



ASX Release

29 January 2021

December 2020 Quarterly Report

HIGHLIGHTS

Rosie Project (100% DKM)

Mining Study underway on the Rosie Nickel Deposit

- Entech Mining Consultants engaged to conduct a **Scoping Study** into underground mining of the Rosie Nickel Deposit
- Rosie Resource **2.56 Mt @ 2.9% NiEq**
- Mineral Resource reports **49,100 tonnes contained nickel, 10,600 tonnes contained copper and 205,000 ounces of contained PGEs ***
- **66% of the Rosie Mineral Resource is in the Indicated category**
- Total combined JORC resource for Rosie & C2 is **87,100 nickel tonnes, 12,900 copper tonnes and 231,000 ounces PGE's**
- Scoping Study due for completion next quarter

Tenement Acquisition (100% DKM)

- Ongoing targeting has led to several tenement positions being acquired

Corporate

- Review of development options for Rosie and C2 underway
- Review of multiple external opportunities underway
- Cash and liquids at 31 December 2020 of \$27.6 million

*see ASX announcement 3 August 2020

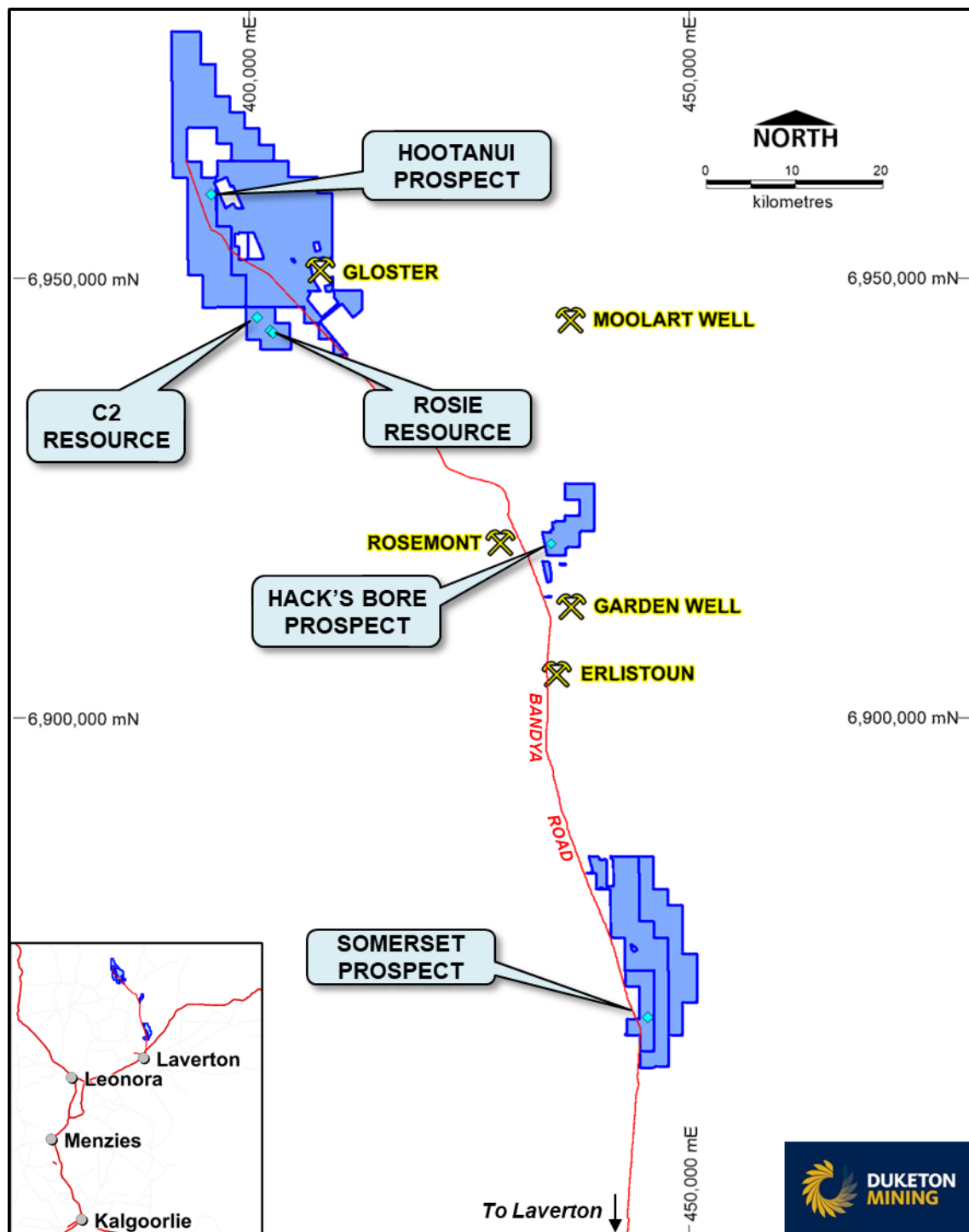


Figure 1. Plan View of the Duketon area showing tenements and areas of nickel rights.



OPERATIONS

The Bulge Nickel Project

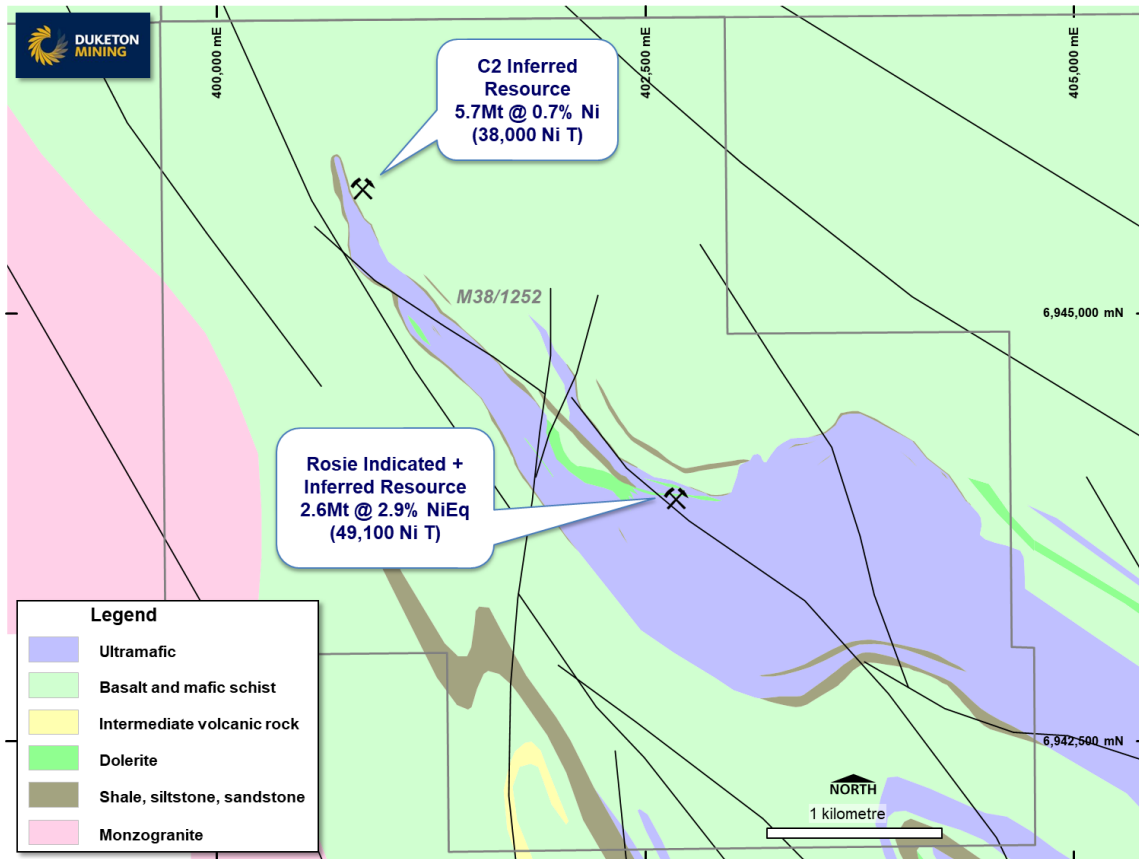


Figure 2. The Bulge Ultramafic Complex

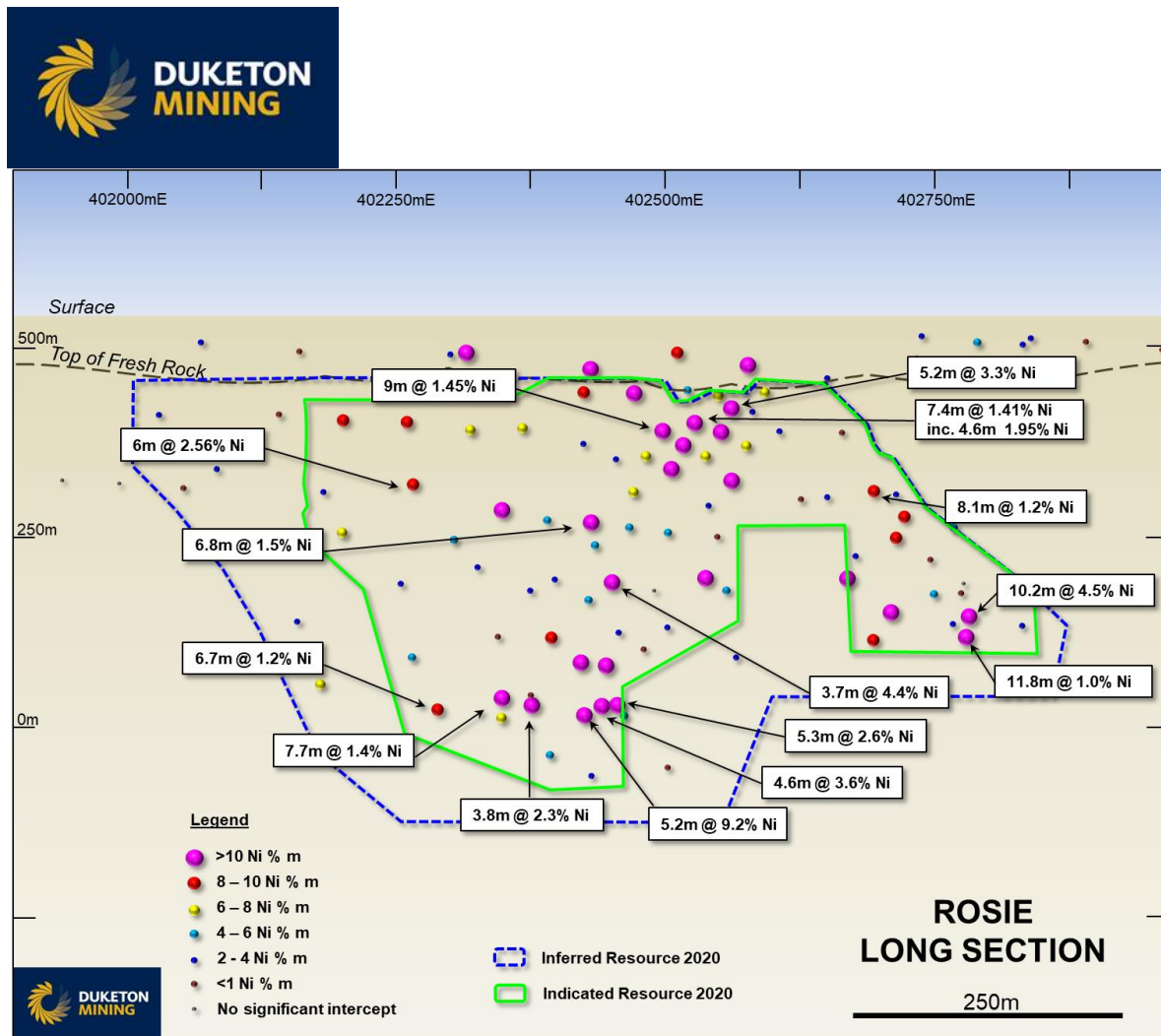


Figure 3. Long Section of Rosie, looking north east.

Rosie and C2 Mineral Resources (100% DKM) Ni

A Scoping Study is currently underway on the Rosie Nickel Deposit.

The Indicated and Inferred Mineral Resource Estimate for Rosie of **2.56 million tonnes at 2.9% nickel equivalent** is reported in accordance with the 2012 JORC Code. The resource estimate is reported at >1% NiEq. Over 66% of the Resource has been classified as Indicated and the mineralisation is open in all directions.

Table 1: Rosie Mineral Resource Statement (July 2020) >1.0% NiEq

Resource Category	Tonnes (kt)	Ni%	NiEq% ⁽¹⁾
Indicated	1,707	2.0	3.0
Inferred	850	1.7	2.8
Total	2,557	1.9	2.9

(1) Assumptions for the nickel equivalent are: Prices (in USD) \$7.00/lb Ni, \$3.20/lb Cu, \$14.00/lb Co, \$1,150/oz Pt, \$1,250/oz Pd and \$8,500/oz Rh. Recovery assumptions from metallurgical test work are: Pentlandite domain 96.9% Ni, 99.5% Cu, 95.1% Co, 78.2% Pt, 97.6% Pd and 83.4% Rh. Violarite domain 88.7% Ni, 94.5% Cu, 88.5% Co, 57.6% Pt, 87.3% Pd and 64.8% Rh.



This resource includes the Nariz mineralisation, discovered by DKM in 2014. The Mineral Resource contained metal is 49,100 tonnes of nickel, 10,600 tonnes of copper, 1,400 tonnes of cobalt and over 205,000 oz of total PGEs (Table 3).

The resource includes a reportable nickel equivalent number after metallurgical work was completed to determine recoveries (see ASX announcement 8th July 2020 & 10th July 2020). It is the opinion of DKM that all the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.

The total JORC compliant nickel resource for the Bulge Area (Rosie & C2) stands at **87,100 tonnes of nickel, 12,900 tonnes of copper and 231,000 ounces of PGE's** (Tables 4-6).



Table 2: Rosie Mineral Resource Grade

Rosie Nickel Resource >1% NiEq							
Classification	Sulphide	Tonnes	Ni (%)	Cu (%)	Co (ppm)	Total PGEs (g/t)	NiEq (%)
Indicated	Pentlandite	960,893	2.3	0.41	610	2.6	3.3
	Violarite	745,813	1.7	0.36	490	2.5	2.6
	Sub-Total	1,706,706	2.0	0.39	560	2.5	3.0
Inferred	Pentlandite	751,559	1.8	0.47	570	2.5	2.8
	Violarite	98,676	1.5	0.43	460	2.2	2.4
	Sub-Total	850,234	1.7	0.47	560	2.5	2.8
Total	All	2,556,940	1.9	0.42	560	2.5	2.9

Table 3: Rosie Mineral Resource Contained Metal

Classification	Ore Type	Contained Metal			
		Ni (t)	Cu (t)	Co (t)	Total PGEs (oz)
Indicated	Pentlandite	21,973	3,987	588	79,041
	Violarite	12,336	2,679	363	59,014
	Sub-Total	34,309	6,666	951	138,056
Inferred	Pentlandite	13,354	3,537	428	60,331
	Violarite	1,452	421	45	6,937
	Sub-Total	14,806	3,958	473	67,268
	Total	49,115	10,624	1,423	205,324



Table 4: C2 Nickel Resource > 0.5% Ni

C2 Nickel Resource >0.5%Ni				
Classification	Oxidation	Tonnes	Ni (%)	Ni (t)
Inferred	Fresh	5,100,000	0.7	34,200
	Transitional	600,000	0.6	3,800
Total		5,700,000	0.7	38,000

Table 5: C2 Resource > 0.5% Ni with Auxiliary Attributes

C2 Nickel Resource >0.5%Ni							
Classification	Oxidation	Tonnes	Ni (%)	Cu (%)	Pt (ppb)	Pd (ppb)	S (%)
Inferred	Fresh	5,100,000	0.7	0.04	60	79	3.3
	Transitional	600,000	0.6	0.04	72	105	0.9
Total		5,700,000	0.7	0.04	61	82	3.1

Table 6: Combined Metal Inventory, The Bulge Area

Deposit	Ni tonnes	Cu tonnes	PGE oz
Rosie	49,115	10,624	205,324
C2	38,000	2,280	25,660
TOTAL	87,115	12,904	230,984

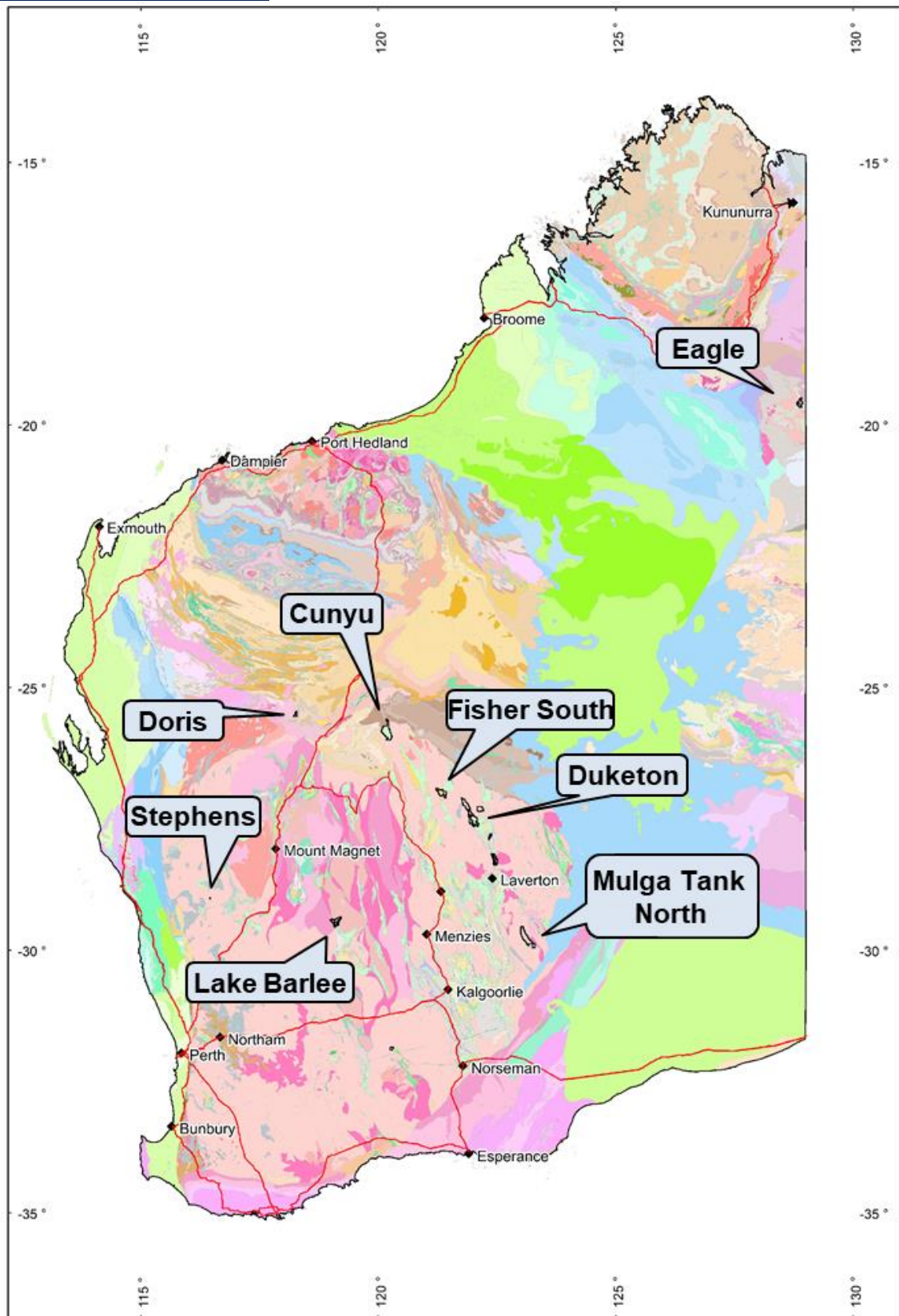


Figure 4. Duketon Regional Tenement Acquisition



Regional Exploration

Regional exploration has been ongoing throughout the quarter. Multiple new targets have been generated creating a significant and robust pipeline of organic opportunities.

Tenement applications include:

- Eagle – gold project in the Tanami Region, two small non JORC gold resource and numerous other significant intercepts
- Lake Barlee – gold project surrounding Halleys East Gold Mine, 200km north of Southern Cross
- Fisher South – gold and nickel project at the southern end of the Fisher Greenstone Belt
- Mulga Tank North – gold project within the Minigwal Greenstone Belt with several gold in regolith anomalies
- Stephens – base metals VMS project in the Gullewa-Koolanooka Greenstone Belt with a number of significant intercepts
- Cunyu – project covering the entire Merrie Greenstone Belt, early stage exploration
- Doris – granted uranium tenement within the Narryer Terrane, 125km north of Meekatharra

Ongoing Strategy

Duketon remains well positioned to drive value from four approaches;

1. Expand/Study Nickel Resources - Complete mining study and target extensions to Rosie C2 and the greater area for Ni-Cu-PGE's
2. New Projects – Acquire advanced Gold or Nickel project with inherent upside that can be unlocked through technical and/or commercial means
3. New Tenure – Acquire new tenure via opportunistic applications or simple/low cost commercial means.

CORPORATE

At 31 December 2020 Duketon had approximately **A\$27.6M** available from cash reserves of **A\$20.3M** and a liquids position of circa **A\$7.3M**.

ASX ADDITIONAL INFORMATION

Exploration and evaluation expenditure during the quarter was \$242,000, associated with tenement compliance costs and project evaluation. Further details are set out in this report. There were no substantive mining production and development activities during the quarter. During the quarter, the Company made cash payments of \$87,000 to related parties and their associates. This was the aggregate amount paid to the directors including salary, directors' fees, consulting fees and superannuation.



For further enquiries, please contact:

Investors:

Stuart Fogarty
Duketon Mining - Managing Director
+61 8 6315 1490

The information in the announcement that relates to Mineral Resources for Rosie is extracted from the ASX announcement 3 August 2020 and is available to view on the Company's website (www.duketonmining.com.au). The information in the announcement that relates to Mineral Resources for C2 is extracted from ASX announcement 29 January 2015. 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 and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. 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 announcement.

The information in this report that relates to exploration results is based on information compiled by Ms Kirsty Culver, Member of the Australian Institute of Geoscientists (AIG) and an employee of Duketon Mining Limited. Ms Culver has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a competent person as defined in the JORC Code 2012. Ms Culver consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.



Appendix 1. Summary of Mining Tenements

As at 31 December 2020 the Company had an interest in the following tenements:

Tenement number	Project	State	Status	Interest at beginning of quarter	Interest at end of quarter	Acquired/ Disposed
E38/2666	Duketon	WA	Granted	100%	100% Ni (note 1)	N/A
E38/2805	Duketon	WA	Granted	100%	100% Ni (note 1)	N/A
E38/2834	Duketon	WA	Granted	100%	100% Ni (note 1)	N/A
E38/2866	Duketon	WA	Granted	100%	100% Ni (note 1)	N/A
E38/2916	Duketon	WA	Granted	100%	100% Ni (note 1)	N/A
E38/3523	Duketon North	WA	Application	100%	100%	N/A
E38/3524	Duketon North	WA	Application	100%	100%	N/A
E39/2173	Mulga Tank North	WA	Application	100%	100%	N/A
E39/2211	Mulga Tank North	WA	Application	0%	100%	Acquired
E52/3833	Doris	WA	Granted	100%	100%	N/A
E53/2143	Fisher South	WA	Application	100%	100%	N/A
E53/2158	Dusty East	WA	Application	0%	100%	Acquired
E59/2414	Stephens	WA	Granted	100%	100%	N/A
E63/2050	Cat Camp	WA	Application	100%	100%	N/A
E69/3763	Cunyu	WA	Application	100%	100%	N/A
E77/2660	Eastside	WA	Application	100%	100%	N/A
E77/2667	Lost Bolt	WA	Application	100%	100%	N/A
E77/2670	Diemals	WA	Application	100%	100%	N/A
E77/2682	Halleys West	WA	Application	100%	100%	N/A
E77/2717	Barlee	WA	Application	100%	100%	N/A
E80/5493	Pelican	WA	Application	100%	100%	N/A
M38/1252	Duketon	WA	Granted	100%	100% Ni (note 1)	N/A

The Company did not have any interests in farm in or farm out agreements at the beginning, end or during the quarter. Note 1: 100% interest held in nickel rights only.