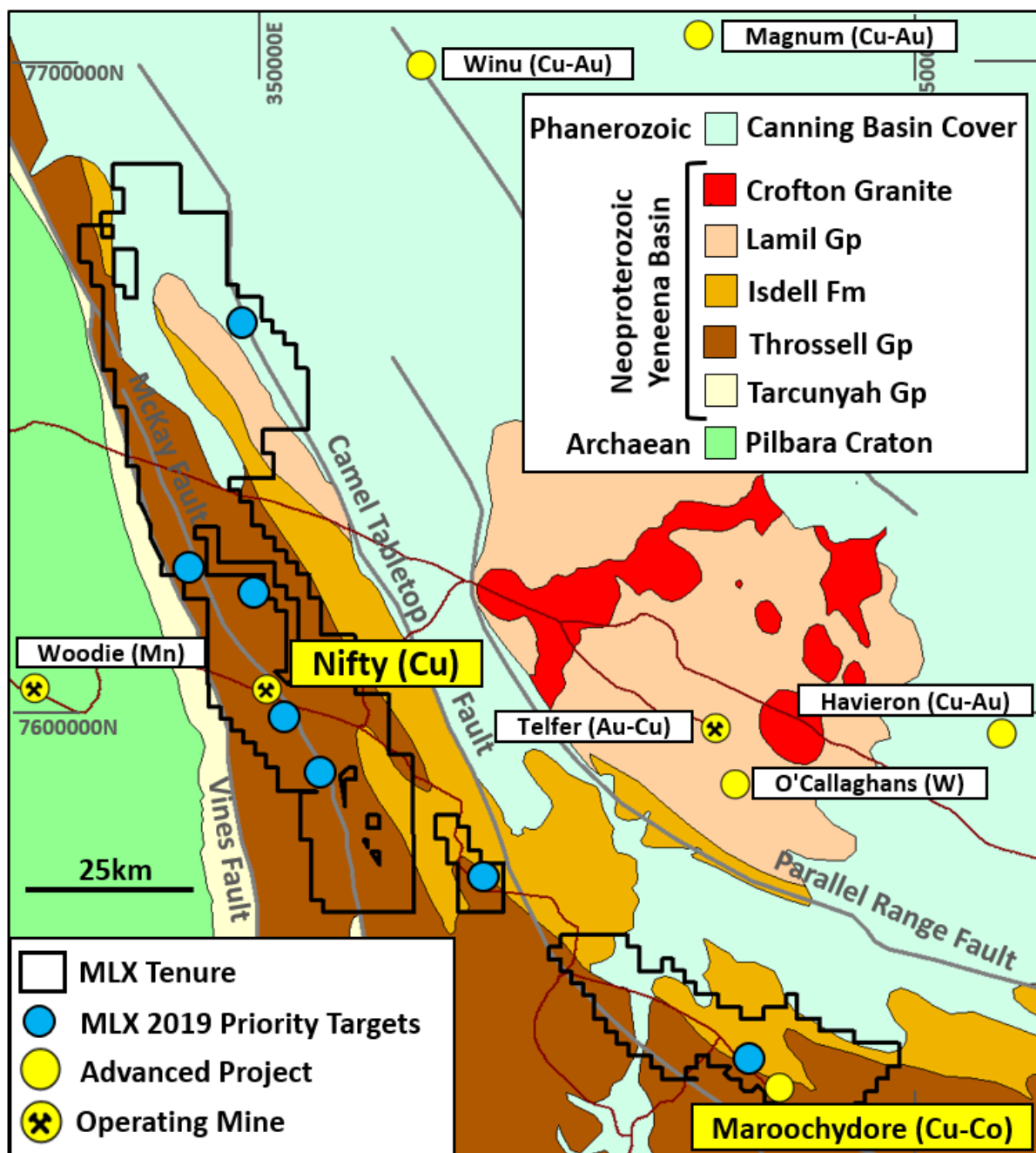


FIGURE 2 – REGIONAL GEOLOGY OF THE PATERSON PROVINCE SHOWING MLX TENURE AND PRIORITY EXPLORATION TARGETS

The Noosa prospect targeted an area 4 kilometres to the west of the Maroochydore deposit in an area previously undrilled and interpreted to be the western extension of the Maroochydore mineralised stratigraphy against the contact of the Eva Well mafic intrusive. Results were disappointing with no anomalous Cu results. The lithological sequence intersected was black shales in the hanging wall sequence.

The Spitfire prospect targeted the contact position of the Eva Well and Broadhurst stratigraphy on the lease E45/3011 immediately to the north of Maroochydore above a discrete late channel EM anomaly. The aim of this work was to determine if there was any anomalous Cu anomalism associated with the EM anomaly and to determine the stratigraphic relationships in the area. No anomalous Cu was intersected.

Drilling at Maroochydore East targeted extensions to the Maroochydore deposit with three holes drilled. All intersected interpreted Footwall shales with anomalous Pb and Zn typical of the unit. The best result being 46 metres at 0.29% Pb from 153 metres in NAC045 including a maximum value of 1.23% Pb over 1 metre from 197 metres. The target sequence was not intersected, and no anomalous Cu was recorded.

The Maroochydore Camp prospect targeted the Maroochydore Carbonate unit to the west of the main Maroochydore deposit. A total of 4 holes were drilled into the target with anomalous results in all holes. Results are tabulated below. All holes were drilled at a dip of 60 degrees with an orientation of 220 magnetic azimuth.

TABLE 4 – NIFTY DRILLING INTERSECTIONS (TRUE WIDTH) RECEIVED DURING DECEMBER QUARTER 2019

Hole Id	Northing	Easting	Depth of Hole	>0.5%Cu Cut-off			>0.3%Cu Cut-off			Dip	Azi
				From	Thickness	Cu %	From	Thickness	Cu %		
NRC037	7547654	424947	181	20	6	0.68	13	14	0.48	60	220
NRC038	7547762	425040	162	62	3	0.95	83	46	0.35	60	220
NRC046	7547830	424735	150	57	9	1.15	57	32	0.57	60	220
NRC047	7547711	425272	138				90	6	0.35	60	220
							115	5	0.40	60	220

The results of these drill holes are encouraging with the target being approximately 4.5 kilometres WNW from the existing defined oxide resource at the Maroochydore deposit. This area has minimal effectual drilling and is a priority area for further exploration.

The drilling of the Juniper target, an interpreted Nifty analogue located 50 kilometres to the north of Nifty failed to intersect any carbonate units, with all holes ending in black shales of the Broadhurst Formation. No anomalous copper was intersected.

Gravity data was acquired from E45/4862 a lease immediately to the east of the Nifty mine and E45/4205, a lease to the west of the Maroochydore deposit. Data is still being processed.

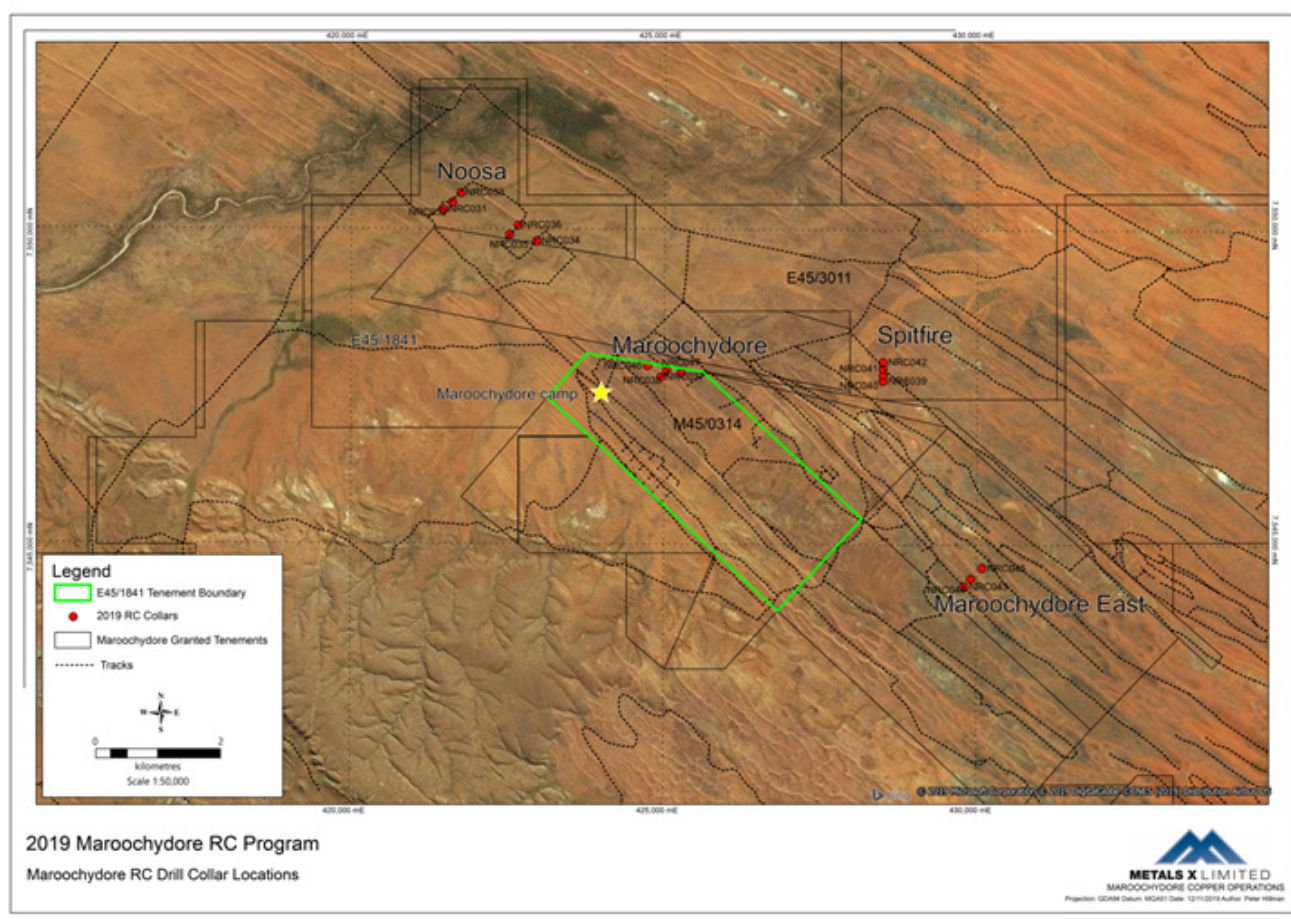


FIGURE 3 – LOCATION MAP OF THE MAROOCHYDORE PROJECT DRILLING IN THE DECEMBER 2019 QUARTER



# NICKEL DIVISION

## WINGELLINA NICKEL-COBALT PROJECT (MLX 100%)

### Background

The Wingellina Nickel-Cobalt Project is part of Metals X's Central Musgrave Project which remains one of the largest undeveloped nickel-cobalt deposits in the world. The Central Musgrave Project has a Mineral Resource containing approximately 2.0Mt of nickel and 154,000t of cobalt within which Wingellina hosts an Ore Reserve of approximately 1.56Mt of nickel and 123,000t of cobalt (refer to the 2019 Annual Report).

### Project update

With the increase in cobalt price, in early 2017 Metals X undertook a review of the cobalt inventory of the deposit from which it defined a higher grade cobalt domain as follows (refer to ASX Announcement 20 March 2017):

- 29.7Mt at 0.14% Co and 1.15% Ni (1.97% Nieq<sup>1</sup>) for 42,000t Co (0.1% Co cut off); or
- 110.5Mt at 0.11% Co and 0.97% Ni (1.60% Nieq<sup>1</sup>) for 121,000t Co (0.05% Co cut-off).

Note 1: Nickel equivalent (Nieq) calculated using a Ni:Co ratio of 6:1 based on assumed price of US\$11,000/t Ni & US\$68,000/t Co and recoveries of 92% Ni and 89% Co

In October 2017, Metals X initiated further studies on Wingellina with the objective of optimising the identified high-grade cobalt-nickel open pits within the existing Mineral Resource and undertook additional testing. The production of high quality cobalt sulphate and nickel sulphate as feedstock for the battery industry was demonstrated to be achievable from Wingellina ore in 2018.

Past drilling and mining studies at Wingellina were focused predominantly on optimisation for nickel production. However, within the Wingellina Mineral Resource, which extends over almost 10 kilometres, Metals X delineated 15 main high grade cobalt – nickel pits within the Wingellina deposit as summarised in Table 5.

TABLE 5 – WINGELLINA HIGH GRADE NICKEL-COBALT PITS

Pit Shell	Tonnes (Mt)	Nieq (%)	Nickel (kt)	Cobalt (kt)
Pit 1	4.5	1.88%	59.0	4.1
Pit 2	3.7	1.65%	42.0	3.1
Pit 3	2.7	1.84%	31.0	2.9
Pit 4	2.3	1.82%	26.5	2.4
Pit 5	2.8	1.44%	28.3	2.0
Pit 6	2.0	1.67%	22.4	1.7
Pit 7	1.9	1.76%	22.6	1.7
Pit 8	1.5	1.73%	16.2	1.5
Pit 9	2.1	1.46%	22.7	1.3
Pit 10	1.5	1.38%	14.8	1.0
Pit 11	0.2	3.68%	2.6	1.0
Pit 12	0.9	1.62%	9.2	0.8
Pit 13	1.1	1.51%	11.4	0.8
Pit 14	0.9	1.57%	8.7	0.8
Pit 15	0.7	1.68%	8.6	0.5
<b>Total Pits 1 - 15</b>	<b>28.5</b>	<b>1.69%</b>	<b>326.1</b>	<b>25.8</b>
Total Wingellina Resource	216	1.33%	1,953	154

As part of these studies during the December 2017 quarter, the Company completed a 41 hole infill drill program, totalling 2,562 metres, which targeted six of the fifteen high-grade cobalt-nickel pit shells (Pit Shell 1, 3, 4, 5, 8 and 14) - refer to the Quarterly Report for quarter ended 31 March 2018. The program confirmed depth and strike continuity of the high grade cobalt-nickel zones within the larger Wingellina deposit.

The Company undertook a further program of infill drilling, targeting high grade cobalt-nickel Pit Shells 2 and 7 in the December 2019 quarter involving the completion of 25 holes for 1,416 metres. The results from the program are expected to become available for reporting in the March 2020 quarter. Planning has been completed for the infill drilling of the remaining seven Pit Shells 6, 9, 10, 11, 12, 13 and 15, requiring about 7,300 metres in 170 holes. Re-optimisation of the high-grade pits is planned to be undertaken on receipt of all data from the infill drill programs.

The first phase of resource definition drilling of part of the Company's significant calcrete areas located 30 kilometres north of Wingellina involved the drilling of 91 shallow holes during the quarter for 618 metres in total. Visually excellent quality calcrete of 3 metres to 6 metres thickness was intercepted in most of the holes. Analytical results to determine the suitability of the calcrete for acid neutralisation purposes are also expected to become available for reporting in the March 2020 quarter. Planning has been completed for drilling out of the remaining calcrete areas requiring about 2,300 metres in 340 holes.

Targeted exploratory water bore drilling in a single reconnaissance hole was undertaken within the Mann Fault palaeovalley located about 15 kilometres northwest of Wingellina. Air lifting yielded flow rates of 7 litres to 8 litres per second (600 kilolitres per day to 700 kilolitres per day) and preliminary water quality analysis indicated salinities of the order of 1,300 mg/L. The results confirm the nearby Mann Fault palaeovalley as a potential viable source of relatively good quality water for the start-up of future development and site works requirements.

## CORPORATE

### CASH AND WORKING CAPITAL

Closing cash and working capital at 31 December 2019 was \$32.3M including \$43.7M cash (\$63.1M and \$50.9M respectively at the end of the previous quarter).

The outstanding principal under the Citibank loan facility at 31 December 2019 was \$34 million.

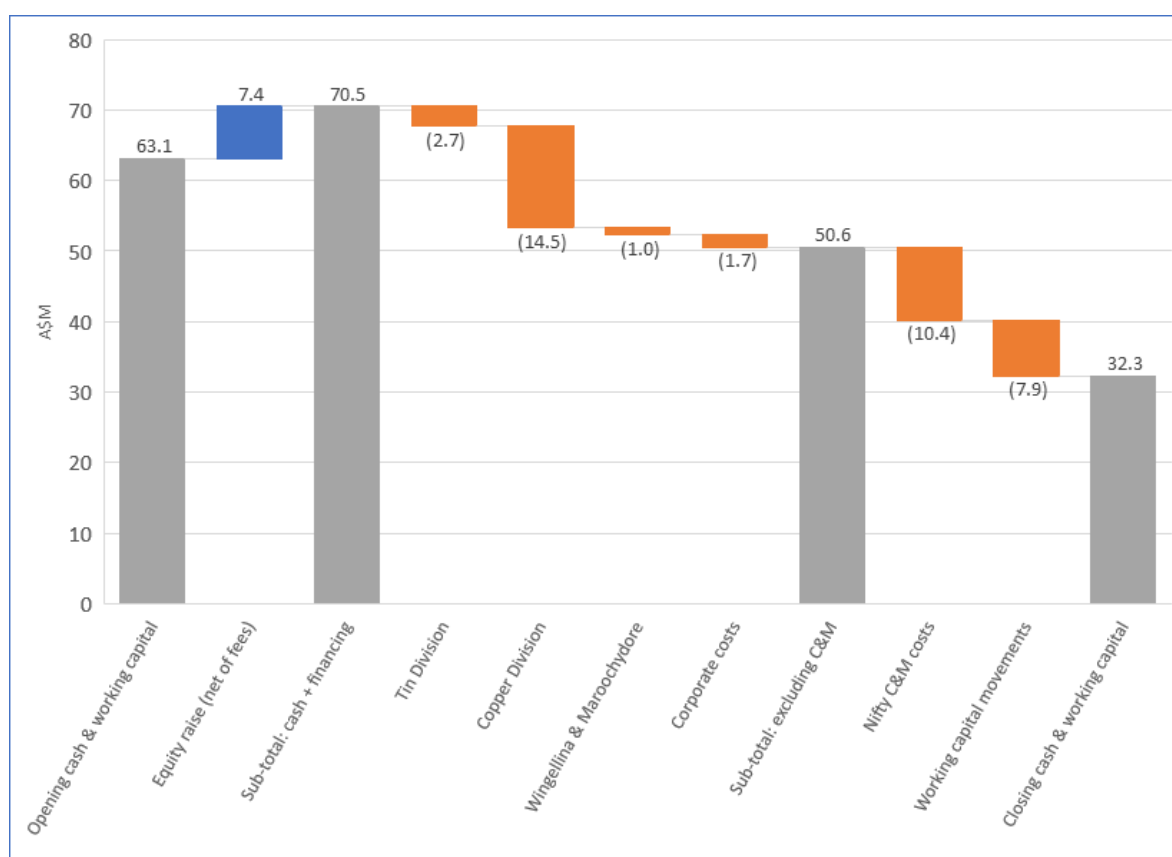


FIGURE 4 - DECEMBER 2019 QUARTER CASH & WORKING CAPITAL MOVEMENTS

Note: working capital movement of (\$7.9M) consist of:

- (\$20.1M) relating to a change in debtors & stocks;
- \$7.6M relating to the reclassification from non-current to current liability associated with the Citi Loan Facility;
- \$4.6M relating to payout of leave entitlements on redundancy;

### RESIGNATION AND APPOINTMENT OF DIRECTORS

At the commencement of the Company's Annual General Meeting on 24 October 2019, Mr Peter Newton resigned as Non-Executive Chairman of the Company.

Following the conclusion of the Annual General Meeting, and with effect 24 October 2019, Mr Simon Heggen, a Non-Executive Director of the Company since 2012, was elected as Non-Executive Chairman and Mr Brett Lambert, Mr Tony Polglase and Mr Patrick O'Connor were appointed to the Board as independent Non-Executive Directors (refer to ASX Announcement dated 24 October 2019).

On 3 December 2019 the Company announced the election of Mr Patrick O'Connor, previously Non-Executive Director, as Non-Executive Chairman, the resignation as directors of Mr Simon Heggen and Mr Damien Marantelli (effective 3 December 2019) and the appointment of Mr Brett Smith as a Non-Executive Director effective immediately. Mr Marantelli was noted as remaining in the Chief Executive Officer role for a period of transition. Mr Yimin Zhang was noted as having stated his intention to retire.

On 18 December 2019 the Company announced the appointment of Mr Patrick O'Connor as Executive Chairman to assist in the resolution of ongoing strategic reviews.

Subsequent to the end of the quarter, on 13 January 2020 Mr Yimin Zhang, Jinchuan's representative on the Board, resigned as a Non-Executive Director and Jinchuan nominee Mr Xingwang Bao was appointed as Non-Executive Director (refer to ASX Announcement 13 January 2020).

The current incumbent directors of the Board are:

- Mr Patrick O'Connor – Executive Chairman
- Mr Brett Lambert – Independent Non-Executive Director
- Mr Tony Polglase - Independent Non-Executive Director
- Mr Brett Smith – Non-Executive Director
- Mr Xingwang Bao – Non-Executive Director

## HEDGING

In conjunction with the \$35 million Citi loan facility (refer to ASX Announcement 18 September 2019) the Company has entered into a tin forward hedge programme. Hedges at 31 December 2019 were 2,970t with an average price of \$25,075 per tonne of tin.

## ISSUED CAPITAL

As at the date of this quarterly the Company has the following equities on issue (refer to Appendix 3B, lodged 21 January 2020):

Fully Paid Ordinary Shares:	907,266,067
Unlisted Employee Options (\$1.32, expiry 30/11/2020):	5,650,000
Unlisted Employee Options (\$0.54, expiry 22/01/2022):	1,000,000
Unlisted Employee Options (\$0.56, expiry 22/01/2023):	1,000,000
Unlisted Employee Options (\$0.58, expiry 22/01/2024):	1,000,000
Unlisted Employee Options (subject to service and performance hurdles, expiry 30/6/2022):	955,707
Unlisted Employee Options (subject to service and performance hurdles, expiry 30/6/2023):	955,707
Unlisted Employee Options (subject to service and performance hurdles, expiry 30/6/2024):	12,299,208

## MAJOR SHAREHOLDERS

The current major shareholders of the Company are:

- APAC Resources (HKEX:1104) 15.31%
- L1 Capital Pty Ltd 13.39%
- IOOF Holdings Limited 6.62%

## COMPLIANCE STATEMENTS

The information in this report that relates to Exploration Results for the Renison Tin Operations has been compiled by BMTJV technical employees under the supervision of Mr Colin Carter B.Sc. (Hons), M.Sc. (Econ. Geol), MAusIMM. Mr Carter is a full-time employee of BMTJV and has sufficient experience which is relevant to the style 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 Carter consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Results for the Nifty Copper Operations and Wingellina Nickel-Cobalt Project is compiled by Metals X technical employees and contractors under the supervision of Mr. Simon Rigby B.Sc. (Hons), who is a member of the Australian Institute of Geoscientists. Mr Rigby 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 Rigby consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

# APPENDIX 1 – DRILLING RESULTS

## COPPER DIVISION

Drilling results for the Nifty Copper Operations for the quarter are presented in Table 6.

TABLE 6: SIGNIFICANT UG DRILLING RESULTS FOR NIFTY COPPER OPERATIONS – DECEMBER 2019 QUARTER

Region / Lode	Hole	Intercept North	Intercept East	Intercept RL	Intercept (True Width)	From (m)	Dip	Azi
GC 190-193 PQRS Stopes	NUG0599A	352098	7604060	19	8.3m at 1.99% Cu	0.0	-82	123
					14.2m at 2.04% Cu	16.6		
					12.2m at 3.3% Cu	50.0		
GC 190-193 PQRS Stopes	NUG0602	352103	7604058	19	15.4m at 1.78% Cu	15.5	-76	108
GC 190-193 PQRS Stopes	NUG0604	352095	7604038	20	9.25m at 2.31% Cu	1.6	-74	109
					16.1m at 2.43% Cu	16.8		
180-195 - Region 4	NUG0694	352401	7604300	10	No Significant Intercept		11	261
180-195 - Region 4	NUG0695	352401	7604300	10	4.2m at 1.06% Cu	221.0	15	263
					3.5m at 2.3% Cu	284.4		
180-195 - Region 4	NUG0696	352401	7604300	10	11.4m at 1.63% Cu	242.0	20	267
180-195 - Region 4	NUG0698	352401	7604300	10	15.8m at 2.23% Cu	120.0	22	240
					9.1m at 1.76% Cu	165.0		
					3m at 4.04% Cu	195.0		
180-195 - Region 4	NUG0699	352401	7604300	10	24.1m at 2.12% Cu	131.4	21	249
					4.4m at 1.9% Cu	191.0		
					5.1m at 1.6% Cu	204.0		
					4.6m at 2.11% Cu	216.4		
GC 16 LMN Stopes	NUG0702	352090	7604028	20	11.4m at 1.43% Cu	1.0	-70	112
					19.2m at 2.07% Cu	17.7		
GC 16 LMN Stopes	NUG0714	352073	7603981	25	No Significant Intercept	6.0	57	113
Region 6 - MCU	NUG0759	352800	7603695	-89	No Significant Intercept	62.0	-14	25
Region 6 - MCU	NUG0760	352800	7603695	-90	15.8m at 1.11% Cu	52.3	-52	55
Region 6 - MCU	NUG0761	352799	7603694	-90	7.1m at 3.17% Cu	69.9	-90	25
Region 6 - MCU	NUG0762	352798	7603690	-90	13m at 1.85% Cu	64.7	-65	205
Region 4 - MCU	NUG0763	352798	7603690	-90	11m at 1.51% Cu	130.5	-46	205
					10.8m at 1.36% Cu	147.3		
Region 6 - MCU	NUG0768	352814	7603678	-90	6.55m at 2.17% Cu	58.0	-66	205
					3.05m at 2.37% Cu	75.5		
Region 4 - LCU	NUG0769	352814	7603677	-90	4m at 2.49% Cu	151.0	-47	205
19 FWD East - Remnants	NUG0776	352679	7603928	-68	No Significant Intercept	9.0	45	205
19 FWD East - Remnants	NUG0777	352679	7603928	-69	No Significant Intercept	14.0	42	225
19 FWD East - Remnants	NUG0778	352669	7603937	-69	5.2m at 1.28% Cu	16.0	39	205
Region 4 - MCU	NUG0783	352401	7604302	12	8.2m at 1.12% Cu	170.4	33	256
					2.5m at 2.15% Cu	203.0		
180-195 - Region 4	NUG0784	352401	7604302	11	2.1m at 1.67% Cu	208.3	31	262
Region 4 - LCU	NUG0785	352401	7604302	11	3m at 1.23% Cu	242.5	12	268
Region 4 - MCU					2.1m at 1.76% Cu	313.0		
					7.2m at 1.26% Cu	333.7		
					3.8m at 3.04% Cu	363.0		
180-195 - Region 4	NUG0786A	352401	7604302	10	2m at 2.92% Cu	228.0	19	239
17 V210 GC	NUG0787	352342	7604145	27	9.9m at 1.43% Cu*	2.0	-20	25
					8m at 3.36% Cu*	19.0		
17 V210 GC	NUG0788	352353	7604140	28	12.85m at 2.47% Cu*	4.2	-11	25
					6.45m at 1.78% Cu*	20.0		
17 V210 GC	NUG0789	352353	7604140	27	19.5m at 2.48% Cu	0.0	-37	25
17 V210 GC	NUG0790	352365	7604133	27	6.4m at 1.64% Cu	3.4	-27	25
					5.6m at 2.59% Cu	25.3		
17 V210 GC	NUG0791	352376	7604128	28	36.8m at 1.8% Cu*	0.0	-11	25
17 V210 GC	NUG0792	352386	7604118	29	11.45m at 1.99% Cu*	2.7	10	25
17 V210 GC	NUG0793	352386	7604118	27	12.1m at 1.99% Cu	0.0	-39	25
17 V210 GC	NUG0794	352397	7604113	29	3m at 2.88% Cu*	3.0	9	46



Region / Lode	Hole	Intercept North	Intercept East	Intercept RL	Intercept (True Width)	From (m)	Dip	Azi
17 V210 GC	NUG0795	352397	7604113	28	31.1m at 2.62% Cu*	2.9	-15	25
17 V210 GC	NUG0796	352397	7604113	28	11m at 2.14% Cu*	0.0	-22	46
17 V210 GC	NUG0797	352406	7604108	29	No Significant Intercept	22.1	14	46
17 V210 GC	NUG0798	352406	7604107	28	10.7m at 1.34% Cu	0.0	-52	70
Region 6 - MCU	NUG0808	352880	7603629	-87	4.6m at 1.35% Cu	77.9	-30	25
Region 6 - MCU	NUG0809	352880	7603629	-87	4.9m at 1.67% Cu	78.0	-39	25
Region 6 - MCU	NUG0810	352880	7603629	-88	3.5m at 1.72% Cu	84.0	-59	25
Region 6 - MCU	NUG0811	352880	7603629	-88	3.2m at 1.68% Cu	91.7	-72	25
Region 6 - MCU	NUG0812	352879	7603628	-88	8.5m at 1.34% Cu	95.5	-85	25
Region 6 - MCU	NUG0813	352879	7603627	-88	3.3m at 1.8% Cu	83.0	-85	204
Region 6 - MCU	NUG0814	352879	7603627	-88	No Significant Intercept		-73	205
Region 6 - MCU	NUG0815	352878	7603625	-88	No Significant Intercept		-63	205
Region 4 - MCU	NUG0816	352878	7603625	-87	No Significant Intercept		-51	205
Region 6 - MCU	NUG0817	352864	7603642	-88	4.6m at 1.65% Cu	76.0	-35	26
Region 6 - MCU	NUG0818	352864	7603642	-88	5.8m at 1.32% Cu	76.0	-45	26
Region 6 - MCU	NUG0819	352864	7603642	-88	3.9m at 6.58% Cu	81.0	-61	26
Region 6 - MCU	NUG0820	352863	7603642	-88	2.9m at 1.59% Cu	92.0	-75	26
Region 6 - MCU	NUG0821	352863	7603640	-88	11.9m at 1.01% Cu	78.0	-87	25
Region 6 - MCU	NUG0822	352862	7603639	-88	No Significant Intercept		-82	202
Region 6 - MCU	NUG0823	352862	7603639	-88	11.2m at 0.9% Cu	91.6	-68	205
Region 6 - MCU	NUG0824	352862	7603638	-88	No Significant Intercept		-57	205
Region 4 - MCU	NUG0825	352862	7603638	-87	No Significant Intercept		-46	205
Region 6 - MCU	NUG0828	352848	7603655	-89	6.7m at 3.1% Cu	76.8	-65	25
17 V210 GC	NUG0842	352396	7604112	29	11.6m at 1.52% Cu	0.0	-49	45
17 V210 GC	NUG0844	352375	7604126	28	7.6m at 1.6% Cu	0.0	-43	25
					9.5m at 1.92% Cu	17.1		
17 V210 GC	NUG0845	352375	7604126	28	17.1m at 1.59% Cu*	1.9	10	25
					14.1m at 2.74% Cu*	34.4		
17 V210 GC	NUG0846	352365	7604133	28	16.4m at 1.18% Cu*	2.0	-9	25
17 V210 GC	NUG0847	352341	7604144	28	41.1m at 2.91% Cu*	0.0	-7	25
17 V210 GC	NUG0848	352334	7604147	28	40m at 1.78% Cu*	1.0	-12	25
					5.1m at 3.32% Cu*	48.0		
17 V210 GC	NUG0849	352329	7604149	28	11.8m at 1.36% Cu	0.0	-23	25
					3m at 3.5% Cu	42.7		
Region 3 Vent (Sterilisation)	NUG0850	352594	7603569	-139	No Significant Intercept		-31	205
Region 3 Vent (Sterilisation)	NUG0851	352594	7603569	-139	No Significant Intercept		-47	205
Region 3 Vent (Sterilisation)	NUG0852	352594	7603569	-138	No Significant Intercept		-16	205
Region 3 Vent (Sterilisation)	NUG0853	352594	7603569	-139	No Significant Intercept		-68	205
Region 3 Vent (Sterilisation)	NUG0854	352594	7603569	-138	No Significant Intercept		1	204
Region 3 Vent (Sterilisation)	NUG0855	352594	7603569	-138	No Significant Intercept		12	205
Region 3 Vent (Sterilisation)	NUG0856	352594	7603569	-136	No Significant Intercept		18	205
Region 3 Vent (Sterilisation)	NUG0857	352592	7603569	-139	No Significant Intercept		-46	240
17 V210 GC	NUG0861	352395	7604114	29	15.7m at 2.1% Cu*	8.2	3	25
17 V210 GC	NUG0862	352386	7604119	28	21.4m at 1.78% Cu*	1.0	-27	25
17 V210 GC	NUG0863	352386	7604118	28	18.85m at 1.98% Cu*	0.8	-16	25
17 V210 GC	NUG0864	352386	7604118	29	14.2m at 2.93% Cu*	1.9	-5	25
17 V210 GC	NUG0865	352386	7604118	29	6.1m at 1.22% Cu*	1.6	4	25
					7.6m at 1.22% Cu*	27.0		

Notes to table:

- Widths are true unless marked with \*
- Grid is MGA94
- Significant = >0.5% Cu.

## TIN DIVISION

Drilling results for the Renison Tin Operations for the quarter are shown in TABLE 7.

**TABLE 7: SIGNIFICANT UNDERGROUND DRILLING RESULTS FOR RENISON TIN OPERATIONS – DECEMBER 2019 QUARTER**

Code	Hole	Intercept N	Intercept E	Intercept RL	Intercept (True Width)	From (m)	To	Dip	Azi
A5	U6960	66353	44707	1043	1.1m @ 2.28% Sn & 0.04% Cu	107.0	108.4	-63	252
A5	U6960	66352	44705	1040	2.1m @ 1.15% Sn & 0.12% Cu	110.5	113.2	-63	252
A5	U6960	66347	44686	999	5.4m @ 2.4% Sn & 0.03% Cu	156.0	163.5	-63	252
B50	U6960	66346	44682	989	8.4m @ 2.03% Sn & 0.09% Cu	167.0	184.0	-63	252
B50	U6960	66342	44668	959	7.2m @ 2.18% Sn & 0.24% Cu	201.0	212.0	-63	252
B50	U6960	66340	44662	945	2.4m @ 1.02% Sn & 0.1% Cu	216.0	220.0	-63	252
A5	U6954	66447	44728	1031	0.8m @ 1.3% Sn & 0.04% Cu	110.7	111.9	-78	243
B50	U6954	66434	44706	922	1m @ 1.57% Sn & 0.03% Cu	223.2	224.9	-78	243
A5	U7125	66473	44678	1037	0.8m @ 2.28% Sn & 0.07% Cu	126.0	127.0	-54	282
A5	U7125	66476	44665	1018	12m @ 5.15% Sn & 0.21% Cu	149.0	167.0	-54	282
A5	U6956	66417	44734	1028	1.6m @ 0.93% Sn & 0.04% Cu	117.6	120.5	-69	203
A5	U6956	66399	44727	978	2.4m @ 1.98% Sn & 0.17% Cu	171.0	174.1	-69	203
A5	U6956	66378	44717	919	1.6m @ 2.03% Sn & 0.18% Cu	235.0	237.0	-69	203
A5	U7115	66363	44695	1053	2.3m @ 3.34% Sn & 0.09% Cu	102.5	104.8	-56	265
A5	U7115	66362	44680	1031	2m @ 1.31% Sn & 0.1% Cu	128.8	130.8	-56	265
A5	U7115	66361	44668	1012	5.9m @ 1.57% Sn & 0.05% Cu	149.1	155.0	-56	265
A5	U7115	66360	44663	1004	8.8m @ 1.88% Sn & 0.08% Cu	156.0	168.0	-56	265
A5	U7115	66360	44656	994	1.2m @ 1.01% Sn & 0.04% Cu	173.7	175.0	-56	265
A5	U7117	66353	44676	1064	8.4m @ 1.83% Sn & 0.07% Cu	103.6	112.0	-44	259
A5	U7117	66349	44652	1041	6m @ 1.07% Sn & 0.07% Cu	138.0	144.0	-44	259
A5	U7117	66347	44644	1032	2.7m @ 0.92% Sn & 0.06% Cu	152.1	155.0	-44	259
A5	U7112	66377	44712	1045	2.2m @ 3.94% Sn & 0.52% Cu	102.5	104.7	-66	282
A5	U7112	66381	44696	1007	9.5m @ 4.58% Sn & 0.04% Cu	139.0	149.0	-66	282
A5	U7112	66382	44693	998	5.4m @ 1.07% Sn & 0.02% Cu	151.0	157.0	-66	282
A5	U7112	66385	44678	960	7.3m @ 1.22% Sn & 0.05% Cu	191.0	199.6	-66	282
A5	U7123	66455	44696	1055	5.7m @ 2.7% Sn & 0.13% Cu	96.7	102.5	-58	269
A5	U7123	66455	44662	1000	23.3m @ 2.76% Sn & 0.62% Cu	153.1	176.6	-58	269
A5	U7119	66349	44706	1002	1.8m @ 1.99% Sn & 0.06% Cu	145.0	147.0	-70	247
A5	U7119	66343	44691	956	4.1m @ 0.84% Sn & 0.06% Cu	192.0	198.0	-70	247
A5	U7119	66337	44676	912	15.9m @ 4.11% Sn & 0.11% Cu	233.0	251.0	-70	247
A5	U7118	66353	44697	1048	3m @ 5.35% Sn & 0.13% Cu	107.0	110.0	-58	254
A5	U7118	66347	44672	1006	7.9m @ 1.04% Sn & 0.12% Cu	153.0	161.0	-58	254
A5	U7118	66346	44667	997	7.5m @ 1.53% Sn & 0.07% Cu	163.4	171.0	-58	254
A5	U7114	66362	44668	1077	8.4m @ 1.4% Sn & 0.04% Cu	100.0	109.0	-36	266
A5	U7114	66360	44639	1055	3.4m @ 1.13% Sn & 2.69% Cu	140.6	144.0	-36	266
A5	U7114	66360	44632	1049	3.6m @ 6.4% Sn & 0.09% Cu	149.0	152.8	-36	266
A5	U7126	66517	44650	1005	2.2m @ 4.65% Sn & 0.08% Cu	176.5	179.0	-48	263
CFB	U7286	65999	44494	1482	5.2m @ 1.62% Sn & 0.45% Cu	23.2	29.0	38	90
A5	U7124	66455	44708	1050	2.2m @ 1.56% Sn & 0.08% Cu	96.7	99.1	-66	269
B50	U7124	66455	44672	967	1.6m @ 2.47% Sn & 0.39% Cu	187.0	188.9	-66	269
A5	U7111	66375	44703	1050	4m @ 2.66% Sn & 0.1% Cu	100.1	104.2	-60	279
A5	U7111	66378	44688	1024	8m @ 1.4% Sn & 0.05% Cu	128.0	136.0	-60	279
A5	U7111	66378	44683	1016	4m @ 1.19% Sn & 0.03% Cu	140.0	144.0	-60	279
A5	U7111	66381	44669	990	38.5m @ 3.13% Sn & 0.11% Cu	152.1	191.0	-60	279
A5	U7120	66413	44673	1021	10.1m @ 1.12% Sn & 0.04% Cu	142.2	152.0	-54	240
A5	U7120	66407	44663	1006	19.3m @ 6.47% Sn & 0.12% Cu	157.0	175.4	-54	240
A5	U7120	66403	44656	995	0.9m @ 3.53% Sn & 0.1% Cu	179.0	180.0	-54	240
A5	U7120	66401	44652	988	1m @ 3.29% Sn & 0.12% Cu	185.3	190.2	-54	240
A5	U7116	66364	44707	1041	5.7m @ 1.02% Sn & 0.05% Cu	106.0	111.9	-65	266
A5	U7116	66364	44694	1013	1m @ 5.16% Sn & 0.02% Cu	138.8	140.0	-65	266
A5	U7116	66364	44686	995	3.9m @ 1.06% Sn & 0.05% Cu	157.0	161.0	-65	266

Code	Hole	Intercept N	Intercept E	Intercept RL	Intercept (True Width)	From (m)	To	Dip	Azi
A5	U7116	66364	44683	986	10m @ 2.08% Sn & 0.11% Cu	162.0	175.0	-65	266
CFB	U7287	66020	44502	1478	13.3m @ 0.65% Sn & 0.39% Cu	27.0	41.0	24	91
A5	U6968	66276	44666	1038	2.7m @ 4.3% Sn & 0.11% Cu	167.0	169.9	-36	262
A5	U6968	66274	44640	1017	5.5m @ 1.58% Sn & 0.3% Cu	199.0	204.5	-36	262
CFB	U7285	65995	44508	1452	11.1m @ 1.04% Sn & 0.43% Cu	28.9	42.0	-17	90
CFB	U7282	65969	44509	1448	0.8m @ 5.5% Sn & 0.42% Cu	34.0	35.0	-25	90
CFB	U7284	65990	44492	1487	1.5m @ 3.39% Sn & 1.34% Cu	26.1	28.0	54	89
CFB	U7284	65990	44498	1495	0.8m @ 2.19% Sn & 0.13% Cu	37.0	38.0	54	89
CFB	U7289	66030	44475	1467	1m @ 1.73% Sn & 0.11% Cu	3.0	4.0	35	81
CFB	U7288	66034	44478	1460	1.4m @ 0.96% Sn & 0.19% Cu	6.0	9.0	50	-17
CFB	U7288	66046	44493	1454	1.7m @ 1.25% Sn & 0.1% Cu	26.8	31.0	50	-17
CFB	U7288	66049	44497	1452	1.4m @ 2.07% Sn & 0.83% Cu	34.8	38.0	50	-17
A5	U7088	66585	44641	1082	1.8m @ 1.3% Sn & 0.11% Cu	0.0	2.0	44	90
A5	U7089	66595	44635	1080	4.5m @ 2.52% Sn & 0.05% Cu	1.0	7.5	0	270
A5	U7089	66595	44625	1080	0.8m @ 2.75% Sn & 0.08% Cu	13.6	14.6	0	270
A5	U7253	66625	44625	1079	2.5m @ 1.73% Sn & 0.2% Cu	18.0	21.1	0	297
CFB	U7289A	66032	44485	1474	0.8m @ 3% Sn & 0.26% Cu	15.0	16.0	35	81
CFB	U7289A	66032	44489	1477	0.8m @ 3.98% Sn & 0.08% Cu	20.0	21.0	35	81
CFB	U7289A	66034	44498	1483	2.4m @ 1.99% Sn & 0.91% Cu	31.0	34.0	35	81
A5	U7080	66575	44626	1070	1.9m @ 2.88% Sn & 0.06% Cu	5.0	8.9	-31	328
A5	U7057	66495	44617	1077	2.3m @ 1.33% Sn & 0.16% Cu	0.0	4.1	1	270
A5	U7057	66495	11598	1077	8.6m @ 2.73% Sn & 0.06% Cu	13.8	29.0	1	270
A5	U7079	66576	44621	1082	10m @ 3.03% Sn & 0.08% Cu	0.0	25.0	21	270
A5	U7079	66576	44603	1089	1m @ 25.07% Sn & 0.11% Cu	29.6	32.0	21	270
A5	U7085	66585	44634	1078	1.4m @ 1.83% Sn & 0.09% Cu	0.0	2.0	0	270
A5	U7085	66585	44608	1078	1.5m @ 1.83% Sn & 0.04% Cu	26.0	28.2	0	270
A5	U7086	66585	44636	1076	0.9m @ 1.88% Sn & 0.05% Cu	0.0	1.0	-58	270
A5	U7086	66585	44630	1068	2.8m @ 1.11% Sn & 0.12% Cu	8.0	12.0	-58	270
A5	U7254	66610	44643	1076	1m @ 1.25% Sn & 0.06% Cu	2.6	4.0	-39	344
A5	U7259	66623	44628	1079	4.5m @ 2.73% Sn & 0.1% Cu	18.0	22.8	1	309
CFB	U7281	65945	44481	1463	0.8m @ 9.99% Sn & 0.04% Cu	4.6	5.8	-19	90
CFB	U7281	65945	44515	1451	0.9m @ 2.9% Sn & 0.08% Cu	41.0	42.0	-19	90
A5	U7246	66606	44627	1094	3m @ 8.04% Sn & 0.17% Cu	17.4	24.0	37	270
A5	U7247	66606	44641	1079	1.7m @ 1.15% Sn & 0.04% Cu	1.0	3.0	0	270
A5	U7247	66606	44637	1079	0.9m @ 5.76% Sn & 0.06% Cu	6.0	7.0	0	270
A5	U7247	66606	44623	1079	4.5m @ 4.58% Sn & 0.07% Cu	18.0	23.0	0	270
A5	U7070	66555	44621	1082	2.3m @ 1.27% Sn & 0.06% Cu	7.0	11.0	21	271
A5	U7070	66555	44601	1090	8.8m @ 4.02% Sn & 0.1% Cu	20.5	40.0	21	271
A5	U7062	66514	44622	1078	3.2m @ 2.51% Sn & 0.1% Cu	0.0	4.3	19	269
A5	U7062	66513	44608	1083	2.3m @ 3.33% Sn & 0.09% Cu	13.0	20.5	19	269
A5	U7062	66513	44599	1086	1.9m @ 2.38% Sn & 0.13% Cu	24.0	29.0	19	269
A5	U7265	66450	44598	1077	9.9m @ 2.93% Sn & 0.08% Cu	7.4	20.9	0	270
A5	U7265	66450	44587	1077	1m @ 3.1% Sn & 0.1% Cu	24.2	26.0	0	270
A5	U7264	66450	44608	1063	13m @ 3.32% Sn & 0.14% Cu	5.0	21.0	-71	270
A5	U7264	66450	44602	1045	0.9m @ 23.17% Sn & 0.61% Cu	30.8	31.9	-71	270
A5	U7064	66535	44616	1077	8.7m @ 4.27% Sn & 0.12% Cu	6.3	20.0	0	270
A5	U7064	66535	44596	1077	1m @ 3.01% Sn & 0.1% Cu	32.4	34.0	0	270
A5	U7268	66440	44600	1075	11.6m @ 2.14% Sn & 0.06% Cu	3.8	18.3	-8	270
A5	U7058	66495	44613	1080	2.7m @ 2.02% Sn & 0.07% Cu	4.0	9.7	22	270
A5	U7058	66495	44600	1085	6.6m @ 3% Sn & 0.11% Cu	14.0	28.1	22	270
A5	U7058	66495	44564	1099	2.2m @ 2.22% Sn & 0.22% Cu	57.9	61.1	22	270
A5	U7066	66514	44615	1077	3.1m @ 1.62% Sn & 0.06% Cu	5.0	10.8	1	271
A5	U7066	66515	44608	1077	2.7m @ 5.48% Sn & 0.12% Cu	13.0	18.1	1	271
A5	U7067	66545	44627	1069	10.1m @ 1.76% Sn & 0.09% Cu	2.0	14.4	-72	268
A5	U7266	66450	44605	1079	3.5m @ 1.26% Sn & 0.07% Cu	8.0	14.5	19	270

Code	Hole	Intercept N	Intercept E	Intercept RL	Intercept (True Width)	From (m)	To	Dip	Azi
A5	U7075	66565	44628	1078	1.1m @ 1.44% Sn & 0.06% Cu	0.0	2.0	2	270
A5	U7075	66565	44623	1078	1.2m @ 1.15% Sn & 0.04% Cu	5.0	7.0	2	270
A5	U7262	66460	44597	1076	11.4m @ 2.18% Sn & 0.06% Cu	10.0	24.6	1	270
A5	U7060	66505	44619	1079	3.1m @ 3.19% Sn & 0.14% Cu	0.0	4.8	20	270
A5	U7060	66506	44598	1086	2.8m @ 3.92% Sn & 0.12% Cu	22.0	28.0	20	270
A5	U7060	66505	44573	1096	1.6m @ 1.14% Sn & 0.13% Cu	49.0	54.3	20	270
A5	U7269	66440	44602	1081	1.4m @ 0.96% Sn & 0.06% Cu	8.7	11.0	26	270
A5	U7269	66440	44592	1086	2.5m @ 0.91% Sn & 0.08% Cu	17.0	24.6	26	270
A5	U7270	66430	44610	1066	14.5m @ 3.81% Sn & 0.11% Cu	0.2	19.0	-82	270
A5	U7270	66430	44607	1045	0.5m @ 10.08% Sn & 0.18% Cu	30.1	30.7	-82	270
A5	U7076	66565	44629	1075	3.5m @ 1.56% Sn & 0.07% Cu	0.0	3.7	-60	270
A5	U7076	66565	44624	1069	4.7m @ 4.66% Sn & 0.13% Cu	6.9	11.0	-60	270
A5	U7083	66575	44637	1081	1m @ 5.75% Sn & 0.26% Cu	0.0	1.0	0	90
A5	U7273	66420	44610	1071	6.2m @ 1.3% Sn & 0.05% Cu	3.0	9.4	-60	270
A5	U7273	66420	44602	1057	18.1m @ 4.46% Sn & 0.13% Cu	12.0	31.5	-60	270
A5	U6947	66541	44653	1007	3.8m @ 7.83% Sn & 0.11% Cu	169.7	177.2	-50	275
A5	U7271	66430	44608	1076	2.9m @ 1.49% Sn & 0.1% Cu	0.4	4.0	-1	269
A5	U7271	66430	44598	1076	3.1m @ 3.36% Sn & 0.07% Cu	12.3	17.3	-1	269
A5	U6678	66292	44671	985	6.3m @ 1.32% Sn & 0.07% Cu	197.0	203.4	-49	268
A5	U7077	66565	44639	1070	4m @ 3.05% Sn & 0.21% Cu	0.8	14.0	-55	90
A5	U7082	66575	44638	1078	0.8m @ 3.57% Sn & 0.26% Cu	0.0	1.0	0	90
A5	U7082	66575	44656	1078	1.2m @ 1.61% Sn & 0.07% Cu	17.7	19.4	0	90
A5	U7279	66400	44610	1076	2.2m @ 2.12% Sn & 0.28% Cu	4.0	6.5	-16	270
A5	U6977	66259	44699	1059	1.1m @ 3.13% Sn & 0.04% Cu	131.8	133.0	-37	251
A5	U6977	66251	44672	1036	1.5m @ 4.87% Sn & 0.08% Cu	168.5	170.0	-37	251
A5	U6977	66242	44641	1009	2.3m @ 6.81% Sn & 0.14% Cu	210.7	213.0	-37	251
A5	U7084	66584	44634	1080	1.9m @ 2.17% Sn & 0.09% Cu	0.0	4.0	22	270
A5	U7084	66585	44602	1093	1.9m @ 8.34% Sn & 0.08% Cu	35.2	38.2	22	270
A5	U7275	66420	44608	1077	5.1m @ 1.33% Sn & 0.07% Cu	1.4	8.0	1	271
A5	U7275	66420	44601	1077	1.2m @ 0.87% Sn & 0.07% Cu	11.4	13.0	1	271
A5	U7113	66378	44720	1038	6.1m @ 5.06% Sn & 0.28% Cu	105.6	112.0	-71	286
A5	U7054	66485	44607	1077	10m @ 3.29% Sn & 0.14% Cu	4.0	17.9	0	270
A5	U7065	66534	44621	1081	1.5m @ 2.11% Sn & 0.02% Cu	6.0	9.6	22	270
A5	U7065	66534	44612	1085	5m @ 2.76% Sn & 0.12% Cu	12.0	24.7	22	270
A5	U7316	66585	44599	1103	4m @ 4.12% Sn & 0.16% Cu	0.0	8.2	2	270
A5	U7317	66594	44629	1102	4.1m @ 2.48% Sn & 0.12% Cu	11.6	17.0	6	90
A5	U7278	66400	44614	1076	5.5m @ 3.33% Sn & 0.12% Cu	1.0	8.0	-37	271
A5	U7280	66391	44613	1076	5m @ 3.15% Sn & 0.1% Cu	0.6	6.0	-42	270
A5	U7319	66595	44602	1103	3m @ 5.54% Sn & 0.22% Cu	7.0	13.0	26	270
A5	U7069	66544	44634	1077	0.7m @ 1.52% Sn & 0.1% Cu	0.0	1.0	0	90
A5	U7069	66544	44642	1077	1.5m @ 1.34% Sn & 0.52% Cu	9.9	12.5	0	90
A5	U7069	66544	44647	1077	0.8m @ 3.08% Sn & 0.33% Cu	13.0	14.4	0	90
A5	U7271A	66430	44611	1076	1.7m @ 1.27% Sn & 0.06% Cu	0.0	2.3	-1	270
A5	U7320	66605	44621	1103	5.5m @ 1.96% Sn & 0.1% Cu	6.0	13.0	13	91
A5	U7320	66604	44635	1106	3.2m @ 4.48% Sn & 0.13% Cu	20.3	24.0	13	91
A5	U7059	66506	44621	1074	0.8m @ 2.06% Sn & 0.03% Cu	2.0	3.0	-57	270
A5	U7059	66506	44620	1072	3m @ 1.97% Sn & 0.05% Cu	4.0	8.0	-57	270
A5	U7059	66506	44615	1065	12m @ 4.25% Sn & 0.09% Cu	10.9	26.0	-57	270
A5	U7059	66506	44607	1052	1.6m @ 7.96% Sn & 0.08% Cu	27.0	29.6	-57	270
A5	U7053	66485	44618	1075	0.7m @ 6.28% Sn & 0.21% Cu	0.0	1.0	-63	273
A5	U7053	66485	44617	1073	6.8m @ 2.4% Sn & 0.12% Cu	2.0	10.4	-63	273
A5	U7053	66485	44612	1061	4.2m @ 2.32% Sn & 0.05% Cu	15.0	21.0	-63	273
A5	U7053	66485	44609	1055	1.4m @ 3.83% Sn & 0.1% Cu	22.0	24.8	-63	273
A5	U7053	66485	44604	1045	0.7m @ 7.61% Sn & 1.15% Cu	33.2	34.2	-63	273
A5	U7071	66555	44629	1078	3.5m @ 3.13% Sn & 0.09% Cu	0.0	5.0	5	270



Code	Hole	Intercept N	Intercept E	Intercept RL	Intercept (True Width)	From (m)	To	Dip	Azi
A5	U7071	66555	44622	1078	3.8m @ 2.16% Sn & 0.09% Cu	6.0	10.6	5	270
A5	U7071	66555	44605	1079	1.4m @ 2.76% Sn & 0.16% Cu	24.0	26.1	5	270
A5	U7063	66514	44625	1081	0.5m @ 2.04% Sn & 0.14% Cu	1.0	2.0	58	272
A5	U7063	66514	44624	1083	1m @ 1.14% Sn & 0.19% Cu	2.9	5.0	58	272
A5	U7063	66514	44620	1089	1m @ 1.86% Sn & 0.06% Cu	10.0	12.0	58	272
A5	U7061	66514	44623	1077	3.8m @ 1.55% Sn & 0.08% Cu	0.0	5.0	1	270
A5	U7061	66514	44613	1077	9.2m @ 4.17% Sn & 0.12% Cu	10.0	24.0	1	270
A5	U7056	66495	44619	1075	3.2m @ 2.19% Sn & 0.12% Cu	0.0	3.9	-50	271
A5	U7056	66495	44609	1062	5m @ 7.03% Sn & 0.14% Cu	17.5	23.5	-50	271
A5	U7056	66495	44604	1056	0.8m @ 1.53% Sn & 0.73% Cu	25.2	26.0	-50	271
A5	U7072	66555	44637	1073	0.8m @ 1.18% Sn & 0.03% Cu	4.0	6.0	-49	89
A5	U7072	66555	44639	1070	0.8m @ 1.31% Sn & 0.11% Cu	8.0	10.0	-49	89
A5	U7072	66555	44641	1068	1m @ 6.71% Sn & 0.27% Cu	11.0	14.0	-49	89
A5	U7072	66555	44643	1064	1m @ 2.26% Sn & 0.3% Cu	15.0	18.0	-49	89
A5	U7072	66555	44645	1061	0.5m @ 2.16% Sn & 0.03% Cu	19.0	20.0	-49	89
A5	U7055	66485	44617	1078	0.6m @ 4.12% Sn & 0.05% Cu	0.0	1.0	20	270
A5	U7055	66485	44610	1080	3.6m @ 3.45% Sn & 0.13% Cu	5.0	11.0	20	270
A5	U7055	66485	44600	1084	4.2m @ 2.02% Sn & 0.15% Cu	15.8	23.0	20	270
A5	U7274	66420	44607	1074	4.5m @ 1.45% Sn & 0.08% Cu	4.0	9.0	-19	270
A5	U7315	66584	44610	1105	2m @ 1.71% Sn & 0.05% Cu	0.6	2.0	50	90
A5	U7315	66584	44617	1113	5.7m @ 4.81% Sn & 0.49% Cu	10.0	15.8	50	90
A5	U7272	66430	44608	1078	1.1m @ 0.89% Sn & 0.07% Cu	1.0	3.9	17	270
A5	U7272	66430	44602	1080	2.8m @ 1.12% Sn & 0.06% Cu	6.6	11.0	17	270
A5	U7322	66605	44606	1104	1.2m @ 1.18% Sn & 0.05% Cu	3.0	6.0	26	270
A5	U7322	66605	44601	1106	1.7m @ 1.24% Sn & 0.19% Cu	8.0	12.0	26	270
A5	U7305	66465	44599	1098	6.6m @ 1.23% Sn & 0.05% Cu	0.0	8.0	5	270
A5	U7323	66615	44628	1107	0.9m @ 2.62% Sn & 0.54% Cu	18.0	19.0	23	91
A5	U7321	66605	44626	1121	1.6m @ 2.45% Sn & 0.1% Cu	20.0	21.8	54	89
A5	U7307	66495	44596	1098	1.8m @ 2.76% Sn & 0.04% Cu	5.0	7.0	1	270
A5	U7307	66495	44564	1099	1.6m @ 2.36% Sn & 0.18% Cu	37.0	38.8	1	270
A5	U7306	66480	44602	1098	3.1m @ 4.34% Sn & 0.1% Cu	0.2	4.0	0	269
A5	U7306	66480	44593	1098	4m @ 1.15% Sn & 0.11% Cu	9.0	14.0	0	269
A5	U7304	66455	44600	1098	4.2m @ 5.26% Sn & 0.12% Cu	1.0	6.0	7	270
A5	U7304	66455	44589	1100	3.3m @ 1.34% Sn & 0.05% Cu	10.0	14.0	7	270
A5	U7312	66515	44590	1098	4m @ 4.48% Sn & 0.1% Cu	4.0	9.0	0	269
A5	U7277	66410	44613	1072	6.7m @ 2.93% Sn & 0.05% Cu	2.0	9.0	-62	270
A5	U7277	66410	44603	1053	19m @ 1.74% Sn & 0.07% Cu	15.0	35.0	-62	270
A5	U7318	66595	44622	1118	1.6m @ 1.35% Sn & 0.99% Cu	14.8	18.0	57	90
A5	U7302	66445	44593	1099	3.8m @ 1.31% Sn & 0.08% Cu	4.9	12.4	10	270
A5	U7290	66295	44613	1056	2.8m @ 0.85% Sn & 0.06% Cu	78.2	81.0	17	145
A5	U7300	66430	44632	1118	7m @ 1.09% Sn & 0.06% Cu	27.3	34.4	36	90
LWD	U7130	67196	44516	1312	3m @ 4% Sn & 0.43% Cu	1.0	5.3	0	90
LWD	U7130	67196	44521	1312	3.9m @ 1.1% Sn & 0.1% Cu	5.3	11.0	0	90
LWD	U7131	67196	44513	1318	4.9m @ 2.57% Sn & 0.14% Cu	1.0	6.0	0	90
LWD	U7141	67223	44520	1310	2.3m @ 0.8% Sn & 0.23% Cu	0.0	4.5	0	90
LWD	U7141	67223	44542	1296	1m @ 3.76% Sn & 0.2% Cu	27.0	28.9	0	90
LWD	U7144	67237	44518	1307	1.6m @ 1.06% Sn & 0.16% Cu	0.9	10.0	-83	90
LWD	U7128	67195	44518	1304	3.5m @ 2.98% Sn & 0.2% Cu	3.2	15.2	-83	90
LWD	U7129	67196	44519	1308	5.9m @ 1.67% Sn & 0.27% Cu	0.7	14.0	-33	90
LWD	U7129	67195	44540	1299	3m @ 1.46% Sn & 0.28% Cu	24.0	36.2	-33	90
LWD	U7138	67216	44517	1310	1m @ 1.21% Sn & 0.15% Cu	0.0	1.5	0	90
LWD	U7133	67206	44520	1309	4.7m @ 1.74% Sn & 0.22% Cu	0.7	8.0	0	90
LWD	U7150	67253	44522	1310	4.1m @ 1.01% Sn & 0.12% Cu	0.0	9.0	0	90
LWD	U7146	67238	44519	1312	1.7m @ 1.54% Sn & 0.73% Cu	0.0	2.5	0	90
LWD	U7146	67238	44532	1312	0.7m @ 0.83% Sn & 0.07% Cu	14.0	15.0	0	90

Lode	Hole	Intercept N	Intercept E	Intercept RL	Intercept (True Width)	From (m)	To	Dip	Azi
LWD	U7149	67252	44517	1311	1m @ 1.07% Sn & 0.27% Cu	0.0	6.9	-83	90
LWD	U7149	67252	44519	1298	0.2m @ 1.26% Sn & 0.14% Cu	14.0	18.0	-83	90
LWD	U7132	67205	44516	1297	0.5m @ 5.14% Sn & 0.03% Cu	13.0	16.0	-80	91
LWD	U7145	67238	44519	1311	2m @ 1.38% Sn & 0.6% Cu	0.0	3.5	-33	90
LWD	U7145	67238	44529	1304	1.5m @ 1.81% Sn & 0.09% Cu	14.0	16.3	-33	90
A5	U6946	66548	44677	970	1.8m @ 3.04% Sn & 0.7% Cu	192.7	195.0	-61	278
LWD	U7159	67280	44512	1311	1m @ 4.68% Sn & 0.26% Cu	0.4	3.0	-79	90
LWD	U7159	67280	44513	1306	1m @ 0.83% Sn & 0.39% Cu	5.0	8.0	-79	90
LWD	U7159	67280	44514	1298	1.2m @ 0.99% Sn & 0.07% Cu	13.0	16.0	-79	90
LWD	U7154	67270	44515	1309	0.8m @ 1.48% Sn & 0.15% Cu	2.0	4.0	-84	90
LWD	U7160	67280	44513	1312	6m @ 1.48% Sn & 0.24% Cu	0.4	19.6	-35	90
LWD	U7161	67281	44512	1313	7m @ 1.24% Sn & 0.18% Cu	0.0	9.0	1	90
LWD	U7162	67280	44513	1319	5.4m @ 1.17% Sn & 0.15% Cu	0.0	5.9	51	90
LWD	U7164	67290	44510	1308	2.6m @ 1.18% Sn & 0.19% Cu	0.3	8.5	-86	90
LWD	U7164	67290	44511	1295	2.6m @ 1.87% Sn & 0.07% Cu	16.0	17.5	-86	90
LWD	U7165	67290	44512	1311	0.9m @ 1.41% Sn & 0.09% Cu	0.8	2.5	-36	90
LWD	U7155	67270	44521	1309	5.7m @ 1.94% Sn & 0.14% Cu	0.0	12.9	-28	90
LWD	U7156	67270	44518	1313	4.5m @ 2.01% Sn & 0.19% Cu	0.3	6.0	0	90
LWD	U7157	67270	44516	1320	6.4m @ 1.44% Sn & 0.18% Cu	0.0	6.9	58	90
LWD	U7167	67290	44516	1323	2.3m @ 1.26% Sn & 0.24% Cu	9.0	11.8	45	90
LWD	U7171	67300	44513	1313	2.5m @ 2.22% Sn & 0.17% Cu	3.9	7.0	-2	90
LWD	U7169	67300	44508	1311	0.7m @ 3.21% Sn & 0.94% Cu	1.0	3.0	-85	90
LWD	U7172	67300	44508	1317	3.2m @ 1.78% Sn & 0.05% Cu	0.0	4.0	1	270
LWD	U7183	67321	44514	1314	3.1m @ 3.21% Sn & 0.24% Cu	0.0	4.0	1	89
A5	U7326	66270	44781	1106	3.1m @ 0.8% Sn & 0.04% Cu	44.6	49.0	-50	219
A5	U7326	66225	44743	1034	0.8m @ 1.32% Sn & 0.68% Cu	137.2	139.5	-50	219
A5	U7122	66441	44711	1047	0.5m @ 1.94% Sn & 0.06% Cu	101.0	102.0	-66	248
A5	U7122	66435	44696	1005	1m @ 2.43% Sn & 0.04% Cu	146.0	148.0	-66	248
A5	U6982	66278	44779	1129	1.5m @ 1.11% Sn & 0.02% Cu	26.2	28.0	-25	237
A5	U6982	66172	44590	1019	2.2m @ 5.42% Sn & 0.11% Cu	269.0	272.0	-25	237
LWD	U7170	67300	44513	1309	0.8m @ 4.68% Sn & 0.08% Cu	6.0	9.2	-40	91
A5	U6983	66186	44621	1004	1.4m @ 5.77% Sn & 0.16% Cu	247.1	248.6	-32	235
LWD	U7181	67321	44509	1313	1.3m @ 3.07% Sn & 0.15% Cu	0.2	5.0	-85	270
B50	U7328	66261	44771	1003	1.8m @ 2.46% Sn & 0.08% Cu	142.1	144.2	-73	225
B50	U7328	66258	44767	987	1.9m @ 3.04% Sn & 0.34% Cu	158.7	161.0	-73	225
LWD	U7188	67330	44514	1312	0.9m @ 2.55% Sn & 0.22% Cu	0.0	4.0	-48	90

Notes to table:

- Widths are true; Coordinates are intersection; Grid is Renison Mine Grid.
- Significant = >4% Sn.
- NSI = No Significant Assays



Criteria	JORC Code explanation	Commentary
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• All core to be sampled was cut in half using a mechanical saw. It is not known if the core was consistently taken from the same side of the stick.</li> <li>• RC chip samples are collected via a cyclone which is cleaned with air blast between samples. The samples riffled to collect between 2 and 3kg. Most samples are dry with any moisture noted on the logs.</li> <li>• Field sub-sampling for chip samples appears appropriate as is the use of core cutting equipment for the submitted core. Procedures adopted in the laboratories are industry standard practises including that in the mine site facility.</li> <li>• In field riffles are cleaned between sampling using compressed air. The diamond cutting equipment is cleaned during the process using water. All laboratories adopt appropriate industry best practises to reduce sample size homogeneously to the required particle size.</li> <li>• No field duplicate information was observed.</li> <li>• The style of mineralisation and high sulphide content does not rely on grain size as being influential on grade. Thus there is confidence in the overall grade of the deposit being fairly represented by the sampling.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>• For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>• Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>• The assay techniques are appropriate for the determination of the level of mineralisation in the sample.</li> <li>• No geophysical tools were utilised to ascertain grade.</li> <li>• Standard and Blanks are included with all samples sent for analysis in the rate of between 1 in 20 and 1 in 30. The most recent reporting covering the majority of holes used in the estimate provide support for the quality of the Cu assays.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• The extensive data set has been reviewed by various parties including Maxwell Geoscience and DataGeo and the intersections within the mineralisation have been confirmed.</li> <li>• No twinned holes observed but there is a significant amount of closely spaced supportive drilling results.</li> <li>• Field data is captured electronically, validated by the responsible geologist and stored on corporate computer facilities. Protocols for drilling, sampling and QAQC are contained with the company operating manuals. The information generated by the site geologists is loaded into a database by the company database manager and undergoes further validation at this point against standard acceptable codes for all variables.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• The collar positions were resurveyed by the Company surveyor or their contractors from a known datum. The survey is on a known local grid with demonstrated control. The orientation and dip at the collars is checked (aligned) by the geologist and down hole recording of azimuth and dip are taken at 30m intervals on most occasions using appropriate equipment.</li> <li>• The regional grid is GDA94 Zone 50 and the drilling is laid out on a local grid.</li> <li>• Topographic control is from surface survey - note the deposit modelled is totally underground and is not influenced by surface topography.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>• The majority of drilling utilised is on 40m x 20m grid specifically targeting lithological and hence mineralisation sequence definition.</li> <li>• The geological sequence is well understood from the mining which supports the current drill spacing as adequate for both grade continuity assessment and lithological modelling</li> <li>• The sampling reflects the geological conditions. For mineral resource estimation a 1m composite length was chosen given that this is the dominant sample length in dataset.</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Given the shape of the sequence, the drilling as best as practically possible, is orientated to intersect the sequence perpendicularly. This is limited to drill sites from underground and surface.</li> <li>No sampling bias is considered to have been introduced.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>The samples once collected and numbered are stored in the lockable site core yard. Each sample bag is securely tied with the sample number on the bag and inside on metal tags transported by commercial contractors to Perth. Upon receipt at the laboratory the samples are checked against the dispatch sheets to ensure all samples are present.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>Resources and reserves are routinely reviewed by the Metals X Corporate technical team.</li> <li>Database management companies have over the past 2 years audited the drill hole database and found it representative of the information contained.</li> </ul>

## SECTION 2: REPORTING OF EXPLORATION RESULTS

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

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>The Nifty deposit is situated on mining lease M271/SA, which is 100% held by Nifty Copper Pty Ltd, a wholly owned subsidiary of Metals X.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>WMC Resources Ltd discovered Nifty in 1980 by using regional ironstone sampling and reconnaissance geology. Malachite staining of an outcrop and Cu-anomalous ironstones from dune swale reconnaissance sampling were the initial indicators. This was followed up by lag sampling on a 500 x 50m grid that detected a 2.5 x 1.5km Cu-Pb anomaly. Secondary Cu mineralisation was intersected in percussion drilling in mid-1981, with high grade primary ore (20.8m at 3.8% Cu) discovered in 1983. WMC commenced open pit mining of the secondary oxide ore in 1992 and continued mining until September 1998 when Nifty was sold to Straits Resources.</li> <li>The project was subsequently purchased from Straits Resources by Aditya Birla Minerals Ltd in 2003.</li> <li>Open pit mining ceased in June 2006.</li> <li>Copper extraction using heap leaching ceased in January 2009.</li> <li>Underground mining of the primary (chalcopyrite) mineralisation started in 2009.</li> <li>The project was purchased from Aditya Birla in 2016 by Metals X Ltd.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Nifty deposit is hosted within the folded late-Proterozoic Broadhurst Formation which is part of the Yeneena Group. The Broadhurst Formation is between 1000 m to 2000 m thick and consists of a stacked series of carbonaceous shales, turbiditic sandstones, dolomite and limestone. Structurally, the dominant feature is the Nifty Syncline which strikes approximately southeast-northwest and plunges at about 6-12 degrees to the southeast. The stratabound copper mineralisation occurs as a structurally controlled, chalcopyrite-quartz- dolomite replacement of carbonaceous and dolomitic shale within the folded sequence. The bulk of the primary mineralisation which is currently being mined is largely hosted within the keel and northern limb of the Syncline.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Refer to body of the Report for full drill hole information.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</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 style="list-style-type: none"> <li>Results are reported on a length weighted average basis.</li> <li>Results are reported above a minimum 2m @ 0.7% Cu with no top cut applied.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>Refer to body of the Report. All reported intersections are true width unless otherwise marked.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>NA</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>All drill holes have been reported.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>NA</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature &amp; scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Open pit and underground feasibility works;</li> <li>Validation drilling in areas of potential economic mineralisation;</li> <li>Infill drill areas of data paucity proximal to the underground development. This will increase resource confidence and resultant classifications.</li> <li>Validation of the underground void model.</li> </ul>

# TIN DIVISION

## INFORMATION MATERIAL TO UNDERSTANDING THE EXPLORATION RESULTS

THE INFORMATION IN THIS TABLE REFERS TO THE FOLLOWING PROJECTS AT THE RENISON TIN OPERATIONS: RENISON BELL, RENTAILS AND MT BISCHOFF

## SECTION 1 SAMPLING TECHNIQUES AND DATA

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

Criteria	JORC Code Explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <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>	<p><b>Diamond Drilling</b></p> <ul style="list-style-type: none"> <li>The bulk of the data used in resource calculations at Renison has been gathered from diamond core. Three sizes have been used historically NQ2 (45.1mm nominal core diameter), LTK60 (45.2mm nominal core diameter) and LTK48 (36.1mm nominal core diameter), with NQ2 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> <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. Face Sampling -Each development face / round is horizontally chip sampled at Renison. The sampling intervals are dominated by geological constraints (e.g. rock type, veining and alteration / sulphidation etc.). Samples are taken in a range from 0.3m up to 1.2m in waste. All exposures within the orebody are sampled. A similar process would have been followed for historical Mount Bischoff face sampling.</li> <li>There is no face sampling for the Rentails Project.</li> </ul> <p><b>Sludge Drilling</b></p> <ul style="list-style-type: none"> <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 64mm (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 Rentails Project.</li> </ul> <p><b>RC Drilling</b></p> <ul style="list-style-type: none"> <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> <li>There is no RC drilling for the Rentails Project.</li> </ul> <p><b>Percussion Drilling</b></p> <ul style="list-style-type: none"> <li>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 50mm 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.</li> <li>There is no percussion drilling for the Renison Project.</li> <li>There is no percussion drilling for the Mount Bischoff Project.</li> <li>All geology input is logged and validated by the relevant area geologists, incorporated into this is assessment of sample recovery. No defined relationship exists between sample recovery and grade. Nor has sample bias due to preferential loss or gain of fine or coarse material been noted.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc)</li> </ul>	<ul style="list-style-type: none"> <li>Diamond core is logged geologically and geotechnically.</li> <li>RC chips are logged geologically.</li> <li>Development faces are mapped geologically.</li> <li>Logging is qualitative in nature.</li> <li>All holes are logged completely, all faces are mapped completely.</li> </ul>

Criteria	JORC Code Explanation	Commentary
	<p>photography.</p> <ul style="list-style-type: none"> <li>The total length and percentage of the relevant intersections logged</li> </ul>	
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Drill core is halved for sampling. Grade control holes may be whole-cored to streamline the core handling process if required.</li> <li>Samples are dried at 90°C, then crushed to &lt;3mm. 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 pulverised 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>The un-sampled half of diamond core is retained for check sampling if required.</li> <li>For RC chips regular field duplicates are collected and analysed for significant variance to primary results.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <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, spectrometres, 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 style="list-style-type: none"> <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>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>All data is spatially oriented by survey controls via direct pickups by the survey department. Drillholes are all surveyed downhole, currently with a GyroSmart tool in the underground environment at Renison, and a multishot camera for the typically short surface diamond holes.</li> <li>All drilling and resource estimation is undertaken in local mine grid at the various sites.</li> <li>Topographic control is generated from remote sensing methods in general, with ground based surveys undertaken where additional detail is required. This methodology is adequate for the resource in question.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Drilling in the underground environment at Renison is nominally carried-out on 40m x 40m spacing in the south of the mine and 25m, x 25m 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 100m centres. This 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>



Criteria	JORC Code Explanation	Commentary
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Drilling intersections are nominally designed to be normal to the orebody as far as 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>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data</li> </ul>	<ul style="list-style-type: none"> <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
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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.</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>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <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>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <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 volcanoclastic rocks. At Renison there are three shallow-dipping dolomite horizons which host replacement mineralisation.</li> <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 volcanoclastic rocks. At Mount Bischoff folded and faulted shallow-dipping dolomite horizons host replacement mineralisation with fluid interpreted to be sourced from the forceful emplacement of a granite ridge and associated porphyry intrusions associated with the Devonian Meredith Granite, which resulted in the complex brittle / ductile deformation of the host rocks. Lithologies outside the current mining area are almost exclusively metamorphosed siltstones. Major porphyry dykes and faults such as the Giblin and Queen provided the major focus for ascending hydrothermal fluids from a buried ridge of the Meredith Granite. Mineralisation has resulted in tin-rich sulphide replacement in the dolomite lodes, greisen and sulphide lodes in the porphyry and fault / vein lodes in the major faults. All lodes contain tin as cassiterite within sulphide mineralisation with some coarse cassiterite as veins throughout the lodes.</li> <li>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.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>Refer to body of the report for full drill hole information.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <li>Results are reported on a length weighted average basis.</li> <li>Results are reported above a 4%<i>m</i> Sn cut-off.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>Interval widths are true width unless otherwise stated.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>No new discoveries reported.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Presented above.</li> <li>Excluded results are non-significant and do not materially affect understanding of the Renison deposit.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <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>	<ul style="list-style-type: none"> <li>No relevant information to be presented.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <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 style="list-style-type: none"> <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>