

30 October 2019

ASX Code: **COY**

### September 2019 Quarterly Activities Report

The following report details the operating and corporate activities of Coppermoly Ltd (**Coppermoly** or **the Company**) for the quarter ended 30 September 2019.

#### HIGHLIGHTS

##### *Simuku IP Survey*

- **Modelling of the IP survey data collected in the June quarter revealed multiple anomalous chargeability and conductivity responses on every line in the survey which correlate strongly with known sulphide occurrences and are extrapolated to other untested areas**
- **A Classic Porphyry Model fits the Simuku Central mineralised zone which is adjacent to a pyrite-rich halo that has a strong IP response**
- **Several large volcanic centres were identified and have been interpreted as calderas which may host porphyry systems**
- **This mineralisation model was integrated with geological, geochemistry and geophysical data, which highlights two high ranked target areas that show features of the classic porphyry mineralisation system at Simuku East and Misusu.**

##### *Corporate Activity*

- **Completion of the placement of 404,170,658 shares to Shanghai Fuyuan Investment Co. Ltd (SFIL) at an issue price of \$0.015 per share to raise \$6.06 million before costs occurred on 31 July 2019.**
- **Mr Xuan Jian appointed Non-Executive Director.**

#### Exploration Activity

##### **Simuku (EL 2379)**

The Simuku project area hosts both a large tonnage low grade porphyry style copper mineralisation zone and near surface higher grade secondary copper mineralisation. Both mineralisation zones have untested extensions.

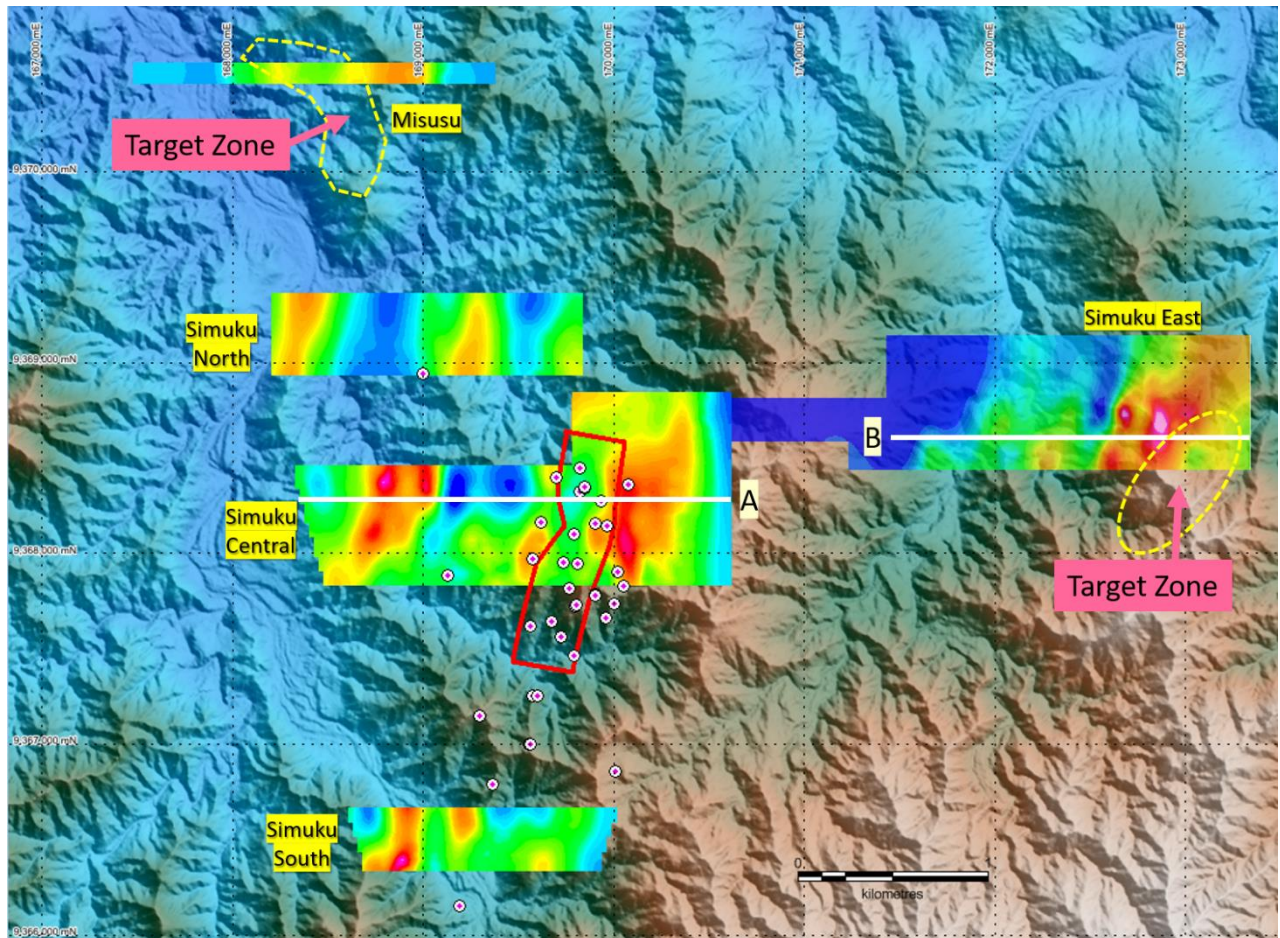
In the June Quarter the Company successfully completed an Induced Polarisation (IP) survey within the Simuku tenement. Coppermoly engaged AusThai Geophysics consultants to conduct lines of 2D Pole-Dipole Ground IP (DPIP) over the highest ranked VTEM anomalies generated from modelling of heli-borne survey completed in December 2017. A total of twenty-one (21) line kilometres of ground survey were completed (Fig 1).

The objective of the Survey was to follow up the highest ranked VTEM anomalies from the December 2017 heli-borne survey to delineate greater detail to allow for identification of high priority drill targets.

An induced polarisation (and resistivity) survey was conducted at the Simuku tenement (EL2379) during May and June 2019. The objective of the survey was to follow up areas several EM anomalies associated with structural zones and intrusive complexes that were identified in the 2017 VTEM survey<sup>1</sup>.

Five areas were surveyed with 100m pole-dipole configuration after commencing the survey using a 100m dipole-dipole configuration (see Figure 1 for areas). Eleven east-west lines for a total of 21 kms were surveyed as single, two, or three-line blocks in each area.

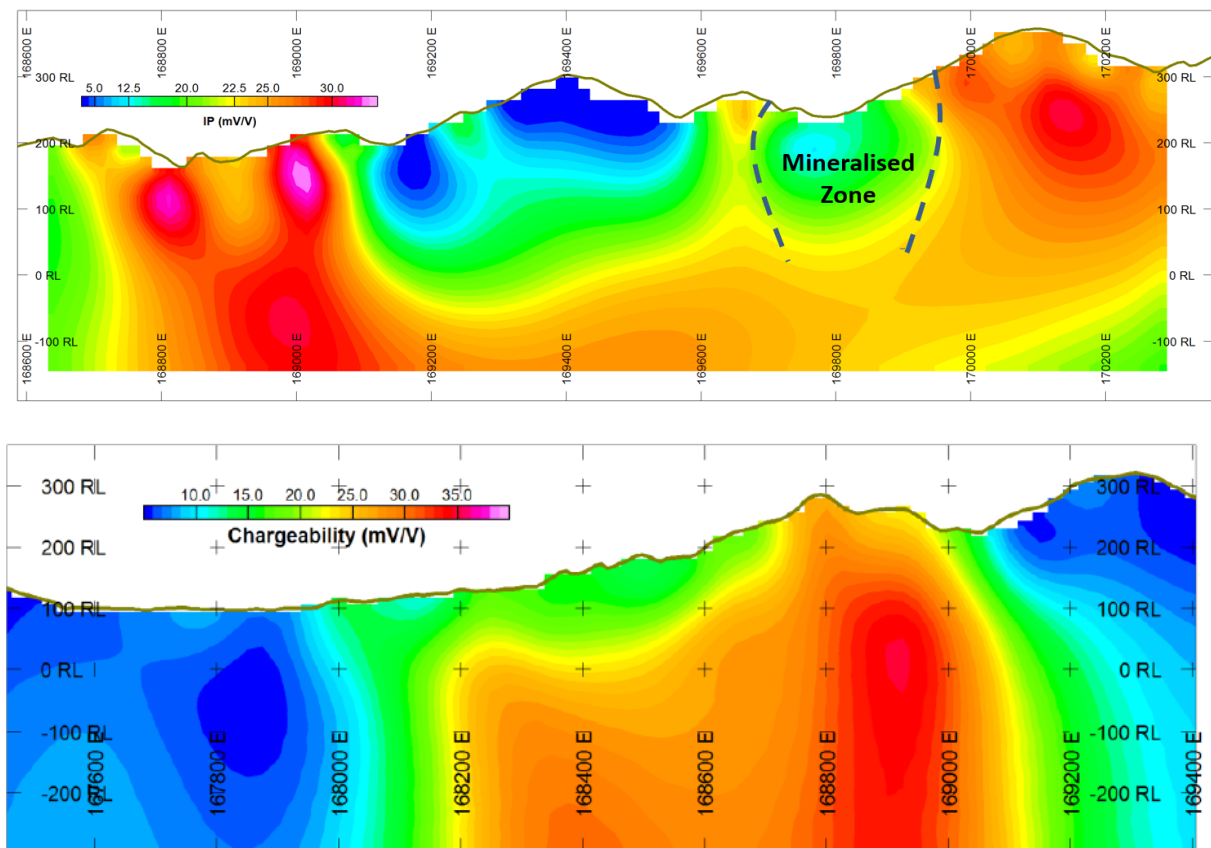
The IP data quality is very high, to the maximum N separation of 8. 2D inverse modelling was undertaken on every line and 3D inverse modelling on each of the 5 areas (Figure 1). All modelling incorporated high resolution LiDAR topography information.



**Figure 1.** 3DIP 100m depth drapes. The bright colours in the image represent anomalous chargeability zones. The yellow dashed outlines represent the high priority targets generated from the new interpretation.<sup>2</sup> The circles represent historical drilling and the red polygon is the outline of the known mineralised zone. Note: Depth drapes are the sliced plan view images extracted from the 3D model at a constant depth below the topography. The background image is the LiDAR topography. The white line 'A' is the location of IP section through Simuku Central (Fig 2a). The white line 'B' is the location of the IP section through Simuku East (Fig 2b). UTM co-ordinate zone: WGS84\_56S.

<sup>1</sup> Refer ASX announcement dated 23 April 2018. The Company is not aware of any new information or data that materially affects the information contained in that announcement.

<sup>2</sup> Refer ASX announcement dated 29 August 2019. The Company is not aware of any new information or data that materially affects the information contained in that announcement.



**Figure 2a and b.** Sections of 3DIP model west to east along the line SIM19\_06 through Simuku Central (a. upper) and SIM19\_04 through Simuku East (b. lower) from the 2019 survey (location Line A and B respectively in Figure 1). Note the spatial relationship between the known mineralisation zone at Simuku Central (grey dashed outline) and the comparison to the IP chargeability high at Simuku East.

### Target Generation

The 2019 survey covered the known mineralisation zone at Simuku Central, but also revealed other high potential zones of similar mineralisation.

### Simuku Central

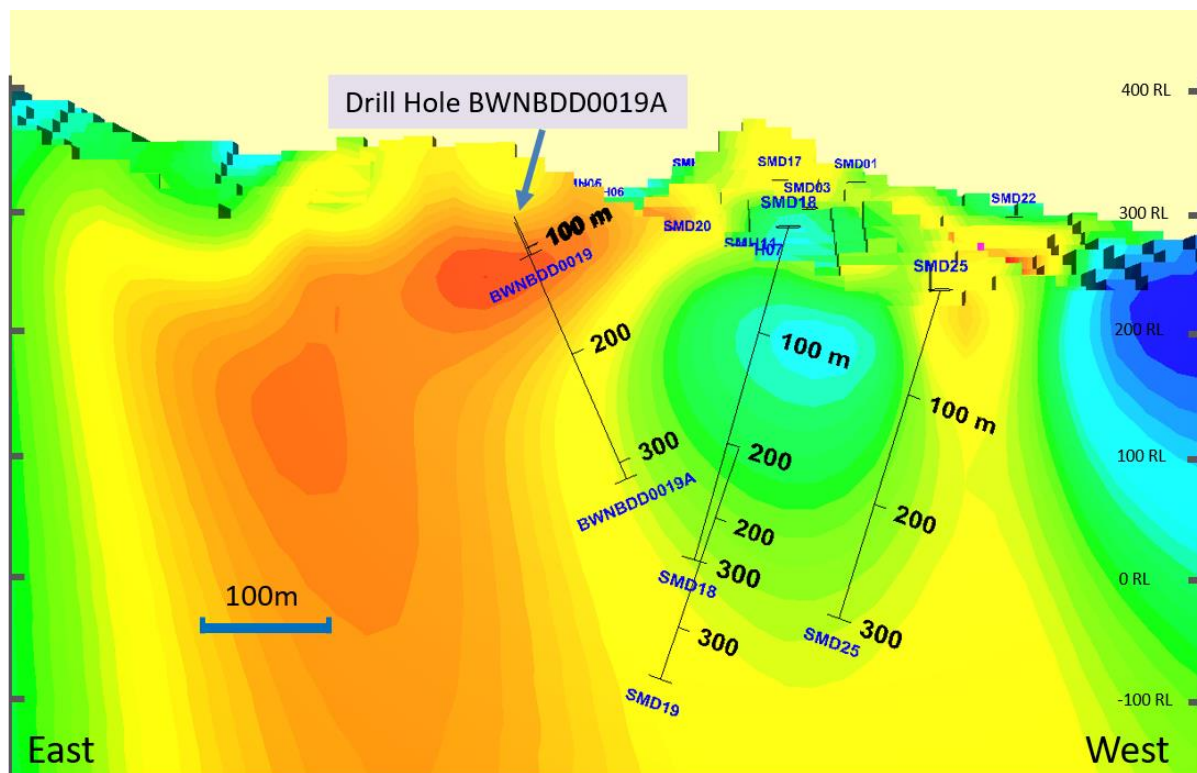
Simuku Central is represented by the 3 IP lines that cross historical drill holes with known Cu mineralisation and the surrounding area.

There are several significant chargeability responses, the most interesting of which is directly juxtaposed with the currently known mineralised drill holes. The IP chargeability response in the mineralised zone is low to moderate compared to the high chargeability response directly to the east (Figure 3). The one drill hole through this chargeability zone shows a spike in pyrite content and consistently low Cu values (Location of BWNBDD0019A on Figure 3 and assay results in Table 1).

When compared to some type example global porphyry systems, the Simuku deposit appears to fit a classic model where the high chargeability zones represent a pyrite-rich halo next to a mineralised porphyry which correspondingly has a relatively lower chargeability response (one such type example is Batu Hijau deposit in Indonesia).

The high chargeability zones to the west of the mineralisation zones are not well understood to date. However, several high chargeability zones coincide with zones of high magnetic response, which form a ring feature around a broad magnetite destruction core (Figure 4).

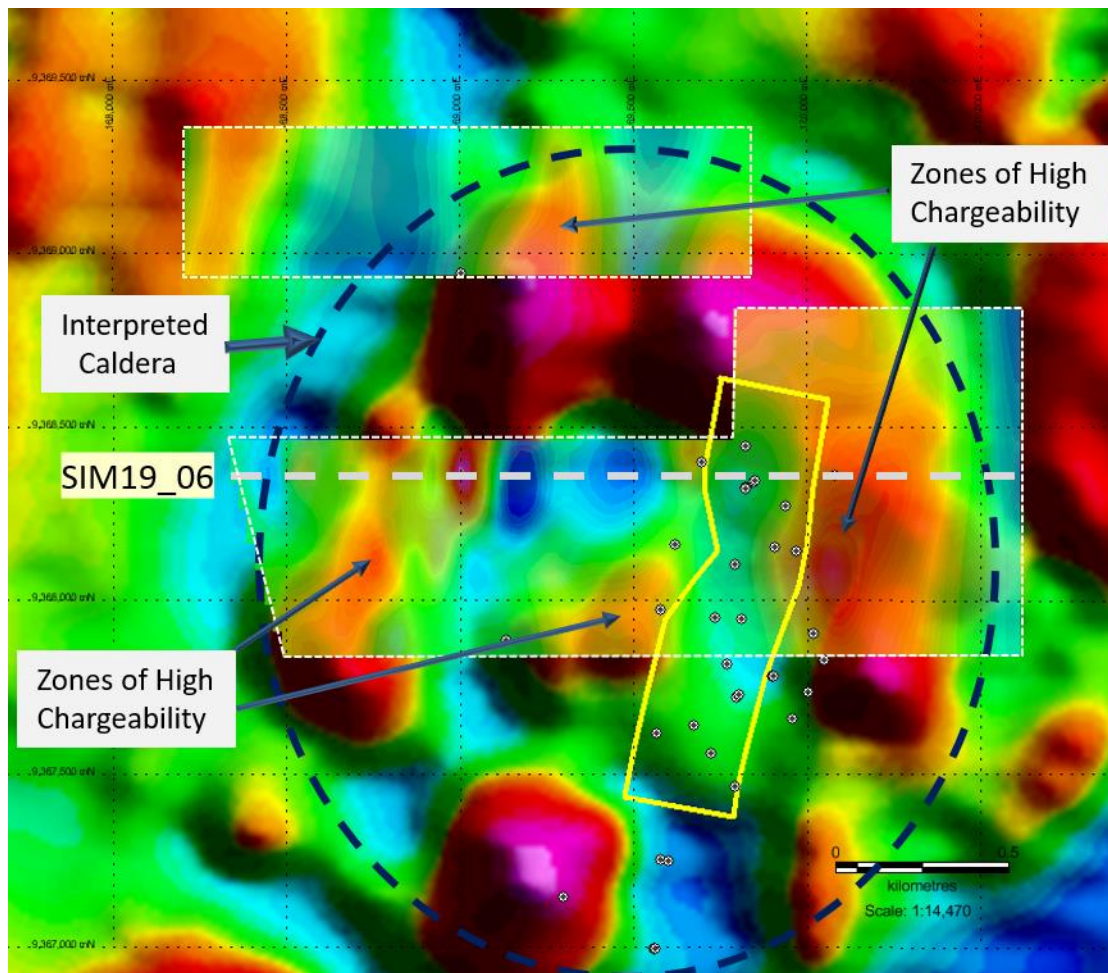




**Figure 3.** East to West section extracted from IP Line SIM19\_06 which crosses directly by drill hole BWNBDD0019A that penetrates through the high IP chargeability anomaly (orange). This hole has elevated pyrite content up to 8-10% within the anomalous IP zone whereas the other holes in the lower chargeability zones have pyrite values rarely above 1%. The classic porphyry model has ring of pyrite-rich, Cu-poor sulphide content which corresponds to a high chargeability response with a central Cu-mineralised zone of lower chargeability which has lower overall volume of pyrite.

This interpreted model implies that current known mineralisation at Simuku lies within part of a large circular magnetic feature that is likely to represent a volcanic centre such as a caldera. (Figure 4). This caldera feature has a reasonably coherent ring of high magnetic response which associates quite well with high IP chargeability around its margin. The known mineralised zones lie within the magnetic and IP low in the central portions.

Follow up field check on the high chargeability zones around the caldera is considered for the next phase of the Simuku exploration program.



**Figure 4.** Interpretation of an approximately 2km diameter caldera hosting a porphyry intrusive cluster. Modelled magnetic image (RTP 1VD colour) overlain by IP chargeability layer (inside white dashed lines). SIM19\_06 is the location of IP section shown in Figures 2 and 3. Black circles are the drill holes. The yellow outline is the area where drill holes have recorded significant Cu intercepts.

This model can be translated to other similar looking areas within the Simuku tenement that have sufficient IP coverage such as Simuku East and Misusu as explained below.

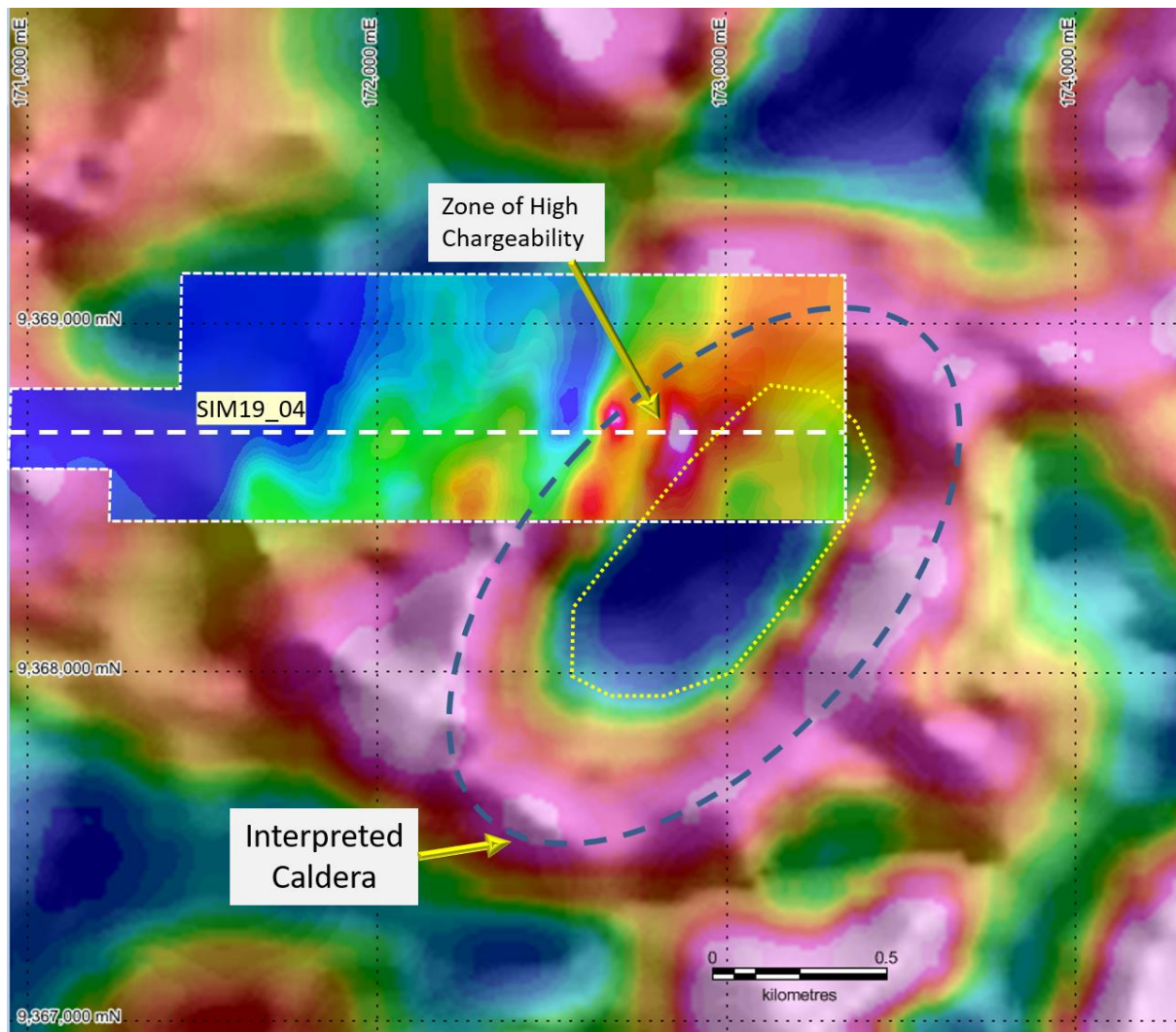
#### Simuku East Porphyry Target

Three IP lines went through the Simuku East area, which revealed a zone of very high chargeability sitting on the west margin of a magnetic ring feature (Figure 5)

Historical mapping observed a felsic porphyry intrusive unit surrounded by more dominant dioritic and volcanic units very similar to those at Simuku Central. Also, the historical stream sediment data for this area has several occurrences of elevated Cu values draining from the centre of this target zone (Figure 5). A short visit to verify a surface IP zone confirmed that pyrite was the probable source of the chargeability anomaly.

If the model for Simuku Central is applied to this area it may represent a good size target to host a potential mineralised porphyry within the interpreted zone of magnetite destruction (Figure 5)

The follow up work program for this area is to review the historical mapping and geochemistry in order to define drill targets.



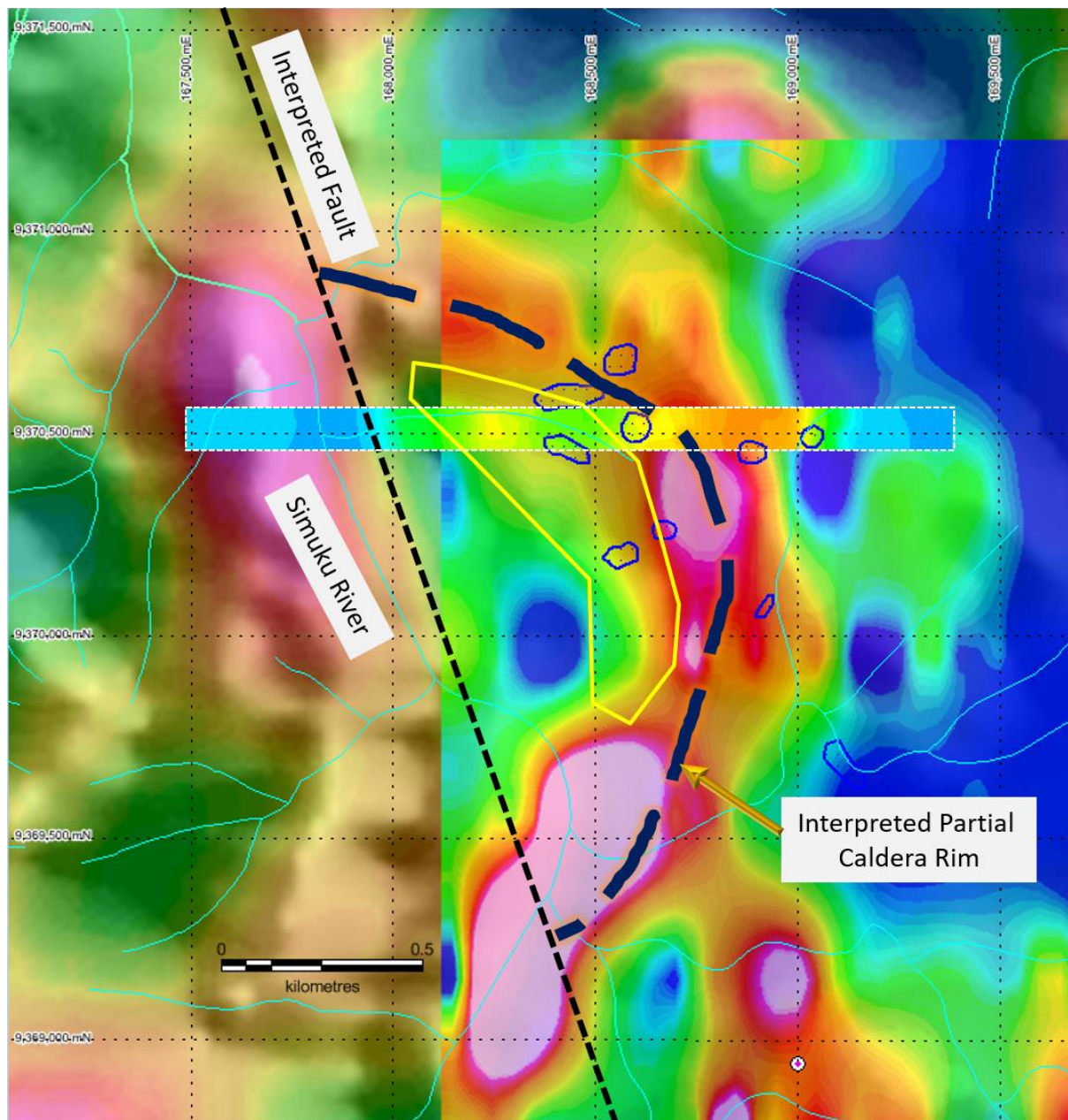
**Figure 5.** Simuku East IP survey area. The yellow dashed line defines the interpreted zone of magnetite destruction and represents a target of interest to potentially host a porphyry system. The 3DIP 100m depth chargeability drape overlies the background image of VTEM modelled magnetic susceptibility 200m depth slice. The white dashed line represents the location of the IP section (line SIM19\_04) shown in Figure 2.

### Misusu

Only one IP line crossed this area in the 2019 survey. The combination of the 2019 IP survey model with the historical GAIP data and VTEM magnetic model allowed for the interpretation of a semi-circular 'caldera' structure. Once again there is a correlation with the higher IP chargeability and the stronger magnetic zones (Figure 6).

Historical mapping has highlighted scattered zones of 'porphyry' stockwork and stream sediment geochemistry recorded irregular elevated Cu values which made this area an attractive prospect. The main target zone of interest lies within the inner part of the caldera feature which could be greater than 1,000 x 500m.





**Figure 6.** 3DIP 100m depth drupe (white dashed line polygon) overlies GAIP image with strong chargeability zone in pink with the interpreted 'caldera' rim outlined by the thick dashed line. It is interpreted to be cut off by a major fault along the Simuku River. The internal zone outlined in yellow is lying within the caldera represents an attractive porphyry target. The background image is the VTEM modelled magnetic susceptibility 200m depth slice

The follow up exploration plan for the Simuku project is to confirm and expand on historical mapping and geochemistry to delineate more precise information, especially structural orientation, that could be crucial to define drill targets.

The two year term of EL2514 expired during the September quarter. The Company has submitted an application to renew EL2514 for a further two years.

**Mt Nakru (EL 1043)**

The Mt Nakru Project hosts JORC Mineral Resource that was estimated by Mining Associates in February 2019 as summarised in Table 1.<sup>3</sup>

Resource	Mineralised	Grade			Metal		
Category	Tonnes (millions)	Copper	Gold	Silver	Copper (kt)	Gold (koz)	Silver (koz)
Indicated	7.03	1.00	0.28	1.81	70	64	409
Inferred	34.36	0.69	0.21	1.55	239	237	1,707
Total	41.39	0.75	0.23	1.59	309	300	2,116

**Table 1. Nakru Project Indicated and Inferred Mineral Resource Estimate, Feb 2019 (> 0.3% Cu)**

During the December quarter, the Company will undertake a trenching program at the Mt Nakru Project designed to identify further potential sulphide occurrences to assist in the planning and design of the next phase of drilling and development for the Mt Nakru project which will focus on continuing the development of Nakru 1 and extensions to Nakru 2 by drilling more step out holes.

**Mak Mak (EL2514)**

Mak Mak is a greenfields exploration tenement that lies proximal to the Nakru tenement. There are several sites within the tenement where rock chip and stream sediment samples have returned elevated copper and gold analysis.

The two year term of EL2514 expired during the September quarter. The Company has submitted an application to renew EL2514 for a further two years.

No work was undertaken on the Mak Mak project during the quarter.

**Kori River (EL2578)**

The Company's application for exploration licence EL2578 Kori River (EL2578) was approved in the June quarter.

EL2578 is valid for an initial term of 2 years at which time the Company may apply for a further extension. The Company's minimum expenditure under the exploration is PGK50,000 per annum for the initial two-year term.

No work was undertaken on EL2578 during the quarter.

**Metelen River (ELA2638)**

During the quarter a Warden's Hearing was conducted in relation to the Company's application for ELA2638 Metelen River which occupies an area of 246km<sup>2</sup> and is located adjacent to the Company's existing Mt Nakru and Mak Mak exploration licences.

<sup>3</sup> Refer ASX announcement dated 28 February 2019. The Company is not aware of any new information or data that materially affects the information included in the referenced ASX announcements and confirms that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.



### **Corporate Activity**

On 30 May 2019 the Company announced that it had entered into a Placement Agreement with Shanghai Fuyuan Investment Co Limited (**SFIL**) pursuant to which SFIL has subscribed for 404,170,658 fully paid ordinary shares (**Placement Shares**) in the Company to raise up to \$6.062 million. The issue price for the Placement Shares was \$0.015.

Completion of the Placement and the issuance of the Placement Shares occurred on 31 July 2019.

It is proposed that the funds will be used for the following:

- Further drilling at the Mt Nakru Cu-Au Project.
- Progressing geotechnical and environmental programs at Mt Nakru.
- Scoping / Pre-feasibility study for the Mt Nakru Cu-Au Project.
- Modelling and interpretation of newly acquired IP data at the Simuku Porphyry Cu Project.
- Test drilling new targets at Simuku Porphyry Cu Project.
- Assessment of regional targets at the Mak Mak and Kori River Projects.
- General working capital purposes.

Mr Xuan Jian was appointed as a Non-Executive Director of the Company on 28 August 2019.

### **Exploration Portfolio at 30 September 2019**

As at 30 June 2019, the Company had interests in the following mineral exploration tenements:

PROJECT	PERIOD ACQUIRED	AREA	LOCATION
<b><u>Granted Exploration Licences</u></b>			
EL 1043 Mt Nakru*	Jan 2008	47km <sup>2</sup>	West New Britain
EL 2379 Simuku* <sup>@</sup>	Jan 2008	122km <sup>2</sup>	West New Britain
EL 2514 Mak Mak <sup>@</sup>	Sep 2017	269km <sup>2</sup>	West New Britain
EL 2578 Kori River	March 2019	396km <sup>2</sup>	West New Britain
<b><u>Exploration Licences under Application</u></b>			
ELA 2638 Metelen River	June 2019	246km <sup>2</sup>	West New Britain

\* Two of the Company's exploration licences, EL 1043 Mt Nakru and EL 2379 Simuku, together known as the West New Britain Projects (**WNB Projects**), were previously subject to a farm-in agreement with Barrick (PD) Australia Ltd (**Barrick**), a subsidiary of Barrick Gold Corporation. Barrick earned a 72% interest in the WNB Projects by spending more than \$20 million on exploration. In July 2013 Coppermoly entered into an agreement with Barrick to reacquire 100% ownership of the WNB Projects' licences on a staged basis. Barrick still holds a nominal 28% interest in the WNB Projects, which the Company has a binding agreement to acquire, completion of which will be affected on the payment of a further \$4.5 million to Barrick within 6 months following the commencement of commercial production at the WNB Projects. Barrick do not have to contribute any further costs for exploration or development of the WNB Projects nor are they entitled to any profits from the projects.

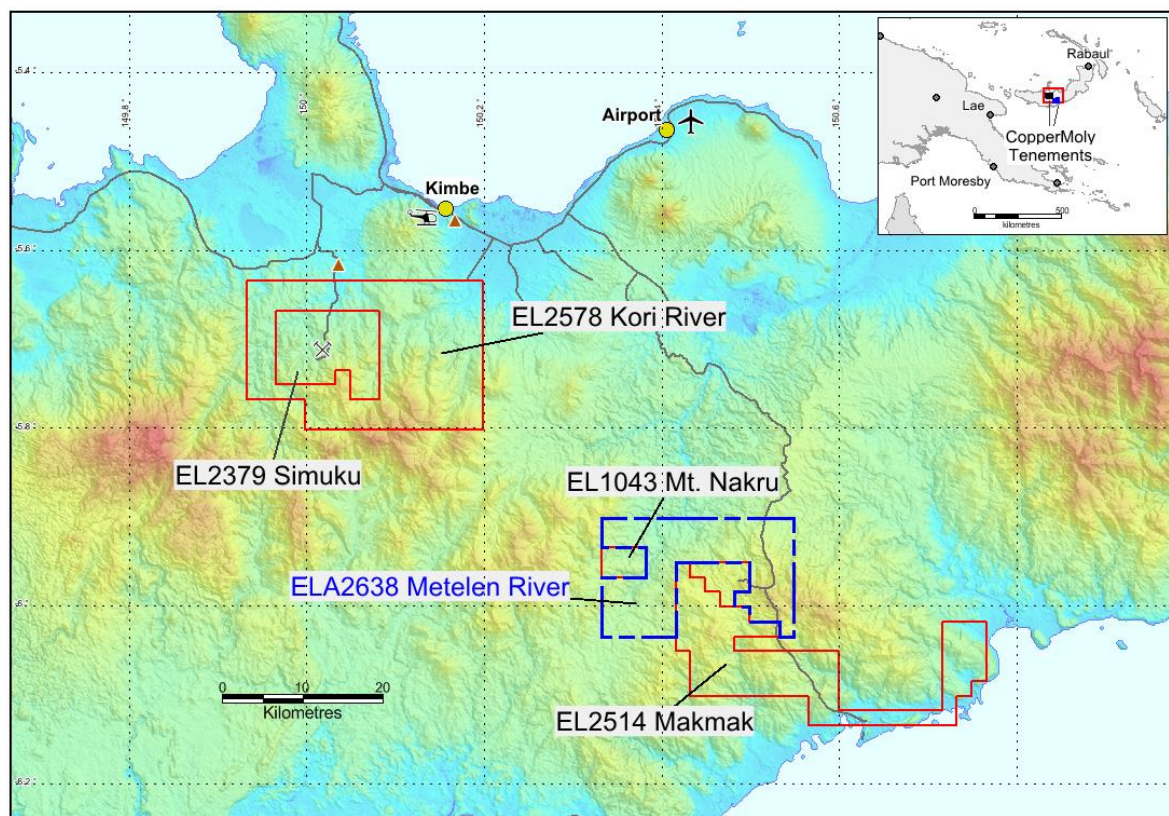
<sup>@</sup> EL2379 and EL2514 expired during the September quarter. The Company has submitted an application to renew each of the exploration licences for a period of two years. The renewal process is proceeding in accordance with the established regulatory processes in PNG. The Group believes it has complied with all licence conditions, including minimum expenditure requirements, and is not aware of any matters or circumstances that have arisen that would result in the Group's application for renewal of the exploration licences not being granted in the ordinary course of business.

## **September 2019 Quarter ASX Announcements**

This Quarterly Activities Report contains information extracted from ASX market announcements reported in accordance with the 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves” (“2012 JORC Code”). Further details (including 2012 JORC Code reporting tables where applicable) of exploration results referred to in this Quarterly Activities Report can be found in the following announcements lodged on the ASX:

- Simuku IP Survey Identifies Multiple High Priority Targets 29 August 2019

Coppermoly confirms that it is not aware of any new information or data that materially affects the information included in any original ASX announcement.



***Figure 7 – Map showing locations of the Company’s exploration licences***

<b><u>Corporate Directory</u></b>	
<b>Coppermoly Limited</b> (ABN 54 126 490 855)	
<b>Executive Director</b> Dr Wanfu Huang  <b>Non-Executive Directors</b> Mr Kevin Grice Mr Zule Lin Mr Jincheng Yao Mr Xuan Jian	<b>Registered office</b> Unit 2, 42 Morrow Street, Taringa, Queensland 4068 Telephone: +61 7 3217 7544 Facsimile: +61 7 3876 0695  Email: <a href="mailto:info@coppermoly.com.au">info@coppermoly.com.au</a> Website: <a href="http://www.coppermoly.com.au">www.coppermoly.com.au</a>
<b>Company Secretary</b> Mr Stephen Kelly	

### About Coppermoly

Coppermoly (COY) is an ASX listed junior exploration company which has been listed on the ASX since 2008. Coppermoly's head office is located in Brisbane, Australia and mineral exploration activities are focused entirely on the island of New Britain in PNG where it is exploring for copper, gold, silver, zinc, and molybdenum.



## Appendix 5B

### Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

#### Name of entity

**COPPERMOLY LIMITED**

#### ABN

**54 126 490 855**

#### Quarter ended ("current quarter")

**30 September 2019**

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(339)	(339)
(b) development	-	-
(c) production	-	-
(d) staff costs	(144)	(144)
(e) administration and corporate costs	(145)	(145)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	2	2
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Research and development refunds	-	-
1.8 Other	-	-
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(626)</b>	<b>(626)</b>

## Appendix 5B

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Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
<b>2.</b>	<b>Cash flows from investing activities</b>		
2.1	Payments to acquire:		
	(a) property, plant and equipment	(110)	(110)
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
<b>2.6</b>	<b>Net cash from / (used in) investing activities</b>	<b>(110)</b>	<b>(110)</b>

<b>3.</b>	<b>Cash flows from financing activities</b>		
3.1	Proceeds from issues of shares	6,063	6,063
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	(16)	(16)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-

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Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
<b>3.10</b>	<b>Net cash from / (used in) financing activities</b>	<b>6,047</b>	<b>6,047</b>

<b>4.</b>	<b>Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1	Cash and cash equivalents at beginning of period	1,581	1,581
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(626)	(626)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(110)	(110)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	6,047	6,047
4.5	Effect of movement in exchange rates on cash held	(6)	(6)
<b>4.6</b>	<b>Cash and cash equivalents at end of period</b>	<b>6,886</b>	<b>6,886</b>



## Appendix 5B

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Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

5.	<b>Reconciliation of cash and cash equivalents</b> at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	<b>Current quarter</b> <b>\$A'000</b>	<b>Previous quarter</b> <b>\$A'000</b>
5.1	Bank balances	6,886	1,581
5.2	Call deposits	-	-
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	<b>Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>6,886</b>	<b>1,581</b>
6.	<b>Payments to directors of the entity and their associates</b>	<b>Current quarter</b> <b>\$A'000</b>	
6.1	Aggregate amount of payments to these parties included in item 1.2		
	Payment of Director fees	(39)	
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	Nil	
6.3	Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2		
Include amounts paid to the Managing Director as remuneration, including superannuation contributions. All Non-Executive Director fees payable during the September quarter were accrued, but not paid.			

## Appendix 5B

### Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

#### 7. Payments to related entities of the entity and their associates

Current quarter  
\$A'000

7.1 Aggregate amount of payments to these parties included in item 1.2

Nil

7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3

Nil

7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

N/a

#### 8. Financing facilities available

*Add notes as necessary for an understanding of the position*

Total facility amount  
at quarter end  
\$A'000

Amount drawn at  
quarter end  
\$A'000

8.1 Loan facilities

-

-

8.2 Credit standby arrangements

-

-

8.3 Other (please specify)

-

-

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

N/a

#### 9. Estimated cash outflows for next quarter

\$A'000

9.1 Exploration and evaluation

(691)

9.2 Development

-

9.3 Production

-

9.4 Staff costs

(227)

9.5 Administration and corporate costs

(213)

9.6 Other – payments for property, plant and equipment

(95)

9.7 Total estimated cash outflows

(1,226)

## Appendix 5B

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Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

*^^The Company anticipates that during the September Quarter it will receive \$6.06 million pursuant to the subscription agreement entered into with Shanghai Fuyuan Investment Co. Ltd (SFIL) as announced by the Company on 30 May 2019. Completion of the placement and issue of the placement shares occurred on 31 July 2019.*

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	N/a			
10.2	Interests in mining tenements and petroleum tenements acquired or increased	N/a			

#### Compliance statement

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Sign here:



Company Secretary

Date: 30 October 2019

Print name: Stephen Kelly

#### Notes

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to



## **Appendix 5B**

### **Mining exploration entity and oil and gas exploration entity quarterly report**

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.

2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.