

## QUARTERLY REPORT

PERIOD ENDING 31 DECEMBER 2019

### OPERATIONAL UPDATE

#### Sayabouly Project, Laos (Santana 75%)

Operational activities during the September quarter were focused on planning for the Company's maiden drilling program at the Phu Lon Nickel Prospect, part of the Sayabouly Project in Laos, acquired during the quarter from Mekong Minerals Limited.

Phu Lon has a significant mineralisation footprint confirmed along a 14km strike length with previous trenching results from Phu Lon including:

- 975m @ 0.51% Ni (including 42m @ 1.02% Ni);
- 90m @ 0.67% Ni (including 36m @ 1.01% Ni); and
- 80m @ 0.74% Ni (including 17m @ 0.91% Ni).

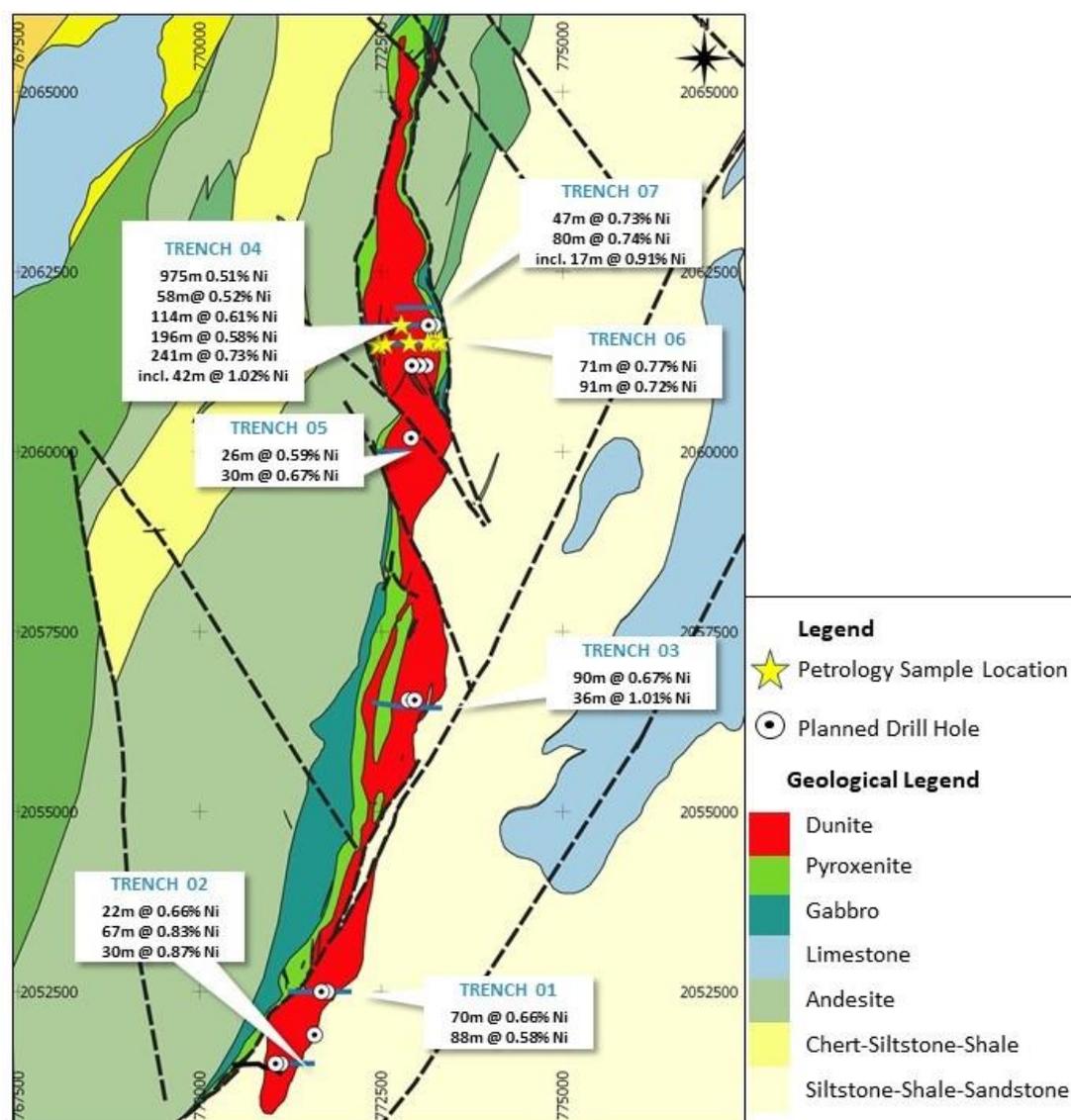


*Figure 1: Location of the Sayabouly Project, Laos*

The interpretation of the Phu Lon Nickel Prospect is modelled on the world class Jinchuan Deposit in China (500mt @ 1.2% Ni, 0.7% Cu, 0.4g/t platinum group elements), a magmatic sulphide style of mineralisation.

To strengthen this interpretation, rock-chip samples from trench excavations were sent for petrological and Scanning Electron Microscope (SEM) analysis at the University of New South Wales. Fifteen samples were submitted for petrology to confirm the composition of the ultramafic intrusion, with six of these chosen for SEM analysis to determine the nature of the nickel mineralisation. These samples were taken from previously reported significant results from trench 4 and 6 (shown in Figure 2), which sit within a 14km x 1km mineralised envelope.

This analysis confirmed the presence of pentlandite and cobalt pentlandite, nickel and cobalt nickel sulphide minerals respectively, which are ordinarily amenable to metallurgical extraction of the contained nickel-cobalt metals.



**Figure 2: Petrological sample locations, with geology and previously announced significant trench results (Santana ASX Announcement, 17 July 2019).**

Three of the six SEM analysed samples recorded pentlandite (a nickel sulphide) with one of these three also defining cobalt pentlandite (cobalt-nickel sulphide). These minerals were found disseminated within the ultramafic host. Nickel oxides were also noted in a number of these samples, as well as alloys of nickel and iron (awaruite). A separate sample contained chalcopyrite; a copper sulphide mineral that previously had not been identified.

The identification of chalcopyrite along with the nickel and cobalt sulphides supports the interpretation that the Phu Lon Nickel Prospect is a magmatic sulphide mineralised ultramafic intrusion with similar geological characteristics to the Jinchuan Deposit, China.

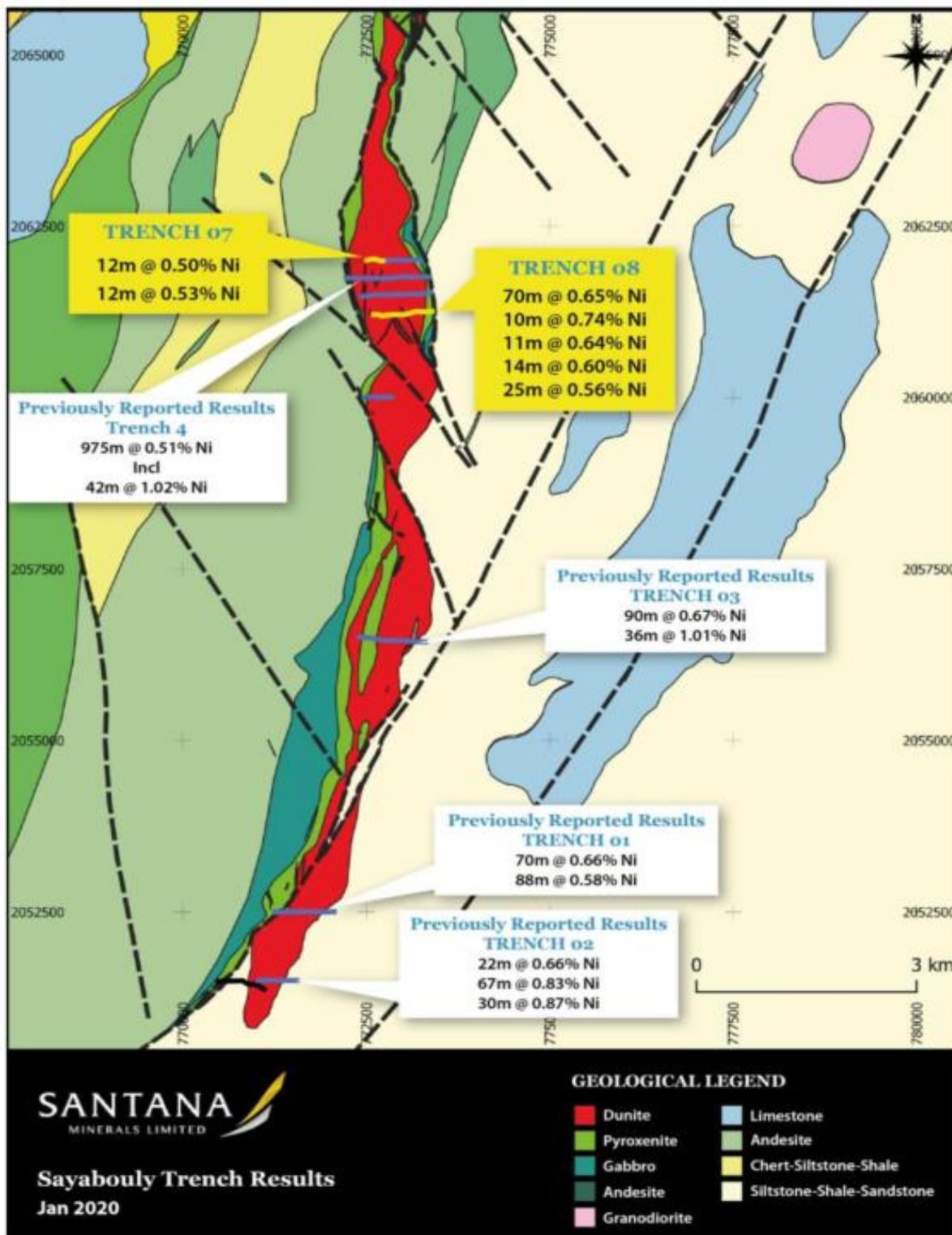
As expected with an ultramafic intrusion containing serpentine minerals, two of the six samples analysed recorded nickel within the serpentine crystal matrix of the ultramafic unit.

Subsequent to quarter end the Company released further trenching results from the northern section of the Phu Lon Nickel Prospect. The results were from trenches 7 and 8, located directly north and south respectively of the previously reported Trench 4 which returned results of 975m @ 0.51% Ni including 42m @ 1.02% Ni. Trench 7 was an extension to the west of an existing trench, while Trench 8 was excavated along a previously completed line of induced polarisation survey line. This geophysical electrical survey method identified a high chargeability with coincident low resistivity anomaly at this location and is interpreted as a zone of sulphide mineralisation at a depth of approximately 100m (Figure 4).

The significant assays from these 2 additional trenches included:

- 70m @ 0.65% Ni Trench 8;
- 10m @ 0.74% Ni Trench 8;
- 11m @ 0.64% Ni Trench 8;
- 14m @ 0.60% Ni Trench 8;
- 25m @ 0.56% Ni Trench 8;
- 12m @ 0.50% Ni Trench 7; and
- 12m @ 0.53% Ni Trench 7.

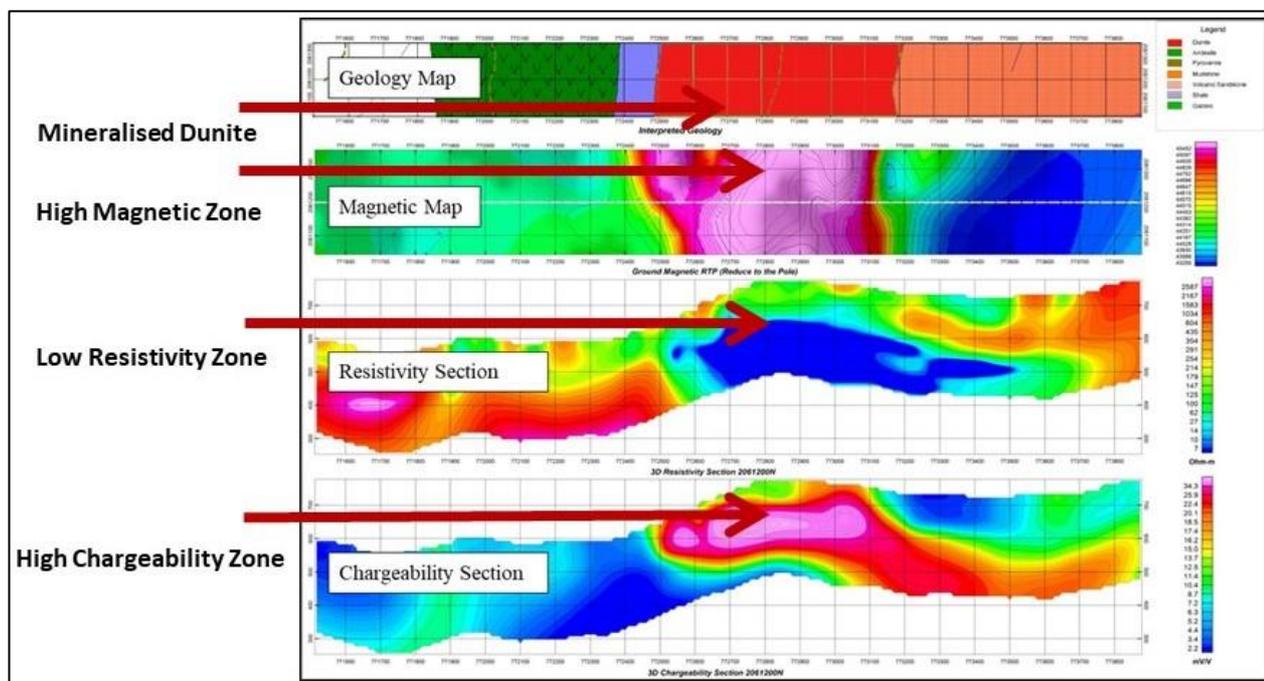
These trench results can be seen in context of previously reported trenching results in Figure 3.



*Figure 3: Trench 7 and 8 Sample Results from the Sayabouly Project*

Importantly, the trench samples were taken below the lateritic profile from the weathered ultramafic intrusion that hosts the nickel mineralisation. These latest results from the weathered ultramafic further bolster the interpretation that Phu Lon has similar geological characteristics to the Jinchuan Nickel deposit.

The results from Trench 8 are particularly encouraging and strengthen the interpretation that a buried zone of nickel sulphide mineralisation is located approximately 100m below surface. The zone shown in Figure 4 is a key focus for the forthcoming drilling campaign.



**Figure 4: Induced Polarisation Survey, show low resistivity and high chargeability, looking north on section 2,041,200N (WGS84 Zone 47). Interpreted to be an untested zone of nickel sulphide mineralisation at approximately 100m depth (Santana ASX Announcement, 17 July 2019).**

On 21 January 2020 the Company announced a maiden drill program had commenced at the Phu Lon Nickel Prospect to test the extensive nickel mineralisation (Figure 2 and 3), and coincident Induced Polarisation (IP) anomalies (Figure 4) targeting bulk tonnage nickel sulphides.

This program comprises an initial 13 holes for 2,000 diamond drilled metres with first assay results from this program expected in February 2020.

### **Becker Gold Project, Chile (Santana right to earn 85% interest)**

No exploration activities were conducted on the Becker Project during the December quarter.

### **Cuitaboca Project, Mexico (Santana 80%)**

No exploration activities were carried out at the Cuitaboca Project during the December quarter.

## **CORPORATE**

### **Completion of Mekong Minerals Acquisition**

During the month of December, the Company announced completion of the acquisition of Mekong Mineral's 75% interest in the Sayabouly Project in Laos and 85% interest in two Cambodian gold projects in which Mekong held farmed out interests. The Company issued 648,721,076 fully paid ordinary shares (**Consideration Shares**) and reimbursed \$210,000 of exploration costs to Mekong Minerals at completion. The Consideration Shares are subject to 12 months escrow.

### **Completion of \$4M Placement**

During the month of December, the Company completed a placement of 1,360,000,000 fully paid ordinary shares at \$0.003 per share to raise \$4.08 million (**Placement Shares**). The placement consisted of 1,333,333,333 Placement Shares pursuant to the approval received from shareholders at a General Meeting held on 15 November 2019 and a further 26,666,677 Placement Shares under the Company's existing placement capacity as provided for by ASX Listing Rule 7.1.

### **Appointment of Chief Executive Officer and Board Appointments**

Upon completion of the transaction with Mekong Minerals, the Company confirmed the appointment of Mr Shane Pike to the role of Chief Executive Officer (CEO) of Santana. Mr Pike brings 20 years technical and management experience in the resources sector. His experience spans a wide range of exploration, mine development and mine geology roles and more recently he has overseen Mekong's exploration assets (for the past year) and immediately prior to that was Exploration Manager (East Coast) for Evolution Mining.

Santana's Managing Director, Mr Tony McDonald's role with the Company has changed with Mr McDonald now serving as a Non-Executive Director. Mr Anthony McClure was appointed as a Non-Executive Director and Mr Robert Bell elected to resign as a director of the Company, effective from the completion of the Mekong transaction.

This announcement has been authorised for release to the ASX by the CEO.

For further information, please contact:

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### **Competent Persons Statement**

The information in this report that relates to Exploration Results is based on information compiled by Mr Shane Pike, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Pike is the Chief Executive Officer of Santana Minerals Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity 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 Pike consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

### **Previous Disclosure - 2012 JORC Code**

Information relating to Mineral Resources, Exploration Targets and Exploration Data associated with the Company’s projects in this announcement is extracted from the following ASX Announcements:

- ASX announcement titled “Acquisition of Highly Prospective Sayabouly Project” dated 17<sup>th</sup> July 2019;
- ASX announcement titled “Petrology Confirms Nickel, Cobalt and Copper Sulphides at The Phu Lon Prospect, Laos”, dated 25<sup>th</sup> November 2019; and
- ASX announcement titled “Significant Trench Results from The Sayabouly Project”, dated 16<sup>th</sup> January 2020.

A copy of such announcement is available to view on the Santana Minerals Limited website [www.santanaminerals.com](http://www.santanaminerals.com). The reports were issued in accordance with the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person’s findings are presented have not been materially modified from the original market announcements.

### Additional ASX Listing Rule Information

Santana Minerals Limited ('Santana') provides the following additional information in accordance with ASX Listing Rule 5.3.3.

#### Exploration tenements held at the end of the quarter and their location

Name	Status	Interest Held
<b>Laos</b>		
Sayabouly	Granted	75%*
<b>Cambodia</b>		
Phnom Khtung	Granted	85%#
Snoul	Granted	85%#

\* The consolidated entity currently holds a 75% interest in the project, with joint venture parties of the other 25% free carried to completion of a feasibility study.

# The consolidated entity currently holds an 85% interest in the project (diluting to not less than 12.75% assuming the consolidated entity does not exercise contribution rights) and is free carried to completion of feasibility study. A summary of the JV and Farm-out agreements are noted below.

#### Exploration tenements acquired during the quarter and their location

The consolidated entity acquired the Laos and Cambodian tenements noted above, through completion of the transaction with Mekong Minerals Limited which completed during the quarter.

#### Exploration tenements disposed of during the quarter and their location

Not applicable.

#### Beneficial percentage interests held in farm-in or farm-out agreements at the end of the quarter

##### *Cuitaboca Project*

The consolidated entity has completed a transaction which allows it to earn an initial 80% interest in the Cuitaboca Project. The consolidated entity is earning, but has yet to earn, its initial interest. Further details are by reference to the announcement of 29 July 2014.

##### *Becker Project*

The consolidated entity has completed a transaction which allows it to earn an initial interest of 85% of the central Becker tenements (2,000ha), and 80% of the surrounding licences (6,000ha). The consolidated entity is earning, but has yet to earn, its initial interest. Further details are by reference to the announcement of 17 May 2018.

##### *Cambodian Project*

The consolidated entity's subsidiary (Subsidiary) is party to an unincorporated joint venture agreement with Southern Gold Limited (SGL) in respect of the Cambodian Exploration Licences, pursuant to which SGL has a 15% unincorporated joint venture interest in the Cambodian Exploration Licences, which is free carried until completion of a feasibility study.

The consolidated entity's subsidiary has also entered into a farm-out and incorporated joint venture agreement with Renaissance Cambodia Pty Ltd (Renaissance) (Farm-Out Agreement), pursuant to which Renaissance will sole fund US\$0.5 million of exploration expenditure on each of the Cambodian Exploration Licences to earn a 30% shareholding in the Subsidiary. Renaissance can elect to sole fund a further US\$1.0 million of exploration expenditure on each of the two Cambodian Exploration Licences over the following two years, to increase its shareholding in the Subsidiary to 60%. Upon Renaissance earning a 60% shareholding in the Subsidiary, the consolidated entity may elect to either contribute to maintain its shareholding in the Subsidiary of 40% or not to contribute, in which case Renaissance may earn a further 25% shareholding in the Subsidiary, by managing the Subsidiary and providing funding to complete a definitive feasibility study, during which period the consolidated entity will be free carried.

Renaissance is earning, but has yet to earn, an interest in the Subsidiary.

#### Beneficial percentage interests in farm-in or farm-out agreements acquired or disposed of during the quarter

The consolidated entity acquired the farm out-agreement with Renaissance noted above, through completion of the transaction with Mekong Minerals Limited which completed during the quarter.

## 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

SANTANA MINERALS LIMITED

### ABN

37 161 946 989

### Quarter ended ("current quarter")

31 DECEMBER 2019

Consolidated statement of cash flows	Current quarter \$A'000	Year to date \$A'000
<b>1. Cash flows from operating activities</b>		
1.1 Receipts from customers	-	-
1.2 Payments for		
(a) exploration & evaluation	(189)	(279)
(b) development	-	-
(c) production	-	-
(d) staff costs	(28)	(37)
(e) administration and corporate costs	(171)	(223)
1.3 Dividends received (see note 3)	-	-
1.4 Interest received	-	-
1.5 Interest and other costs of finance paid	-	-
1.6 Income taxes paid	-	-
1.7 Research and development refunds	-	-
1.8 Other (Concession Renewal Fees)	(296)	(296)
<b>1.9 Net cash from / (used in) operating activities</b>	<b>(684)</b>	<b>(835)</b>

<b>2. Cash flows from investing activities</b>		
2.1 Payments to acquire:		
(a) property, plant and equipment	-	-
(b) tenements (see item 10)	(210)	(210)
(c) investments	-	-
(d) other non-current assets	-	-

<b>Consolidated statement of cash flows</b>	<b>Current quarter \$A'000</b>	<b>Year to date \$A'000</b>
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 (Transaction Costs)	(73)	(92)
<b>2.6 Net cash from / (used in) investing activities</b>	<b>(283)</b>	<b>(302)</b>

<b>3. Cash flows from financing activities</b>		
3.1 Proceeds from issues of shares	4,000	4,001
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	(255)	(255)
3.5 Proceeds from borrowings	75	245
3.6 Repayment of borrowings	(245)	(245)
3.7 Transaction costs related to loans and borrowings	-	-
3.8 Dividends paid	-	-
3.9 Other	-	-
<b>3.10 Net cash from / (used in) financing activities</b>	<b>3,575</b>	<b>3,746</b>

<b>4. Net increase / (decrease) in cash and cash equivalents for the period</b>		
4.1 Cash and cash equivalents at beginning of period	209	208
4.2 Net cash from / (used in) operating activities (item 1.9 above)	(684)	(835)
4.3 Net cash from / (used in) investing activities (item 2.6 above)	(283)	(302)
4.4 Net cash from / (used in) financing activities (item 3.10 above)	3,575	3,746
4.5 Effect of movement in exchange rates on cash held	-	-
<b>4.6 Cash and cash equivalents at end of period</b>	<b>2,817</b>	<b>2,817</b>

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	Current quarter \$A'000	Previous quarter \$A'000
5.1 Bank balances	44	20
5.2 Call deposits	2,773	189
5.3 Bank overdrafts	-	-
5.4 Other (provide details)	-	-
<b>5.5 Cash and cash equivalents at end of quarter (should equal item 4.6 above)</b>	<b>2,817</b>	<b>209</b>

**6. Payments to directors of the entity and their associates**

- 6.1 Aggregate amount of payments to these parties included in item 1.2
- 6.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

**Current quarter  
\$A'000**

47

-

Executive and Non-Executive Directors Fees

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

- 7.1 Aggregate amount of payments to these parties included in item 1.2
- 7.2 Aggregate amount of cash flow from loans to these parties included in item 2.3
- 7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

**Current quarter  
\$A'000**

-

-

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

<b>8. Financing facilities available</b> <i>Add notes as necessary for an understanding of the position</i>	<b>Total facility amount at quarter end \$A'000</b>	<b>Amount drawn at quarter end \$A'000</b>
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.		

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<b>9. Estimated cash outflows for next quarter</b>	<b>\$A'000</b>
9.1 Exploration and evaluation	1,100
9.2 Development	-
9.3 Production	-
9.4 Staff costs	25
9.5 Administration and corporate costs	240
9.6 Other (Transaction Costs)	100
<b>9.7 Total estimated cash outflows</b>	<b>1,465</b>

<b>10. Changes in tenements (items 2.1(b) and 2.2(b) above)</b>	<b>Tenement reference and location</b>	<b>Nature of interest</b>	<b>Interest at beginning of quarter</b>	<b>Interest at end of quarter</b>
10.1 Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	Refer Annexure to Quarterly Activities Report			
10.2 Interests in mining tenements and petroleum tenements acquired or increased	Refer Annexure to Quarterly Activities Report			

**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:

  
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(Company secretary)

Date: 31 January 2020

Print name: Craig J McPherson

**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 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.