

# METALS X LIMITED - QUARTERLY REPORT

## FOR THE QUARTER ENDED 31 MARCH 2019



## HIGHLIGHTS

### CORPORATE

- ▶ Closing cash and working capital of \$74.3 million (\$74.7 million at end of previous quarter).
- ▶ Loading of a copper concentrate shipment of 3,890 tonnes of contained copper with a value of approximately \$31 million commenced on 31 March 2019 and was dispatched on 2 April 2019.
- ▶ Company-wide business improvement program initiated, resulting in identification and progress on a number of substantial opportunities. Nifty quarterly cash costs already reflecting the continuous improvement program.

### TIN DIVISION

- ▶ Record production of 2,061 tonnes of tin<sup>1</sup> contained in concentrate at an AISC of \$15,701 per tonne of tin (previous quarter 1,798 tonnes at \$17,436 per tonne).
- ▶ EBITDA of \$12.9 million and net cash flow of \$10.1 million (MLX 50% share) (previous quarter \$8.1 million and \$5.2 million respectively).
- ▶ Mine planning and development commenced for access to high-grade Area 5 target located proximal to existing development and mining areas.
- ▶ Further outstanding drilling results from grade control and extensional drilling programs in Area 5 and Leatherwood, including an exceptional intersection of 20 metres at 6.27% Sn. Substantial upside in both grade and tonnes to be reflected in next updated Mineral Resource estimate.

### COPPER DIVISION

- ▶ Production of 3,985 tonnes of copper contained in concentrate (previous quarter 5,177 tonnes).
- ▶ EBITDA of (\$5.2) million (previous quarter (\$6.2) million) reflecting reduced cost base.
- ▶ Focus on development both west and east of the Central Zone (historic mining area) at Nifty has opened up 6 new stoping areas which will be available for ore production during the June 2019 quarter.
- ▶ Continued definition of significant copper mineralisation in the down-plunge eastern extension of the Nifty orebody, adjacent to existing development and mining areas. Mineralisation extends more than 300 metres east of the Central Zone providing further upside to the already substantial resource base.
- ▶ Significant positive cultural change and strong engagement across all levels of the workforce.
- ▶ Comprehensive evaluation of the Nifty operation, including geological endowment, planning, infrastructure, cost base and operational constraints as part of the "Nifty Reset Plan" to provide a detailed plan of action to deliver a profitable operation.

### COMMENTARY

Managing Director Mr Damien Marantelli said, "The quarterly results at Renison were outstanding, providing strong cash flow and highlighting the significant opportunity to deliver further upside as we target higher grade zones within the mine such as Area 5 and Leatherwood.

"At Nifty, we continue to focus on the priorities of developing into new mining areas, removing operational constraints, reducing costs, increasing productivity and resolving legacy infrastructure and cultural issues. Although production for the quarter was disappointing, we are taking the critical steps that will drive improvements in the near term. Drilling results received during the quarter support our confidence that the existing resource base and geological potential of the deposit are substantial and that, once existing operational limitations are resolved, Nifty will be profitable. Progress on a "Reset Plan", which will outline the way forward for Nifty, is well advanced. The Plan will be released to the market in late April."

*Note: EBITDA is unaudited and a non-IFRS measure. \$ are AUD unless stated otherwise.*

*All numbers quoted are for the March 2019 quarter unless stated otherwise.*

*Renison data is 100% of the operation unless stated as 'MLX 50%' share.*

*1. Highest quarterly production since MLX acquisition of Renison.*



#### 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.

#### STRATEGY AND OPERATIONAL FOCUS

Renison is a world-class, long-life underground mining operation producing tin concentrate.

The strategy at Renison is to increase tin production by processing higher-grade feed while maintaining a 7-year Ore Reserve. In addition, a production expansion opportunity exists with the Rentails Project.

The operational focus at Renison has been:

- Commencing the development required to implement a staged improvement in ventilation in the Area 5 and Leatherwood mining areas to support access to higher grade mining zones; and
- Continuing resource definition drilling in Area 5 and the Leatherwood Trend, proximal to existing development, which provide the opportunity for increasing the grade of ore mined in the medium term.
- Optimising the new purpose-built three-stage crushing, screening and ore sorting plant. The plant is now fully operational and is meeting, and at times exceeding, design expectations;
- Focusing on the planning activities required to deliver opportunities to increase mine production and mill throughput to further capitalise on the substantial resource base at Renison;

Results for the quarter were at the upper end of overall guidance and reflected a 15% increase in tin production:

- Production of tin in concentrate of 2,061 tonnes of Sn (1,798 tonnes of Sn in the previous quarter);
- Increased grade of ore processed (1.46% Sn vs 1.33% Sn in the previous quarter);
- Continued outstanding exploration drilling results from Area 5 and Leatherwood (refer to ASX Announcement dated 11 February 2019), with development and mining studies having commenced.

#### PRODUCTION AND COSTS

TABLE 1: RENISON TIN OPERATIONS PRODUCTION AND COSTS – MARCH 2019 QUARTER

All \$ are AUD		March 2019 Quarter	Previous Quarter	Rolling 12-months
<b>Physical Summary</b>				
Ore mined	t ore	183,850	186,243	808,481
Grade of ore mined	% Sn	1.33%	1.25%	1.17%
Ore processed	t ore	188,358	186,330	3,753
Grade of ore processed	% Sn	1.46%	1.33%	1.28%
Recovery	% Sn	74.3%	72.3%	71.6%
Tin produced	% Sn	2,061	1,798	6,893
Tin sold	t Sn	2,251	1,650	6,867
Tin price	\$/t Sn	29,681	26,558	27,838
Realised tin price (net of TC/RC)	\$/t Sn	27,109	24,156	25,446
<b>Cost Summary</b>				
Mining	\$/t Sn	5,418	6,558	7,024
Processing	\$/t Sn	4,873	5,734	5,528
Administration	\$/t Sn	1,112	1,130	1,192
Stockpile adjustments	\$/t Sn	2,408	1,081	282
<b>C1 Cash Cost</b>	<b>\$/t Sn</b>	<b>13,810</b>	<b>14,502</b>	<b>14,026</b>
Royalties & other marketing costs	\$/t Sn	759	624	854
Sustaining capital	\$/t Sn	1,113	2,279	2,584
Reclamation & other adjustments	\$/t Sn	5	4	9
Corporate costs	\$/t Sn	14	27	29
<b>All-in Sustaining Costs (AISC)</b>	<b>\$/t Sn</b>	<b>15,701</b>	<b>17,436</b>	<b>17,502</b>
Project costs	\$/t Sn	1,528	919	1,549
Exploration costs	\$/t Sn	58	3	18
<b>All-in Costs (AIC)</b>	<b>\$/t Sn</b>	<b>17,287</b>	<b>18,358</b>	<b>19,069</b>
<b>Depreciation &amp; amortisation</b>	<b>\$/t Sn</b>	<b>3,542</b>	<b>4,181</b>	<b>4,127</b>

Ore mined for the quarter (183,850 tonnes) was lower than ore milled (188,358 tonnes), with the balance drawn from surface low grade stockpiles. The grade of ore mined during the quarter increased to 1.33% Sn (up from 1.25% Sn in the previous quarter), primarily due to improved grades from the Central Federal Bassett (CFB) stopes and development ore from Area 5 and Huon North. A further increase was achieved through the ore sorter with resultant mill feed grade of 1.46% (1.33% in the prior quarter).

The mill achieved higher recovery for the quarter (74.3% Sn versus 72.3% Sn in the previous quarter), with further opportunities identified for increased recovery.

Production and costs for the quarter were excellent at 2,061 tonnes of tin in concentrate at an AISC of \$15,701 per tonne of Sn (compared to the previous quarter production of 1,798 tonnes of tin contained in concentrate at an AISC of \$17,436 per tonne of tin). The operation achieved a margin of realised sales price over AISC of \$11,408 per tonne of tin for the quarter.

Increased production of tin for the quarter coincided with a rising tin price, with an average tin price for the quarter of \$29,681 per tonne of tin (compared to \$26,558 per tonne in the previous quarter). The Company will continue to focus on accessing additional high-grade ore, optimisation of the ore sorter and increases in both mill throughput and recovery, in order to further take advantage of the current high tin price environment.

Renison made a substantial contribution to Metals X for the quarter, with EBITDA of \$12.9 million (MLX 50% share) compared to the previous quarter of \$8.1 million. Net cash flow was \$10.1 million (MLX 50% share) compared to \$5.2 million for the previous quarter.

Guidance is unchanged for 2019 at 7,500 – 8,000 tonnes of tin in concentrate.

## **DEVELOPMENT ACTIVITIES FOR AREA 5**

Mine planning activities to identify the most efficient mining methods to capitalise on the high-grade Area 5 orebody were commenced during the quarter.

Development of the decline to access the high grade zone and additional development to allow an immediate upgrade of ventilation to support mining in the area continued across the period.

The ventilation upgrade is planned to be complete in the June 2019 quarter with access to first ore in late 2019.

## **RESOURCE DEFINITION DRILLING**

During the quarter a second underground diamond drilling rig was mobilised to Renison to enable continued targeting of highly prospective ore zones. A total of 93 holes for 11,096 metres were drilled during the period with the focus remaining on further delineating (grade control drilling) and expanding (resource definition drilling) resources in the Area 5, Deep Federal, Leatherwood and Huon North lodes.

Results from these campaigns are continuing to flow through with drilling continuing to demonstrate significant mineralization; in particular within holes targeting Area 5 and the Leatherwood trend which are upcoming production zones.

Full details of significant drill results received during the quarter are provided in Appendix 1. The most significant intercepts returned during the quarter included:

### From Area 5

- 15.8m at 2.91% Sn and 2.8m at 1.70% Sn in hole U6674;
- 12.5m at 5.14% Sn in hole U6806;
- 20.0m at 6.27% Sn in hole U6809;
- 20.2m at 2.97% Sn and 3.5m at 10.78% in hole U6805;
- 15m at 3.26% Sn and 8.8m at 2.84% Sn in hole U6792;
- 16.3m at 2.31% Sn in hole U6836; and
- 20.0m at 1.42% Sn in hole U6839.

### From Leatherwood

- 17.0m at 2.4% Sn in hole U6688; and
- 2.5m at 8.73% Sn and 1.5m at 6.93% Sn and 0.7m at 10.93% Sn in hole U6470.

In addition, drilling was undertaken within the CFB lower zone targeting grade continuity within the planned LCFB lower mining panel. Recent drill results have demonstrated continued strong mineralisation, including 3.9m at 1.23% Sn in hole U6720 and 2.5m at 3.24% Sn in hole U6733.

An updated Mineral Resource estimate for the Renison Operation, including the highly significant drilling results returned from the Area 5 and Leatherwood Trends over the past 9 months, is scheduled for completion during the June 2019 quarter.

Ongoing programs during the June quarter will include drilling at Area 5, Leatherwood and Huon North as well as testing conceptual targets at depth below Area 5. These conceptual targets are highly prospective and are based on updated geological interpretations which suggest that the No. 2 Dolomite, a favourable tin mineralisation host rock throughout the Renison deposit, is plunging down from Area 5 towards the geophysically modelled position of the Pine Hill Granite approximately 150-200m below (FIGURE 2). This granite intrusive is the likely metal source for the mineralising system and thus the intrusive contact with the dolomite is expected to result in the development of further high grade tin mineralisation.

## EXPLORATION

In addition to the excellent extensional drilling results being returned from the underground drilling programs, the Company believes there is high prospectivity for new discoveries with the broader Renison licence area and has commenced prioritising and investigating a number of identified targets.

During the quarter exploration activities focussed on the planned downhole electromagnetic survey (**DHEM**) in the Argent, South Bassett, North Federal and Lead-Blow target areas. This work included completion of various permitting requirements along with re-establishment of access tracks within the target areas and the commencement of drilling to clean-out and case selected drill holes in preparation for the DHEM survey.

In addition to this work, historic data compilation and 3D geological modelling was undertaken in support of additional targeting programs.

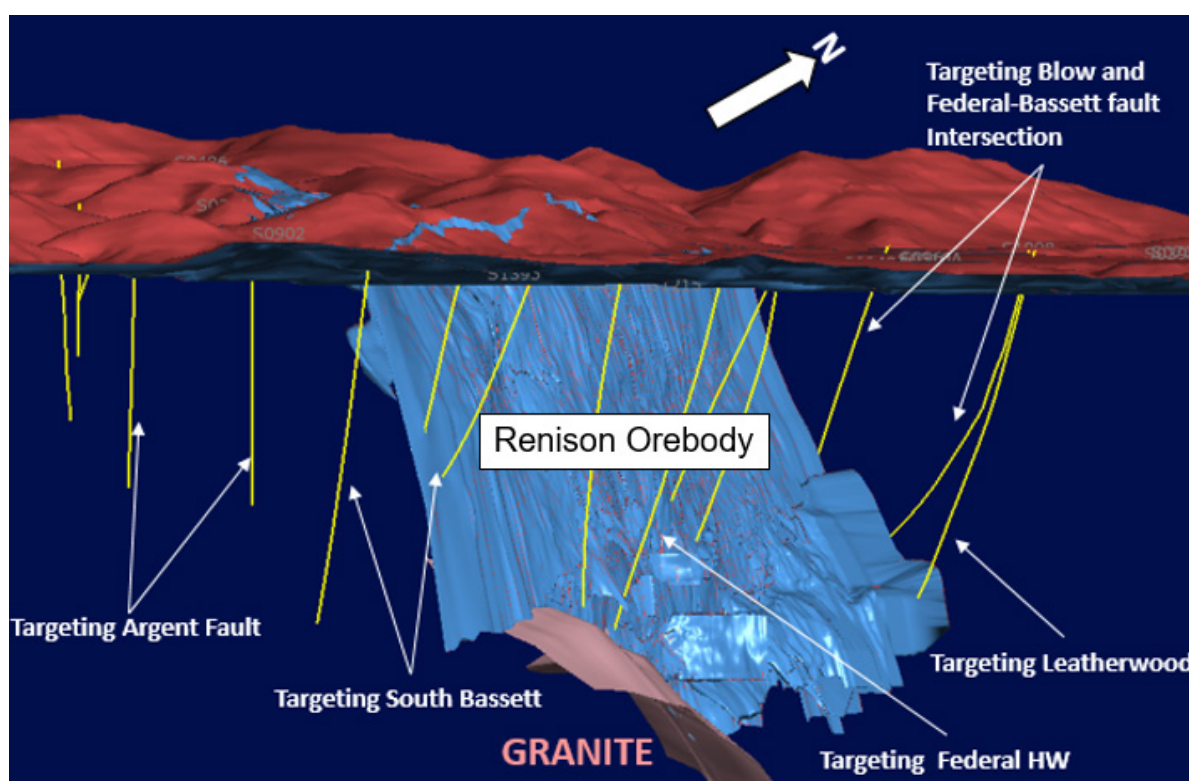


FIGURE 1. RENISON EXPLORATION – PRIORITY TARGET AREAS RELATIVE TO THE RENISON OREBODY SHOWING SELECTED HISTORIC DRILL HOLES (YELLOW) FOR DHEM SURVEY

## RENISON TAILINGS RETREATMENT PROJECT (RENTAILS)

The objective of the Rentails Project is to re-process the estimated 22.5 million tonnes of tailings at an average grade of 0.44% tin and 0.23% copper from the historical processing of tin ore. The current tailings dams have a Probable Ore Reserve containing approximately 99,000 tonnes of tin and 51,000 tonnes of copper.

The Rentails DFS proposes to retreat the historical tailings over an 11-year period at an average rate of 2 million tonnes per annum to produce approximately 5,400 tonnes of tin in a high grade tin fume product and 2,200 tonnes of copper in a high grade copper matte (refer to ASX announcement dated 3 July 2017).

The key Rentails Project activities during the quarter were the continuation of the environmental approvals process and some additional tin fuming testwork. Mining studies, with associated geochemical testwork, to produce a basis of design for tailings dam deconstruction and reconstruction were largely completed during the quarter.

The Company has received an extension of its timeline for lodgement of its Development Proposal and Environmental Management Plan (**DEMP**) with the Tasmanian Environment Protection Authority (**EPA**) to October 2019.



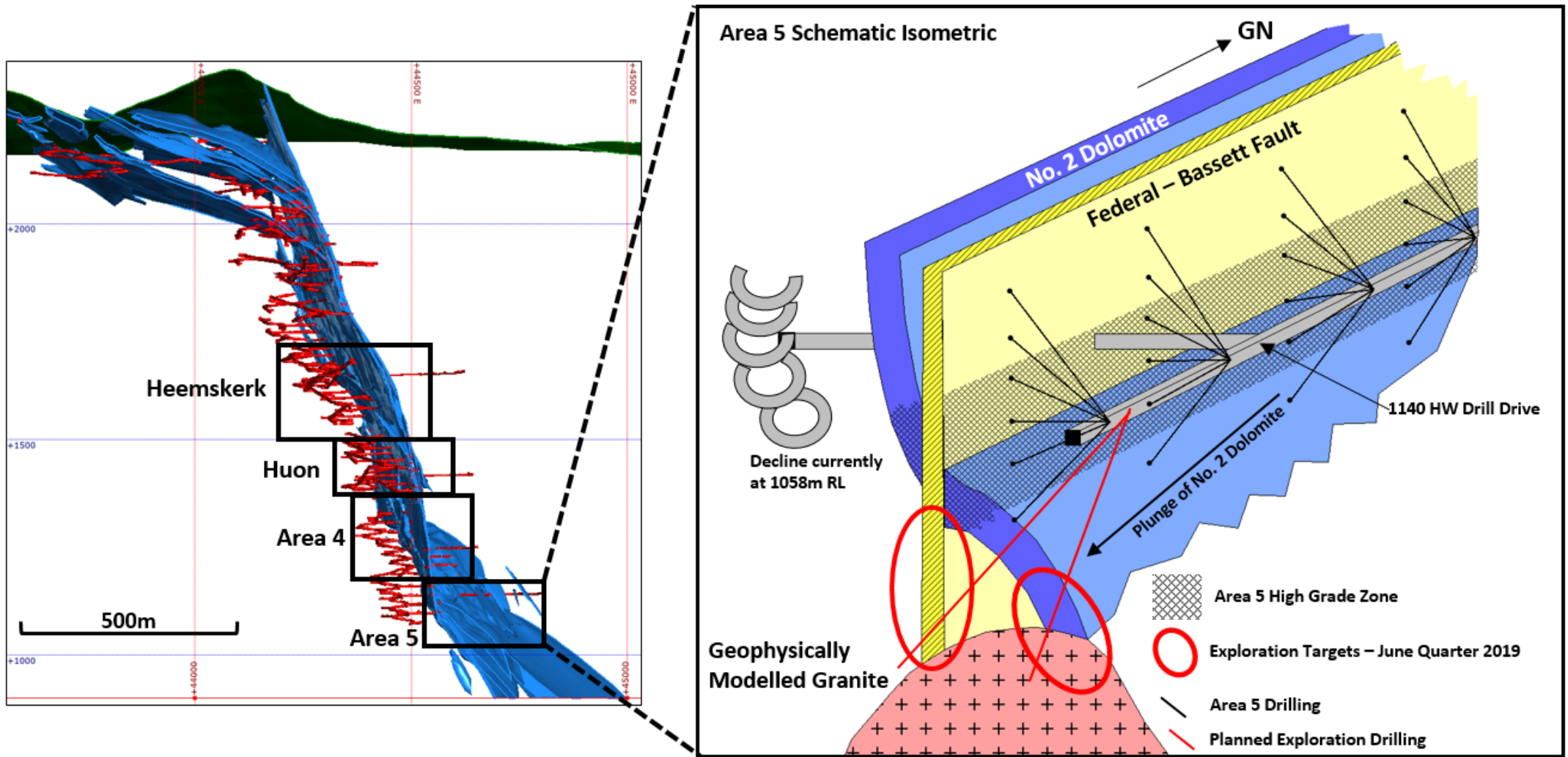


FIGURE 2. RENISON AREA 5 SCHEMATIC HIGHLIGHTING THE POSITION AND CONTROLS TO THE HIGH GRADE ZONE AND CONCEPTUAL EXPLORATION TARGETS TO BE TESTED DURING THE JUNE 2019 QUARTER

# 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.

### OPERATIONAL FOCUS

During the quarter a comprehensive evaluation of the Nifty operation was undertaken. The evaluation included geological endowment, the historical performance of the mine, the condition of the underground and surface infrastructure, the cost base, planning activities as well as operational and productivity constraints. The evaluation is being incorporated into a detailed plan of action ("Reset Plan") to transform Nifty into a long term, profitable operation.

In regard to geological potential, the Nifty deposit (and regional tenure) remains underexplored. Drilling results received during the quarter, and discussed in more detail below, support our view of the significant upside of the deposit. Underground drilling, including establishing drill drives to provide optimal angles for resource definition and extensional drilling, is a key activity for 2019.

The immediate focus at Nifty is to increase copper in concentrate production through the development and introduction of new mining areas outside of the Central Zone. Prior activities at Nifty have prioritised short term operational objectives ahead of the required development of new mining areas and associated underground infrastructure. These capital project imperatives are now being addressed.

The key activities for the quarter were:

- Continuing the recruitment and building of a higher capability Nifty mining team;
- Increasing development rates to target priority areas outside of the Central Zone;
- Identifying and progressively resolving operational inefficiencies and bottlenecks in the mine;
- Identifying and delivering sustainable cost reductions and improvements in inventory management;
- Optimising the mining fleet to build further on productivity improvements during the quarter;

### PRODUCTION AND COSTS

TABLE 2: NIFTY COPPER OPERATIONS PRODUCTION AND COSTS – MARCH 2019 QUARTER

All \$ are AUD		March 2019 Quarter	Previous Quarter	Rolling 12-months
<b>Physical Summary</b>				
Ore mined	t ore	283,680	372,749	1,396,022
Grade of ore mined	% Cu	1.45%	1.47%	1.35%
Ore processed	t ore	284,396	376,044	1,396,678
Grade of ore processed	% Cu	1.48%	1.49%	1.37%
Recovery	% Cu	94.4%	92.2%	92.2%
Copper produced	t Cu	3,985	5,177	17,690
Copper sold	t Cu	4,426	4,552	15,755
Copper price	\$/t Cu	8,722	8,587	8,710
Realised copper price (net of TC/RC)	\$/t Cu	7,676	7,557	7,739
<b>Cost Summary</b>				
Mining	\$/t Cu	4,103	4,843	4,433
Processing	\$/t Cu	2,757	2,139	2,442
Admin	\$/t Cu	1,218	902	1,098
Stockpile adjustment	\$/t Cu	26	18	4
<b>C1 Cash Cost</b>	<b>\$/t Cu</b>	<b>8,104</b>	<b>7,902</b>	<b>7,976</b>
Royalties & other marketing costs	\$/t Cu	822	811	810
Sustaining capital	\$/t Cu	587	1,384	1,245
Reclamation & other adjustments	\$/t Cu	3	2	4
Corporate costs	\$/t Cu	54	42	53
<b>All-in Sustaining Costs (AISC)</b>	<b>\$/t Cu</b>	<b>9,569</b>	<b>10,143</b>	<b>10,088</b>
Project costs	\$/t Cu	2,195*	-	494
Exploration costs	\$/t Cu	77	298	196
<b>All-in Costs (AIC)</b>	<b>\$/t Cu</b>	<b>11,840</b>	<b>10,441</b>	<b>10,778</b>
<b>Depreciation &amp; amortisation</b>	<b>\$/t Cu</b>	<b>1,161</b>	<b>1,166</b>	<b>1,066</b>

\* During the quarter, the Company amended its methodology of calculating project costs to include those costs at existing operations where the projects will materially increase future production. This has resulted in a reclassification of the costs of capital development to the new mining areas at Nifty from sustaining capital to project costs.

Key outcomes for the quarter were:

- Development of priority headings to new mining areas west, east and north of the Central Zone resulting in the establishment of 14 new stoping areas that will be available during the June quarter (compared to the March quarter during which only 8 stoping areas were available for operations);
- Development to the first stope in the western zone completed with initial slot preparation underway;
- Development of a new stoping panel in the New North East Limb (Region 5) area completed;
- Commencement of the second stope in the Eastern Zone (Region 6);
- Reduction in cash costs through the quarter with significant scope for ongoing reductions through the continuous improvement program;
- Improved copper recovery at 94.4% Cu (compared to 92.2% Cu in the previous quarter);
- Production of 3,985 tonnes of copper in concentrate lower than previous quarter (5,177 tonnes of copper).

Ore mined was lower for the quarter at 283,680 tonnes (previous quarter 372,749 tonnes) due to the combined impact of the focus on development outside of the Central Zone and production losses and inefficiencies associated with a variety of operational and legacy infrastructure issues.

Tropical Cyclone Veronica impacted the operation at the end of the quarter as a result of roads being closed and the port of Port Hedland experiencing delays in shipping schedules; this included a shipment of Nifty concentrate that was scheduled for departure during the last week of March but was delayed and left port during the first week of April.

C1 costs were \$8.6 million lower (\$32.3 million compared to \$40.9 million for the previous quarter) which reflected operational cost savings as well as the lower production rate for the quarter.

Sustaining capital and project costs were \$2,782 per tonne of copper (\$587/t Cu and \$2,195/t Cu respectively) compared to \$1,384/t Cu in the previous quarter. The increased capital cost was reflective of the continued investment at Nifty into mine development and critical infrastructure such as:

- Mine capital development: \$8.8M
- Mobile equipment rebuilds: \$1.2M
- Light vehicle replacements: \$0.7M
- Other infrastructure upgrades: \$0.4M

EBITDA (unaudited) for the quarter was (\$5.2) million (previous quarter (\$6.2) million) which, given the lower production for the quarter, reflected the reduction in operating costs at site.

## DEVELOPMENT AND MINING AREAS

A key focus for the quarter was development outside of the Central Zone at Nifty, into new production areas, with planned development rates being consistently achieved. The development focus has resulted in six new production areas being scheduled to become available during the current quarter, with a further eight new stopes within the Central Zone. The total of 14 scheduled new stopes for the current quarter is in comparison to the March Quarter during which only eight stopes were available, all of which were within the Central Zone.

FIGURE 3 and FIGURE 4 show the amount of development that has occurred in the West and East through the March 2019 quarter. The development activity has resulted in the first stope being available for production in the West (FIGURE 3) and a number of stopes starting to be available in the East (FIGURE 4)

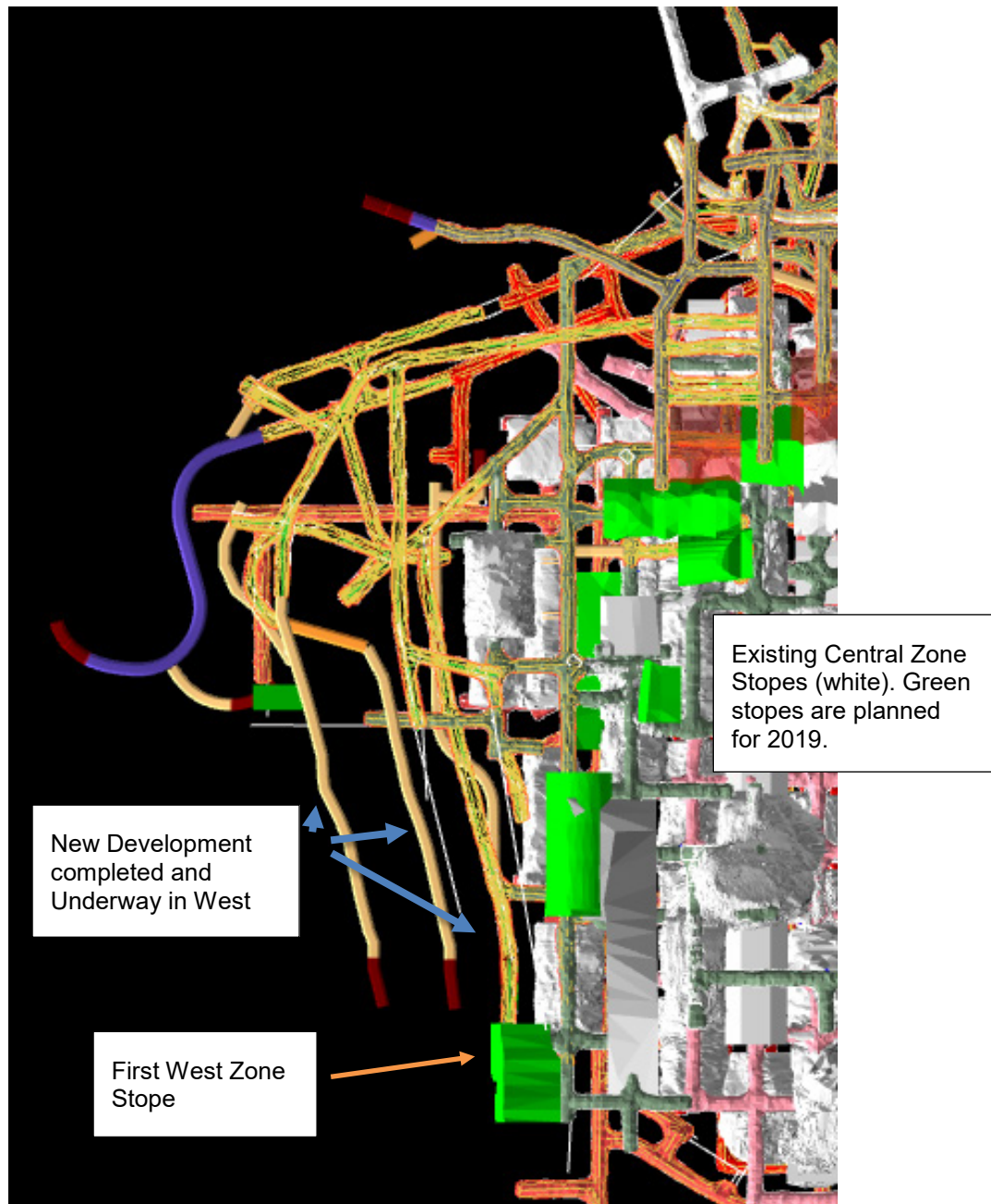


FIGURE 3. PLAN VIEW SHOWING NEW DEVELOPMENT AND PLANNED DEVELOPMENT IN THE WEST ZONE AT NIFTY



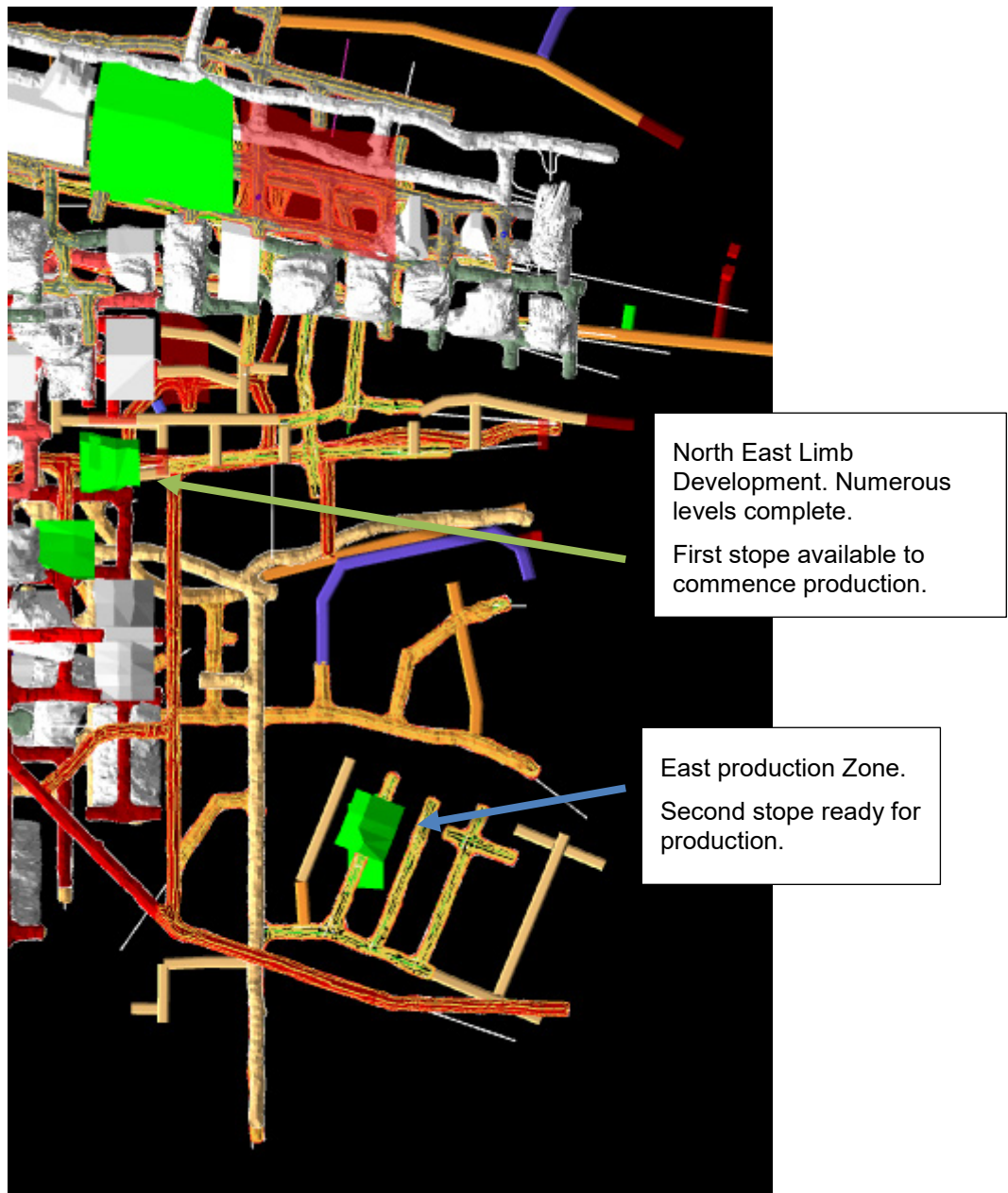


FIGURE 4. NEW DEVELOPMENT IN NORTH EAST AND EASTERN ZONES OF NIFTY

## RESOURCE DEFINITION DRILLING PROGRAMS

Grade control and resource definition drilling programs at Nifty were suspended during January and February to allow drilling results for the December 2018 quarter programs to be assessed and to allow for new drilling platforms to be established to service ongoing programs. Underground diamond drilling recommenced during March with an initial focus in Region 5 within the Northeast Limb (*FIGURE 4*).

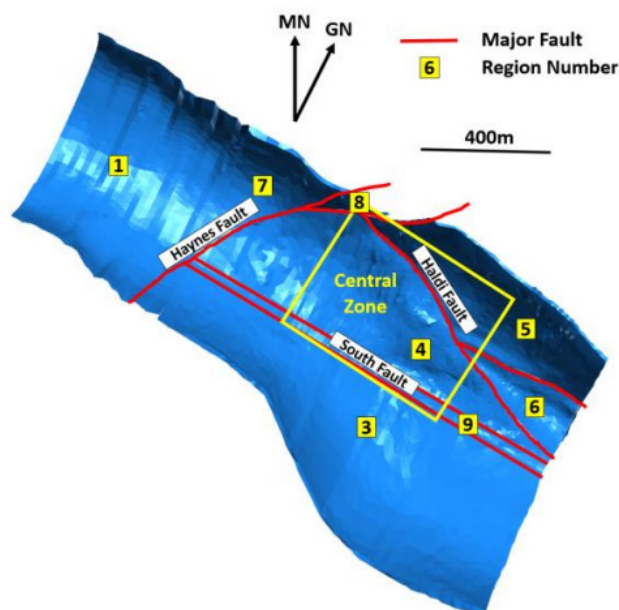


FIGURE 5. PLAN VIEW OF NIFTY DEPOSIT (MIDDLE CARBONATE UNIT SHOWN) HIGHLIGHTING “REGION” LOCATIONS

Assay results received during the quarter pertained to the last of the December 2018 drilling programs which have supported updates to the geological wireframes in Regions 4, 5, 6, 7, and 9 and are presented in Appendix 1.

Example significant drill intersections reported for the period include;

- 12.5m at 3.38% Cu in hole NUG0399;
- 4.0m at 7.82% Cu in hole NUG464;
- 10.8m at 2.82% Cu in hole NUG0441; and
- 12.4m at 1.85% Cu in hole NUG0533.

Importantly, further highly encouraging results have been returned from Region 9 which have both improved geological understanding around the South Fault, and further delineated high grade copper mineralisation (FIGURE 5).

In addition to the resource drilling programs, during the quarter the Company engaged a consultant structural geologist to assist with increasing geological understanding of the controls and distribution of higher-grade copper mineralisation within the Nifty deposit.

## NIFTY RESET PLAN

As part of an overall Company-wide business improvement program, Metals X has implemented the “Nifty Improvement Program”, a continuous improvement program which focusses on productivity and cost reduction initiatives across the site. The response from the workforce has been excellent, with a large number of initiatives currently being actioned and reflected in the cost performance for the quarter.

The Nifty Improvement Program is an important component of the greater “Nifty Reset Plan” (refer to previous announcement on 12 March 2019) which focuses on workforce culture, improved mine planning, underground development and infrastructure requirements, cost reductions and the production ramp-up in new mining areas required to achieve a sustainable and profitable operation. Progress on the Reset Plan is well advanced with further details planned to be provided to the market in late April 2019.

## REGIONAL EXPLORATION

Regional exploration activities during the March quarter focussed on data and prospect reviews utilising the extensive new drilling information collected during the 2018 field season. In addition, statutory reporting was undertaken along with detailed program planning for the 2019 field season. No new significant assay results were returned during the Quarter.

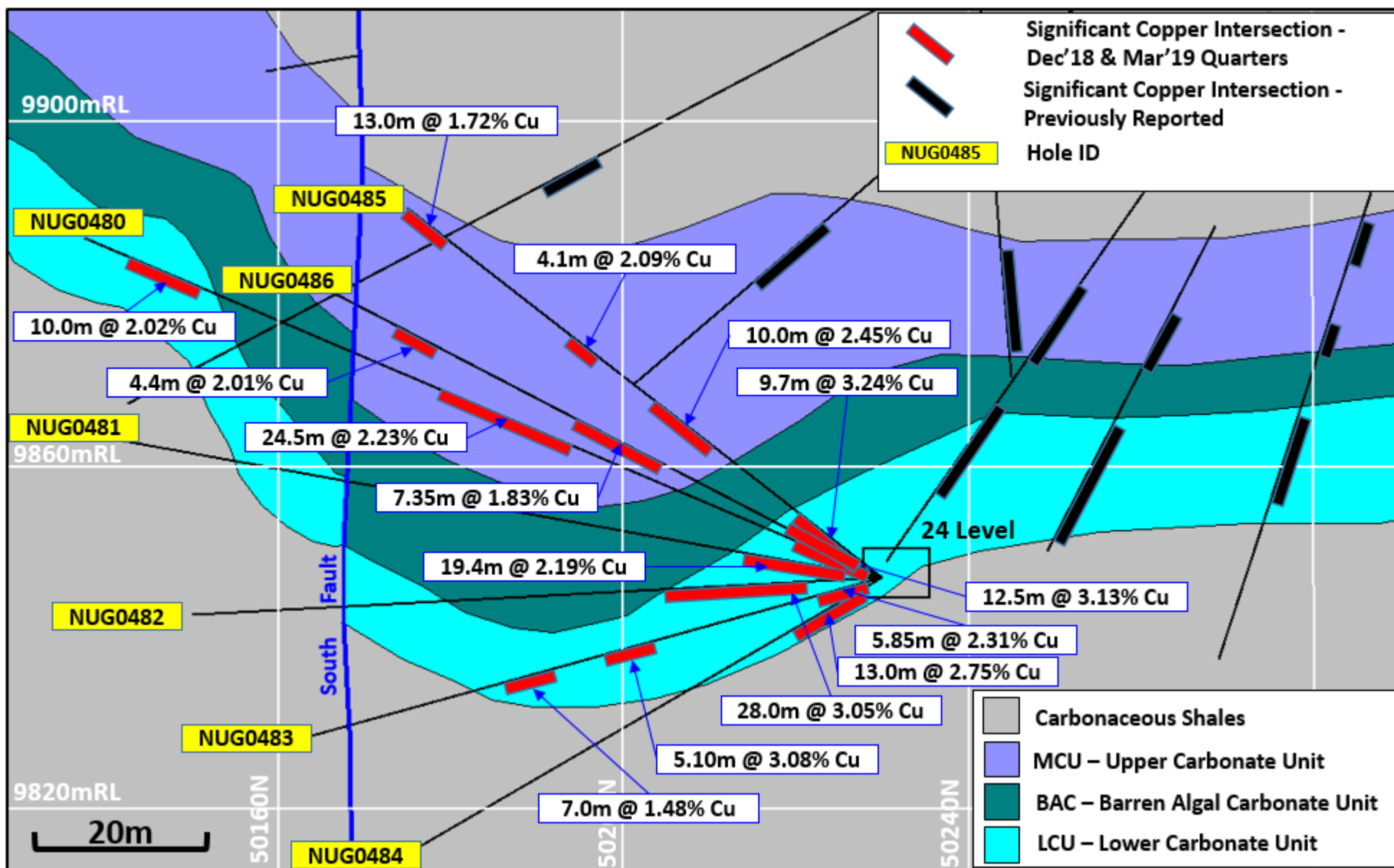


FIGURE 6. NIFTY REGION 9 – DRILL SECTION 10,2360ME HIGHLIGHTING DRILLING RESULTS RETURNED DURING THE DECEMBER 2018 AND MARCH 2019 QUARTERS

# NICKEL DIVISION

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

The Company continues to engage with potential strategic partners for the world-class Wingellina Nickel-Cobalt Project (**Wingellina**) that forms part of Metals X's Central Musgrave Project. Wingellina is one of the largest undeveloped nickel-cobalt deposits in the world.

The total Central Musgrave Project has a Mineral Resource containing approximately 2.0 million tonnes of nickel and 154,000 tonnes of cobalt within which Wingellina hosts an Ore Reserve of approximately 1.56 million tonnes of nickel and 123,000 tonnes of cobalt (refer to the 2018 Annual Report).

Metals X has completed a Feasibility Study ( $\pm 25\%$ ) and signed an agreement with the Traditional Owners which provides consent to undertake mining activities. In November 2016 the Company received its Public Environment Review approval from the EPA.

Preparation for planned exploration programs progressed during the quarter with the following activities proposed for 2019:

- Resource definition drilling to further delineate high grade cobalt-nickel pits within the resource area (refer to the March 2018 quarterly report);
- Resource definition drilling on the Company's significant calcrete deposits (a major neutralising reagent in the proposed processing plant); and
- Exploratory water bore drilling on the Mann Fault. Wingellina already has identified and pump tested two bore fields that will provide sufficient water for the operation. However, the Mann Fault provides a potential closer (within 15 to 20kms) source of water for a possible smaller scale start-up option.

The work conducted over the past 18 months has leveraged off the growth in demand for battery metals to create further options for project development in regard to initial investment scale and choice of potential final product produced. The increased optionality has afforded a wider field of potential partners to develop the project.

## CORPORATE

### CASH AND WORKING CAPITAL

Metals X closed the quarter with cash and working capital of \$74.3 million including \$17.8 million cash (*FIGURE 7*).

A further \$31 million in cash, which is included in working capital, will be realised from the copper concentrate shipment of 3,890 tonnes of contained copper which commenced loading on 31 March 2019 and was dispatched on 2 April 2019.

The Company also had share investments with a market price of \$3.6 million at the end of the quarter. During the quarter the Company realised \$0.85 million from sales of share investments at a loss of \$1.35 million.

### HEDGING

During the period the Company entered into a copper commodity swap transaction (2,000t Cu at US\$6,390) and a foreign exchange forward contract (US\$10 million at US\$0.7051) to hedge the Quotational Period risk of the January 2019 copper shipment.

### ISSUED CAPITAL

During the quarter, 1,366,828 unlisted employee options lapsed and the Company granted 3,000,000 unlisted employee options.

The Company has the following equities on issue (refer to Appendix 3B, lodged 17 December 2018):

Fully Paid Ordinary Shares:	689,060,508
Unlisted Employee Options (\$0.76, expiry 20/01/2020):	4,150,000
Unlisted Employee Options (\$1.32, expiry 30/11/2020):	5,850,000
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 30/11/2022):	1,258,081
Unlisted Employee Options (subject to service and performance hurdles, expiry 30/11/2023):	1,258,081



## MAJOR SHAREHOLDERS

The current major shareholders of the Company are:

APAC Resources (HKEX:1104):	9.18 %
Mitsubishi UFJ Financial Group, Inc.:	8.93 %
IOOF Holdings Limited:	8.75 %
Jinchuan Group:	7.22 %

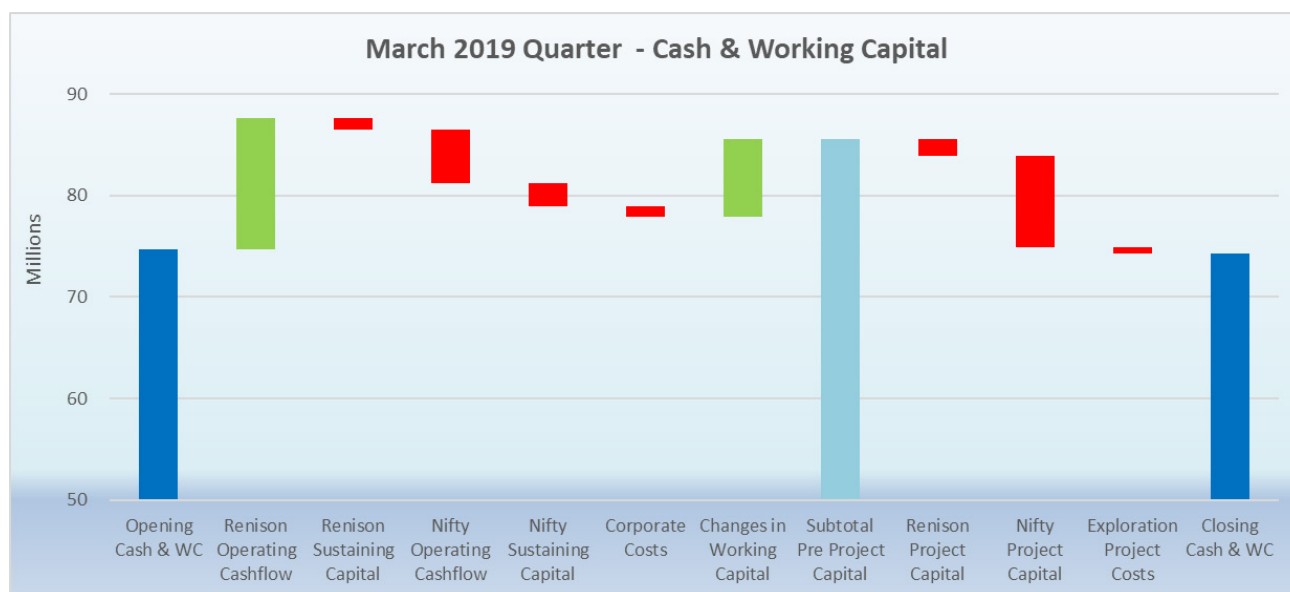


FIGURE 7. MARCH 2019 QUARTER CASH AND WORKING CAPITAL DETAILS

## COMPLIANCE STATEMENTS

The information in this presentation that relates to Exploration Results for the Nifty Copper Operations has been compiled by Metals X Limited technical employees under the supervision of Mr Kim Kremer BSc., who is a member of the Australasian Institute of Geoscientists. Mr Kremer is a full-time employee of the Company 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 Kremer 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 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 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 – SIGNIFICANT EXPLORATION RESULTS

## COPPER DIVISION

Significant exploration results for the Nifty Copper Operations for the quarter are shown below.

TABLE 3: SIGNIFICANT UG DRILLING RESULTS FOR NIFTY COPPER OPERATIONS – MARCH 2019 QUARTER

Lode	Hole	Intercept N	Intercept E	Intercept RL	Intercept (True Width)	From (m)	Dip	Azi
Region 4	NUG0399	7603653	352607	-90	2.9m @ 1.51% Cu	31.0	-78.0	26.0
					2.9m @ 4.17% Cu	44.4		
					12.5m @ 3.38% Cu	53.0		
					4.4m @ 2.37% Cu	76.0		
					2.9m @ 2.02% Cu	85.0		
Region 7	NUG0463	7604643	351938	151	10.6m @ 1.63% Cu	254.0	-9.0	173.0
					3.5m @ 1.12% Cu	290.0		
					4.0m @ 7.82% Cu	316.0		
					2.3m @ 1.49% Cu	331.8		
Region 7	NUG0466	760643	351937	149	2.0m @ 0.83% Cu	264.0	-16.0	174.0
Region 9	NUG0439	7603622	352615	-139	2.8m @ 1.77% Cu	23.0	-45.0	307.0
					4.2m @ 2.04% Cu	35.0		
Region 9	NUG0441	7603620	352620	-140	10.8m @ 2.825 Cu	42.0	-72.0	163.0
Haldi Flt	NUG0446	7603558	352732	-88	NSI		-44.0	120.0
Region 6	NUG0453	7603561	352733	-88	4.5m @ 1.98% Cu	171.5	-28.0	66.0
					2.1m @ 1.50% Cu			
Region 4	NUG0549	7603669	352644	-172	2.05m @ 5.26% Cu	7.0	1.0	143.0
					7.85m @ 2.36% Cu	39.6		
					6.1m @ 1.51% Cu	65.0		
Region 4	NUG0461	7603670	352644	-172	2.1m @ 2.49% Cu	9.0	1.0	118.0
					3.95m @ 3.275 Cu	9.1		
Region 4	NUG0462	7603670	352644	-172	2.0m @ 4.54% Cu	13.0	0	106.0
					1.85m @ 2.45% Cu	40.7		
Region 4	NUG0468	7603669	352748	-172	18.3m @ 2.62% Cu *	36.2	2.0	216.0
Region 6	NUG0470	7603652	352762	-170	8.45m @ 1.77% Cu *	14.0	2.0	175.0
Region 9	NUG0482	7603729	352468	-145	28.0m @ 3.05% Cu *	7.0	-4.0	205.0
Region 9	NUG0483	7603729	352468	-154	5.85m @ 2.31% Cu *	0	-15.0	205.0
					5.1m @ 3.08% Cu*	24.9		
					7.0m @ 1.48% Cu*	39.0		
Region 9	NUG0484	7603729	352468	-154	13.0m @ 2.75% Cu *	0	-30.0	205.0
Region 4	NUG0491	7603717	352495	-151	3.3m @ 2.49% Cu *	0	50.0	205.0
					7.8m @ 1.71% Cu	15.3		
Region 9	NUG0509	7603691	352559	-154	NSI		-22.0	217.0
Region 5	NUG0531	7603843	352803	-65	16.9m @ 1.99% Cu	33.0	14.0	170.0
Region 5	NUG0532	7603843	352803	-66	8.1m @ 1.62% Cu	46.0	6.0	178.0
Region 5	NUG0533	7603843	352803	-64	12.4m @ 1.85% Cu	44.0	28.0	146.0
Region 5	NUG0534	7603843	352803	-64	10.1m @ 2.05% Cu	31.7	36.0	157.0
Region 5	NUG0536	7603843	352803	-66	5.3m @ 1.71% Cu	75.0	-1.0	155.0
Region 5	NUG0537	7603843	352803	-65	13m @ 1.59% Cu	57.0	9.0	152.0

Notes to table:

- Widths are true unless marked with \*
- Grid is MGA51
- NSI = No Significant Assays
- Significant = >5% Cu.

## TIN DIVISION

Significant exploration results for the Renison Tin Operations for the quarter are shown below.

TABLE 4: SIGNIFICANT UNDERGROUND DRILLING RESULTS FOR RENISON TIN OPERATIONS – MARCH 2019 QUARTER

Code	Hole	Intercept N	Intercept E	Intercept RL	Intercept (True Width)	From (m)	Dip	Azi
A5	U6183	66751	44674	1064	3.3m @ 4.48% Sn & 0.06% Cu	198.0	-21.0	325.7
A5	U6166	66654	44628	1083	1.3m @ 3.22% Sn & 0.17% Cu	171.9	-18.65	288.9
A5	U6177	66803	44664	1071	1.9m @ 1.95% Sn & 0.1% Cu	245.0	-14.6	329.3
HN	U6777	67442	44384	1477	3.9m @ 1.24% Sn & 0.09% Cu	186.9	0.84	13.2
A5	U6182				NSI			
A5	U6171	66193	44578	1064	1.7m @ 4.95% Sn & 0.05% Cu	242.0	-16.0	244.9
A5	U6171	66190	44572	1062	9.6m @ 2.71% Sn & 0.14% Cu	253.0	-16.0	244.9
A5	U6176				NSI			
A5	U6806	66534	44689	1087	2.1m @ 2.85% Sn & 0.55% Cu	92.4	-35.4	270.3
A5	U6806	66535	44656	1064	2.7m @ 7.51% Sn & 0.07% Cu	133.0	-35.4	270.3
A5	U6806	66535	44641	1054	12.5m @ 5.14% Sn & 0.18% Cu	151.0	-35.4	270.3
CFB	U6721	66114	44550	1289	1.4m @ 1.42% Sn & 0.17% Cu	162.2	24.8	274.3
A5	U6809	66514	44642	1058	20m @ 6.27% Sn & 0.26% Cu	148.8	-33.3	260.2
A5	U6809	66511	44619	1042	1.4m @ 10.49% Sn & 0.08% Cu	177.4	-33.3	260.2
LWD	U6474	66997	44664	1133	0.7m @ 3.05% Sn & 0.15% Cu	229.0	190.0	-73.9
LWD	U6472				NSI			
A5	U6807	66533	44697	1077	1m @ 2.35% Sn & 0.2% Cu	92.0	-43.0	270.3
A5	U6807	66534	44642	1025	2.5m @ 2.44% Sn & 0.12% Cu	167.2	-43.0	270.3
A5	U6804	66537	44692	1088	0.5m @ 12.84% Sn & 0.23% Cu	89.9	-35.0	278.3
A5	U6804	66552	44635	1049	9.3m @ 2.95% Sn & 0.07% Cu	155.0	-35.0	278.3
A5	U6188	66251	44768	1131	2m @ 1.16% Sn & 0.06% Cu	49.0	-12.1	223.1
CFB	U6714				NSI			
A5	U6165				NSI			
CFB	U6722				NSI			
A5	U6670	66633	44730	981	1.1m @ 2.36% Sn & 0.27% Cu	170.0	-69	304.7
LCFB	U6734	66118	44536	1337	3.9m @ 0.78% Sn & 0.2% Cu	192.4	36.2	276.3
A5	U6811	66517	44718	1091	0.5m @ 7.58% Sn & 1.06% Cu	69.8	-44.8	251.1
A5	U6811	66493	44650	1018	8.7m @ 5.21% Sn & 0.3% Cu	167.9	-44.8	251.1
A5	U6811	66491	44641	1008	1m @ 17.27% Sn & 0.19% Cu	185.0	-44.8	251.1
LWD	U6700				NSI			
LWD	U6688	67142	44536	1283	17m @ 2.4% Sn & 0.17% Cu	160	-27.4	299.0
0	U6699				NSI			
LCFB	U6720	66137	44550	1287	3.9m @ 1.23% Sn & 0.04% Cu	162.6	22.8	283.5
LCFB	U6733	66162	44525	1347	2.5m @ 3.24% Sn & 0.15% Cu	216.0	34.5	289.1
LWD	U6470	66968	44635	1107	2.5m @ 8.73% Sn & 0.07% Cu	270.0	-64.9	199.9
LWD	U6470	66949	44626	1049	1.5m @ 6.93% Sn & 2.12% Cu	332.4	-64.9	199.9
LWD	U6470	66928	44616	982	0.7m @ 10.93% Sn & 0.01% Cu	403.5	-64.9	199.9
A5	U6813	66457	44668	1098	3.3m @ 1.23% Sn & 0.65% Cu	89.5	-26.2	269.2
A5	U6813	66457	44661	1095	1.5m @ 2.24% Sn & 0.09% Cu	98.6	-26.2	269.2
A5	U6813	66456	44627	1076	1m @ 1.45% Sn & 0.11% Cu	137.0	-26.2	269.2
A5	U6813	66456	44619	1072	4.7m @ 3.68% Sn & 0.26% Cu	146.0	-26.2	269.2
A5	U6813	66456	44610	1067	6.3m @ 3.31% Sn & 0.12% Cu	156.0	-26.2	269.2
A5	U6813	66455	44595	1059	1.2m @ 8.66% Sn & 0.25% Cu	173.6	-26.2	269.2
A5	U6201				NSI			
LWD	U6471	66925	44631	1116	0.5m @ 1.2% Sn & 0.01% Cu	280.0	-58.7	193.6
LWD	U6476				NSI			
A5	U6638				NSI			
A5	U6668				NSI			
A5	U6805	66535	44624	1068	20.2m @ 2.97% Sn & 0.09% Cu	148.9	-26.3	271.0
A5	U6805	66535	44605	1058	3.5m @ 10.78% Sn & 0.6% Cu	178.5	-26.3	271.0
A5	U6636	66701	44709	1033	0.8m @ 4.25% Sn & 0.5% Cu	164.6	-41.2	327.4
A5	U6816				NSI			
A5	U6817	66616	44641	1043	1m @ 2.89% Sn & 0.38% Cu	170.0	-35.2	282.2
A5	U6815	66441	44654	1093	6.4m @ 1.89% Sn & 0.07% Cu	101.4	-25.4	260.2
A5	U6815	66434	44616	1074	4.6m @ 2.61% Sn & 0.23% Cu	146.5	-25.4	260.2
A5	U6815	66432	44604	1068	11.7m @ 4.32% Sn & 0.07% Cu	156.1	-25.4	260.2
A5	U6819	66599	44639	1086	2.9m @ 1.89% Sn & 0.09% Cu	147.0	-21.5	273.0
A5	U6820	66597	44639	1043	0.8m @ 16.03% Sn & 0.33% Cu	169.4	-34.8	273.1
A5	U6818				NSI			
A5	U6814	66457	44685	1063	1m @ 2.84% Sn & 0.04% Cu	99.0	-43.4	269.0

Lode	Hole	Intercept N	Intercept E	Intercept RL	Intercept (True Width)	From (m)	Dip	Azi
A5	U6814	66456	44648	1016	14.2m @ 3.52% Sn & 0.21% Cu	151.6	-43.4	269.0
A5	U6802				NSI			
A5	U6821	66581	44680	1091	4m @ 1.77% Sn & 0.11% Cu	109.0	-26.4	264.4
A5	U6821	66581	44664	1082	2.5m @ 1.5% Sn & 0.25% Cu	127.2	-26.4	264.4
A5	U6821	66580	44645	1072	6.9m @ 1.5% Sn & 0.11% Cu	149.0	-26.4	264.4
A5	U6822	66573	44634	1047	1.9m @ 2.75% Sn & 0.07% Cu	171	-33.3	264.4
A5	U6812	66469	44678	1087	2.1m @ 3.35% Sn & 1.07% Cu	87.6	-35.4	278.8
A5	U6812	66478	44630	1050	14.8m @ 4.23% Sn & 0.09% Cu	142.7	-35.4	278.8
A5	U6812	66481	44614	1037	2.3m @ 2.77% Sn & 0.05% Cu	169.6	-35.4	278.8
A5	U6823				NSI			
A5	U6810	66511	44694	1092	0.7m @ 6.45% Sn & 0.01% Cu	87.3	-33.1	253.3
A5	U6810	66509	44686	1086	3.5m @ 2.5% Sn & 0.14% Cu	97.0	-33.1	253.3
A5	U6810	66505	44674	1079	9.5m @ 3.77% Sn & 0.15% Cu	105.0	-33.1	253.3
A5	U6810	66493	44631	1049	15.8m @ 4.57% Sn & 0.12% Cu	158.0	-33.1	253.3
A5	U6790	66370	44504	1094	2.3m @ 3.66% Sn & 0.11% Cu	26.0	-13.5	86.2
A5	U6790	66378	44625	1063	1.9m @ 3.12% Sn & 0.15% Cu	152.0	-13.5	86.2
A5	U6844	66638	44627	1128	0.8m @ 3.12% Sn & 0.07% Cu	159.0	-5.06	289.1
A5	U6844	66645	44606	1125	4.1m @ 4.95% Sn & 0.7% Cu	178.0	-5.06	289.1
A5	U6845	66615	44692	1107	0.9m @ 4.84% Sn & 0.02% Cu	94.9	-21.2	288.6
A5	U6845	66638	44627	1080	2.6m @ 2.73% Sn & 0.18% Cu	168.0	-21.2	288.6
A5	U6791	66370	44504	1091	3.3m @ 6.1% Sn & 0.08% Cu	28.1	-18.4	86.6
A5	U6791	66376	44625	1050	2.1m @ 5.71% Sn & 0.07% Cu	157.0	-18.4	86.6
A5	U6791	66376	44633	1047	5.2m @ 2.04% Sn & 0.08% Cu	165.4	-18.4	86.6
A5	U6174				NSI			
A5	U6842	66525	44679	1125	1m @ 14.89% Sn & 0.29% Cu	87.5	-9.5	264.1
A5	U6842	66519	44595	1108	3.8m @ 2.69% Sn & 0.04% Cu	172.1	-9.5	264.1
A5	U6842	66518	44588	1107	0.9m @ 7.04% Sn & 0.09% Cu	180.0	-9.5	264.1
A5	U6792	66370	44506	1087	2.3m @ 3.46% Sn & 0.02% Cu	31.1	-27.3	85.6
A5	U6792	66375	44631	1032	15m @ 3.26% Sn & 0.09% Cu	158.1	-27.3	85.6
A5	U6792	66376	44652	1023	2.6m @ 2.31% Sn & 0.04% Cu	191.0	-27.3	85.6
A5	U6792	66376	44669	1015	8.8m @ 2.84% Sn & 0.09% Cu	205.0	-27.3	85.6
A5	U6795	66278	44626	1035	3m @ 5.94% Sn & 0.11% Cu	183.8	-20.3	119.0
A5	U6841	66508	44575	1133	1.3m @ 2.96% Sn & 0.06% Cu	180.0	-1.3	285.5
A5	U6843	66553	44657	1137	9m @ 2.81% Sn & 0.26% Cu	104.7	-2	280.5
A5	U6793	66335	44621	1058	4.3m @ 1.89% Sn & 0.1% Cu	152.0	-14.8	101.0
A5	U6794	66306	44611	1063	3.8m @ 1.25% Sn & 0.07% Cu	150.5	-13	113.6
A5	U6798	66351	44487	1094	1.1m @ 1.47% Sn & 0.2% Cu	16.2	-19.2	132.3
A5	U6798	66237	44607	1033	2.2m @ 1.03% Sn & 0.23% Cu	191.9	-19.2	132.3
A5	U6798	66232	44613	1031	2m @ 3.48% Sn & 0.04% Cu	200.0	-19.2	132.3
A5	U6796	66293	44577	1050	1.3m @ 1.39% Sn & 0.08% Cu	134.4	-20.7	125.0
A5	U6838	66565	44263	1106	1.5m @ 4.61% Sn & 0.02% Cu	148.3	-12.3	282.4
A5	U6838	66567	44613	1104	4.5m @ 1.34% Sn & 0.04% Cu	156.9	-12.3	282.4
A5	U6838	66571	44597	1099	10.8m @ 2.27% Sn & 0.07% Cu	172.0	-12.3	282.4
A5	U6839	66571	44597	1099	3.9m @ 1.12% Sn & 0.04% Cu	122.0	-20.3	286.2
A5	U6839	66571	44597	1099	20m @ 1.42% Sn & 0.06% Cu	147.0	-20.3	286.2
A5	U6837	66551	44626	1112	1.5m @ 1.85% Sn & 0.22% Cu	132.3	-11.7	278.1
A5	U6837	66557	44589	1101	3.6m @ 1.38% Sn & 0.04% Cu	180.0	-11.7	278.1
A5	U6836	66540	44667	1112	1.8m @ 1.79% Sn & 0.14% Cu	101.3	-15.9	274.3
A5	U6836	66546	44600	1090	16.3m @ 2.31% Sn & 0.1% Cu	164.0	-15.9	274.3
A5	U6840	66594	44597	1122	9.2m @ 2.47% Sn & 0.09% Cu	176.0	-5.4	271.3
A5	U6834				NSI			
A5	U6797	66261	44582	1062	2.3m @ 8.01% Sn & 0.14% Cu	152.0	-13.0	133.4
A5	U6797	66254	44590	1059	2m @ 3.44% Sn & 0.2% Cu	163.0	-13.0	133.4
A5	U6799	66239	44573	1065	2.5m @ 1.24% Sn & 0.08% Cu	160.0	-11.3	140.3
A5	U6835	66529	44675	1106	4m @ 1.26% Sn & 0.08% Cu	96.7	-20.4	267.5
A5	U6835	66527	44628	1086	2m @ 3.8% Sn & 0.12% Cu	147.7	-20.4	267.5
A5	U6835	66526	44619	1082	10m @ 4.09% Sn & 0.04% Cu	157.7	-20.4	267.5
A5	U6800				NSI			
A5	U6831	66443	44596	1093	3m @ 1.95% Sn & 0.11% Cu	3.2	-44.1	267.4
A5	U6831	66443	44591	1088	2.5m @ 2.06% Sn & 0.09% Cu	10.3	-44.1	267.4
A5	U6830	66408	44607	1074	2.3m @ 1.17% Sn & 0.05% Cu	20.0	-79.4	164.2
A5	U6830	66405	44607	1057	3m @ 1.72% Sn & 0.04% Cu	36.0	-79.4	164.2
A5	U6830	66402	44608	1041	9.9m @ 2.96% Sn & 0.15% Cu	48.2	-79.4	164.2
A5	U6673	66483	44719	1053	4.3m @ 0.92% Sn & 0.04% Cu	92.0	-67.9	310.7
A5	U6673	66485	44717	1046	1.6m @ 1.11% Sn & 0.05% Cu	101.0	-67.9	310.7



Lode	Hole	Intercept N	Intercept E	Intercept RL	Intercept (True Width)	From (m)	Dip	Azi
A5	U6801				NSI			
A5	U6828	66420	44597	1095	1.5m @ 2.86% Sn & 0.04% Cu	0.4	-41.9	249.3
A5	U6829	66417	44594	1085	1m @ 1.83% Sn & 0.08% Cu	11.0	-66.5	231.6
A5	U6832	66443	44596	1079	1.7m @ 1.78% Sn & 0.06% Cu	16.0	-74.5	276.2
A5	U6832	66443	44594	1074	2.1m @ 1.86% Sn & 0.08% Cu	21.8	-74.5	276.2
A5	U6832	66444	44591	1065	1.7m @ 4.4% Sn & 0.16% Cu	31.3	-74	276.2
A5	U6833	66473	44609	1086	11m @ 1.72% Sn & 0.1% Cu	148	-20.2	276.3
A5	U6879	66226	44569	1098	1m @ 4.58% Sn & 0.05% Cu	0	-66.6	232.1
A5	U6880	66266	44569	1100	1.4m @ 2.43% Sn & 0.11% Cu	0	-0.2	89.8
A5	U6885	66235	44571	1099	1.8m @ 0.95% Sn & 0.06% Cu	0	0	90.0
A5	U6888	66235	44563	1100	2.9m @ 1.58% Sn & 0.11% Cu	0	0	270.0
A5	U6888	66235	44557	1100	1.4m @ 5.86% Sn & 0.11% Cu	6.5	0	270.0
A5	U6893	66245	44562	1100	5.4m @ 8.29% Sn & 0.13% Cu	0	0	270.0
A5	U6894	66255	44575	1102	3m @ 2.89% Sn & 0.13% Cu	0	30.6	90.0
A5	U6895	66255	44571	1106	3.2m @ 6.74% Sn & 0.13% Cu	0.1	85.1	90.0
A5	U6898	66265	44578	1099	1.5m @ 2.19% Sn & 0.11% Cu	0	0	90.0
A5	U6899				NSI			
A5	U6884				NSI			
A5	U6900				NSI			
A5	U6890	66245	44574	1096	6m @ 3.54% Sn & 0.1% Cu	0	-28.3	89.8
A5	U6886	66235	44568	1105	1.6m @ 4.49% Sn & 0.29% Cu	0	78.1	90.0
A5	U6897	66257	44564	1099	6.4m @ 3.23% Sn & 0.09% Cu	0.9	-6.6	297.0
A5	U6892	66245	44563	1107	1.7m @ 6.12% Sn & 0.16% Cu	0.4	55.2	270.0
A5	U6896	66257	44564	1103	4.1m @ 6.96% Sn & 0.19% Cu	1.3	31.1	293.0
A5	U6653	66366	44744	1126	0.5m @ 5.41% Sn & 4.85% Cu	15.5	-60.2	267.6
A5	U6653	66364	44680	1012	0.4m @ 5.35% Sn & 0.14% Cu	146.0	-60.2	267.6
A5	U6653	66397	44676	990	7.2m @ 2.4% Sn & 0.11% Cu	161.	-60.2	267.6
A5	U6653	66363	44659	974	15.5m @ 4.47% Sn & 1.52% Cu	179.8	-60.2	267.6
A5	U6674A	66473	44714	1038	15.8m @ 2.91% Sn & 0.1% Cu	99.1	-69.5	289.2
A5	U6674A	66485	44685	947	2.8m @ 1.7% Sn & 0.06% Cu	202.9	-69.5	289.2
A5	U6889	66235	44564	1090	1.2m @ 1.96% Sn & 0.09% Cu	7.0	-79.5	270.1
A5	U6887				NSI			
A5	U6654	66343	44695	1049	5.6m @ 1.21% Sn & 0.04% Cu	104.0	-55.6	246.2
A5	U6654	66340	44688	1037	4m @ 1.52% Sn & 0.06% Cu	119.0	-55.6	246.2
A5	U6654	66331	44666	1003	4.1m @ 1.66% Sn & 0.05% Cu	160.0	-55.6	246.2
HN	U6875				NSI			
A5	U6652	66390	44705	1053	1.9m @ 1.99% Sn & 0.07% Cu	100.0	-59.1	293.3
A5	U6652	66398	44686	1017	2.9m @ 2.5% Sn & 0.01% Cu	141	-59.1	293.3
HN	U6877	67150	44431	1454	3.8m @ 1.27% Sn & 0.14% Cu	0	19.6	89.7
A5	U6905	66200	44563	1116	2.4m @ 1.93% Sn & 0.06% Cu	0	-49.4	89.8

Notes to table:

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

## APPENDIX 2 – MINERAL RESOURCE ESTIMATES

### COPPER DIVISION

The Mineral Resource estimates for Nifty Copper Operations are in compliance with the JORC Code (2012 Edition). The Nifty Oxide and Heap Leach Mineral Resource estimates are at 31 March 2017 and were published on 31 May 2018. The Nifty Sulphide Mineral Resource is at 31 August 2017 and was published on 12 October 2017. The Maroochydore Copper Prospect Mineral Resource estimate is at 31 March 2016 and was published by Aditya Birla Minerals on 16 May 2016. There have been no material changes to these Mineral Resource estimates since the dates of these publications.

TABLE 5: NIFTY COPPER OPERATIONS MINERAL RESOURCE ESTIMATE

Deposit	Mineral Resource Category <sup>1</sup>	Mt <sup>2</sup>	Grade % Cu	Copper tonnes <sup>2</sup>
Nifty Sulphide <sup>3</sup>	Measured	25.36	1.68%	426,000
	Indicated	8.10	1.31%	106,000
	Inferred	8.12	1.11%	90,000
	<b>Total</b>	<b>41.58</b>	<b>1.50%</b>	<b>622,000</b>
Nifty Oxide <sup>4</sup>	Measured	1.43	0.91%	13,000
	Indicated	1.22	0.86%	10,000
	Inferred	1.68	0.83%	14,000
	<b>Total</b>	<b>4.33</b>	<b>0.86%</b>	<b>37,000</b>
Nifty Heap Leach <sup>5</sup>	Measured	-	-	-
	Indicated	2.85	0.75%	20,000
	Inferred	0.46	0.66%	3,000
	<b>Total</b>	<b>3.31</b>	<b>0.74%</b>	<b>23,000</b>
<b>TOTAL NIFTY OPERATIONS</b>	Measured	26.79	1.64%	439,000
	Indicated	12.17	1.12%	136,000
	Inferred	10.26	1.04%	107,000
	<b>Total</b>	<b>49.22</b>	<b>1.39%</b>	<b>682,000</b>

1. Mineral Resources are reported inclusive of Mineral Resources modified to produce the Ore Reserve;
2. Tonnes are reported as million tonnes (Mt) and rounded to nearest 10,000; Cu tonnes are rounded to nearest 1,000 tonnes; rounding may result in some slight apparent discrepancies in totals.
3. Cut-off grade of 0.75% Cu.
4. Cut-off Grade of 0.4% Cu.
5. Cut-off Grade of 0.5% Cu.

TABLE 6: MAROOCHYDORE COPPER PROSPECT MINERAL RESOURCE ESTIMATE

Deposit	Mineral Resource Category	Mt <sup>1</sup>	Copper		Cobalt	
			Grade % Cu	Copper tonnes <sup>2</sup>	Grade ppm Co	Cobalt tonnes <sup>2</sup>
Oxide <sup>3</sup>	Measured	-	-	-	-	-
	Indicated	40.80	0.92%	375,000	388	15,800
	Inferred	2.40	0.81%	19,000	451	1,100
	<b>Total</b>	<b>43.20</b>	<b>0.91%</b>	<b>394,000</b>	<b>391</b>	<b>16,900</b>
Sulphide <sup>4</sup>	Measured	-	-	-	-	-
	Indicated	-	-	-	-	-
	Inferred	5.43	1.66%	90,000	292	1,600
	<b>Total</b>	<b>5.43</b>	<b>1.66%</b>	<b>90,000</b>	<b>292</b>	<b>1,600</b>
<b>TOTAL<sup>5</sup></b>	Measured	-	-	-	-	-
	Indicated	40.80	0.92%	375,000	388	15,800
	Inferred	7.83	1.40%	110,000	341	2,700
	<b>Total</b>	<b>48.63</b>	<b>1.00%</b>	<b>486,000</b>	<b>380</b>	<b>18,500</b>

1. Tonnes are reported as million tonnes (Mt) and rounded to nearest 10,000;
2. Cu tonnes are rounded to nearest 1,000 tonnes; Co tonnes are rounded to the nearest 100 tonnes;
3. Cut-off Grade of 0.5% Cu;
4. Cut-off Grade of 1.1% Cu;
5. Rounding may result in some slight apparent discrepancies in totals.

## TIN DIVISION

The Mineral Resource estimate for the Renison Tin Operations is in compliance with the JORC Code (2012 Edition) and is at 31 March 2018 and was published on 23 August 2018. There has been no material change to the Mineral Resource estimates since the date of this publication.

Metals X's equity share is 50% of the Mineral Resource estimates shown below.

TABLE 7: RENISON TIN OPERATIONS MINERAL RESOURCE ESTIMATE<sup>6</sup>

Deposit	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>
Renison Tin Mine <sup>3</sup>	Measured	1,540	1.69%	25,900	1,540	0.36%	5,500
	Indicated	7,142	1.30%	92,700	6,949	0.28%	19,700
	Inferred	7,756	1.25%	97,000	7,748	0.11%	8,700
	<b>Total</b>	<b>16,437</b>	<b>1.31%</b>	<b>215,700</b>	<b>16,236</b>	<b>0.21%</b>	<b>33,900</b>
Mt Bischoff <sup>4</sup>	Measured	-	-	-	-	-	-
	Indicated	968	0.59%	5,700	-	-	-
	Inferred	699	0.47%	3,300	-	-	-
	<b>Total</b>	<b>1,667</b>	<b>0.54%</b>	<b>9,000</b>	<b>-</b>	<b>-</b>	<b>-</b>
Rentails Project <sup>5</sup>	Measured	23,886	0.44%	104,400	23,886	0.22%	52,700
	Indicated	-	-	-	-	-	-
	Inferred	-	-	-	-	-	-
	<b>Total</b>	<b>23,886</b>	<b>0.44%</b>	<b>104,370</b>	<b>23,886</b>	<b>0.22%</b>	<b>52,700</b>
Total	Measured	25,426	0.51%	130,300	25,426	0.23%	58,300
	Indicated	8,109	1.21%	98,400	6,949	0.28%	19,700
	Inferred	8,455	1.19%	100,300	7,748	0.11%	8,700
	<b>Total</b>	<b>41,990</b>	<b>0.78%</b>	<b>329,000</b>	<b>40,122</b>	<b>0.22%</b>	<b>86,700</b>

1. Mineral Resources are reported inclusive of Mineral Resources modified to produce the Ore Reserve;
2. Tonnes are reported as kilo tonnes ('000t) and rounded to nearest 1,000; Sn and Cu tonnes are rounded to the nearest 100 tonnes; rounding may result in some slight apparent discrepancies in totals.
3. Cut-off grade of 0.7% Sn.
4. Cut-off Grade of 0.5% Sn.
5. Cut-off Grade of 0.0% Sn.
6. The Rentails Mineral Resource is at 31 May 2018.

## NICKEL DIVISION

The Mineral Resource estimate for the Central Musgrave Project is in compliance with the JORC Code (2012 Edition) and is at 30 June 2016 and was published on 18 August 2016. There has been no change to the Mineral Resource estimate since the date of this publication.

TABLE 8: CENTRAL MUSGRAVE PROJECT MINERAL RESOURCE ESTIMATE

Deposit	Mineral	Mt <sup>2</sup>	Nickel		Cobalt	
			Grade	Nickel	Grade	Cobalt
Wingellina (cut-off 0.50% Ni)	Measured	37.6	0.98%	368	0.07%	28.0
	Indicated	130.9	0.91%	1,193	0.07%	94.6
	Inferred	14.1	0.87%	122	0.06%	9.1
	<b>Total</b>	<b>182.6</b>	<b>0.92%</b>	<b>1,684</b>	<b>0.07%</b>	<b>131.7</b>
Claude Hills (cut-off 0.50% Ni)	Measured	-	-	-	-	-
	Indicated	-	-	-	-	-
	Inferred	33.3	0.81%	270	0.07%	22.7
	<b>Total</b>	<b>33.3</b>	<b>0.81%</b>	<b>270</b>	<b>0.07%</b>	<b>22.7</b>
Total Central Musgrave Project	Measured	37.6	0.98%	368	0.07%	28.0
	Indicated	130.9	0.91%	1,193	0.07%	94.6
	Inferred	47.4	0.83%	392	0.07%	31.8
	<b>Total</b>	<b>215.8</b>	<b>0.91%</b>	<b>1,953</b>	<b>0.07%</b>	<b>154.4</b>

1. Mineral Resources are reported inclusive of Mineral Resources modified to produce the Ore Reserve;
2. Tonnes are reported as million tonnes (Mt) and rounded to nearest 100,000; nickel tonnes are reported as thousand tonnes (kt) and rounded to the nearest 1000 tonnes; cobalt tonnes are reported as thousand tonnes (kt) and rounded to the nearest 100 tonnes; rounding may result in some slight apparent discrepancies in totals.

# APPENDIX 3 – ORE RESERVE ESTIMATES

## COPPER DIVISION

The Ore Reserve estimate for Nifty Copper Operations is in compliance with the JORC Code (2012 Edition) and is at 31 August 2017 and was published on 12 October 2017. There has been no material change to the Ore Reserve estimate since the date of this publication.

TABLE 9: NIFTY COPPER OPERATIONS ORE RESERVE ESTIMATE

Deposit	Ore Reserve Category	Ore Mt <sup>2</sup>	Grade % Cu	Copper tonnes <sup>2</sup>
Nifty Sulphide <sup>1</sup>	Proved	11.75	1.76%	207,000
	Probable	2.15	1.42%	30,500
	<b>Total</b>	<b>13.90</b>	<b>1.71%</b>	<b>237,500</b>

1. The Ore Reserve is based on the Nifty sulphide Mineral Resource estimate at 31 August 2017, with applied modifying factors, at a 1.0% Cu cut-off grade, using a copper price of US\$5,750/t and assumed exchange rate of USD/AUD 0.7419 for a price of AUD \$7,750/t Cu
2. Tonnes are reported as million tonnes (Mt) and rounded to the nearest 10,000; copper tonnes are rounded to the nearest 500 tonnes; rounding may result in some slight apparent discrepancies in totals.

## TIN DIVISION

The Ore Reserve estimate for the Renison Tin Operations is in compliance with the JORC Code (2012 Edition) and is at 31 March 2018 and was published on 23 August 2018. There has been no material change to the Ore Reserve estimate since the date of this publication.

Metals X's equity share is 50% of the Ore Reserve estimate shown below.

TABLE 10: RENISON TIN OPERATIONS ORE RESERVE ESTIMATE

Project	Ore Reserve Category <sup>1</sup>	Tin			Copper		
		Ore '000 tonnes	Grade % Sn	Tin tonnes <sup>2</sup>	Ore '000 tonnes	Grade % Cu	Copper tonnes <sup>2</sup>
Renison Tin Mine	Proved	1,310	1.29%	16,900	1,310	0.33%	4,300
	Probable	5,512	0.94%	51,800	5,512	0.20%	10,900
	<b>Total</b>	<b>6,822</b>	<b>1.01%</b>	<b>68,800</b>	<b>6,822</b>	<b>0.22%</b>	<b>15,200</b>
Rentails	Proved	-	-	-	-	-	-
	Probable	22,313	0.44%	98,900	22,313	0.23%	50,700
	<b>Total</b>	<b>22,313</b>	<b>0.44%</b>	<b>98,900</b>	<b>22,313</b>	<b>0.23%</b>	<b>50,700</b>
Renison total	Proved	1,310	1.29%	16,900	1,310	0.33%	4,300
	Probable	27,825	0.54%	150,800	27,825	0.22%	61,600
	<b>Total</b>	<b>29,135</b>	<b>0.58%</b>	<b>167,700</b>	<b>29,135</b>	<b>0.23%</b>	<b>65,800</b>

1. The Ore Reserve is based on the Renison Mineral Resource estimate at 31 March 2018, with applied modifying factors, at a cut-off grade of 0.8% Sn for the Renison Tin Mine and 0.0% Sn for Rentails;
2. Sn and Cu tonnes are rounded to the nearest 100 tonnes; rounding may result in some slight apparent discrepancies in totals.



## NICKEL DIVISION

The Ore Reserve estimate for the Wingellina Nickel-Cobalt Project is in compliance with the JORC Code (2012 Edition) and is at 30 June 2016 and was published on 18 August 2016. There has been no change to the Ore Reserve estimate since the date of this publication.

TABLE 11: WINGELLINA NICKEL-COBALT PROJECT ORE RESERVE ESTIMATE

Project	Ore Reserve Category <sup>1</sup>	Ore Mt <sup>2</sup>	Nickel		Cobalt	
			Grade % Ni	Nickel kt Ni <sup>2</sup>	Grade % Co	Cobalt kt Co <sup>2</sup>
Wingellina	Proved	-	-	-	-	-
	Probable	168.4	0.93%	1,561	0.07%	122.6
	<b>Total<sup>2</sup></b>	<b>168.4</b>	<b>0.93%</b>	<b>1,561</b>	<b>0.07%</b>	<b>122.6</b>

1. The Ore Reserve is based on the Wingellina Mineral Resource estimate at 30 June 2016 with applied modifying factors, at a cut-off grade of 0.5% Ni;
2. Tonnes are reported as million tonnes (Mt) and rounded to nearest 100,000; nickel tonnes are reported as thousand tonnes (kt) and rounded to the nearest 1000 tonnes; cobalt tonnes are reported as thousand tonnes (kt) and rounded to the nearest 100 tonnes; rounding may result in some slight apparent discrepancies in totals.

## APPENDIX 4 – JORC CODE (2012) TABLE 1

## COPPER DIVISION

## INFORMATION MATERIAL TO UNDERSTANDING THE EXPLORATION RESULTS

THE INFORMATION IN THIS TABLE REFERS TO THE FOLLOWING PROJECTS AT THE NIFTY COPPER OPERATIONS: NIFTY SULPHIDE, NIFTY OXIDE AND NIFTY HEAP LEACH

## SECTION 1: SAMPLING TECHNIQUES AND DATA

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>The deposit has been drilled and sampled using various techniques with diamond and reverse circulation drilling utilised for mineral estimation. This information comes from surface and underground and is on variable spacing along and across strike. The total metres within the immediate vicinity of the Deposit are 249,973m. The holes are drilled on most occasions to intersect as near as possible perpendicularly the synclinal east plunge mineralisation.</li> <li>The drilling programs have been ongoing since initial discovery to both expand the mineralisation and provided control for mining. The hole collars were surveyed by Company employees/contractors with the orientation recorded. Down hole survey is recorded using appropriate equipment. The diamond core was logged for lithology and other geological features.</li> <li>The diamond core varied from HQ to NQ in diameter and mineralised intervals and adjacent locations were sampled by cutting the core in half. The RC samples were collected from the cyclone of the rig and spilt at site to approximate 2 to 3Kg weight. The preparation and analysis was undertaken at accredited commercial laboratories, ALS or Intertek Genalysis. Both laboratories have attained ISO/IEC 17025 accreditation. ALS uses the ME-ICP61 four acid digest methods using a sample of 0.2g with an ICP-OES finish. Over limit results (&gt;1% Cu) are re-analysed using the ME-OG62 method, which involves subjecting a 0.4g sample to a four acid digest with an ICP-OES finish. Intertek Genalysis use a four acid digest using a 0.2g sample with an ICP-OES finish. Over limit results (&gt;1% Cu) are re-assayed using an ore grade four acid digestion of 0.2g sample, and an AAS finish. The analysis and preparation of recent diamond drilling by Metals X has been undertaken at the onsite Nifty laboratory which has been contracted to accredited analytical testing service by ALS. On-site, ALS uses a Fusion XRF15C method for analysis.</li> </ul>
Drilling techniques		
Drill sample recovery	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</li> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>The drilling was completed using a combination of surface and underground drilling. In general the orientation of the drilling is appropriate given the strike and dip of the mineralisation.</li> <li>The core recovery is recorded in the database and in most instances was in excess of 95%. This was assessed by measuring core length against the drilled core run. There is no record of the quantity (weight) of RC chips collected per sample length.</li> <li>The ground conditions in the mineralised zone are competent. In areas of less competent material core return is maximised by controlling drill speed. In the case of RC samples areas of less competent material are identified in the log.</li> <li>Whilst no assessment has been reported, the competency of the material sampled would tend to preclude any potential issue of sampling bias.</li> </ul>
Logging	<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.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>The routine logging of core and chips describes the general geology features including stratigraphy, lithology, mineralisation, alteration etc. For the majority of holes this information is sufficient and appropriate to apply mineralisation constraints. Some core drilling is orientated and structural measurements of bedding, joints, veins etc. has occurred as well as fracture densities.</li> <li>Geological logging has recorded summary and detailed stratigraphy, lithology, mineralisation content, and alteration, some angle to core axis information, vein type, incidence and frequency, magnetic content.</li> <li>The entire length of all holes, apart from surface casing, was logged.</li> </ul>

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 within 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.</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>Refer to body of the Report.</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.</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>NA</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.</li> </ul> <p>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.</p> <ul style="list-style-type: none"> <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) photography.</li> <li>The total length and percentage of the relevant intersections logged</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
<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 75µm. 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:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Excluded results are non-significant and do not materially affect understanding of the Renison deposit.</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%<sub>m</sub> 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>