

# NICKEL

## MINES LIMITED

ACN 127 510 589

ASX Release: 30 January 2019

### ASX: NIC

Shares on issue: 1.388B

Cash (31 December 2018): \$20.8M

### Board of Directors

Non-Executive Chairman  
Rob Neale

Executive Deputy Chairman  
Norman Seckold

Managing Director  
Justin Werner

Executive Director and CFO  
Peter Nightingale

Non-Executive Director  
James Crombie

Non-Executive Director  
Mark Lochtenberg

Non-Executive Director  
Weifeng Huang

Non-Executive Director  
YuanYuan Xu

### Substantial Shareholders

Shanghai Decent	11.6%
Shanghai Wanlu	10.8%
Blackrock	9.9%
Norman Seckold	8.9%
Regal FM	5.1%

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## QUARTERLY ACTIVITIES REPORT

For the quarter ended 31 December 2018

The Directors of Nickel Mines Limited ('Nickel Mines' or the 'Company') are pleased to provide the following activities report for the quarter ended 31 December 2018.

### Highlights

- **Substantial progress made on the Company's 60% owned Hengjaya Nickel Project currently under construction within the Indonesia Morowali Industrial Park ('IMIP').**
- **PT Hengjaya Nickel Industry granted material corporate income tax relief by the Indonesian Government.**
- **Collaboration Agreement signed with Shanghai Decent to acquire up to an 80% interest in 2 additional RKEF lines ('Ranger Nickel Project') currently under construction within the IMIP.**
- **Initial 17% interest in the Ranger Nickel Project purchased for US\$50M utilising funds raised from the Company's IPO.**
- **Memorandum of Understanding ('MoU') signed for Hengjaya Mine to supply limonite ore the HPAL plant recently announced to be constructed within the IMIP.**



*The Hengjaya Nickel Project under construction within the IMIP*

## IMIP Operations

### Hengjaya Nickel Project (60% interest held by Nickel Mines)

#### Construction Update

During the quarter significant progress was made at the Company's 60% owned Hengjaya Nickel Project.

Foundation work and support structures for the rotary kilns and electric furnace were completed and material capital equipment components including the rotary kilns and electric furnaces, having been prefabricated in China, were progressively shipped to the IMIP ready for assembly.

Construction support equipment (cranes, trucks etc) at the IMIP have been prioritised to expedite the Hengjaya Nickel Project construction. Recruitment and training of Indonesian staff has begun ahead of commissioning which is now anticipated to commence early in the March 2019 quarter. Commissioning will target 80% capacity 6-8 weeks from first nickel pig iron ('NPI') production.



***Significant progress was made at the Company's Hengjaya Nickel Project during the December quarter***

Subsequent to quarter end, in early January 2019, the rotary kilns (4 metre diameter x 100 metres long) for Hengjaya Nickel were in place with one kiln having been rotated to check alignment, bearing alignments and drive meshing, with no issues noted. Test pre-heating of this kiln was also undertaken.



*Refractory lining of Hengjaya Nickel's electric furnace*

## Corporate Income Tax Relief

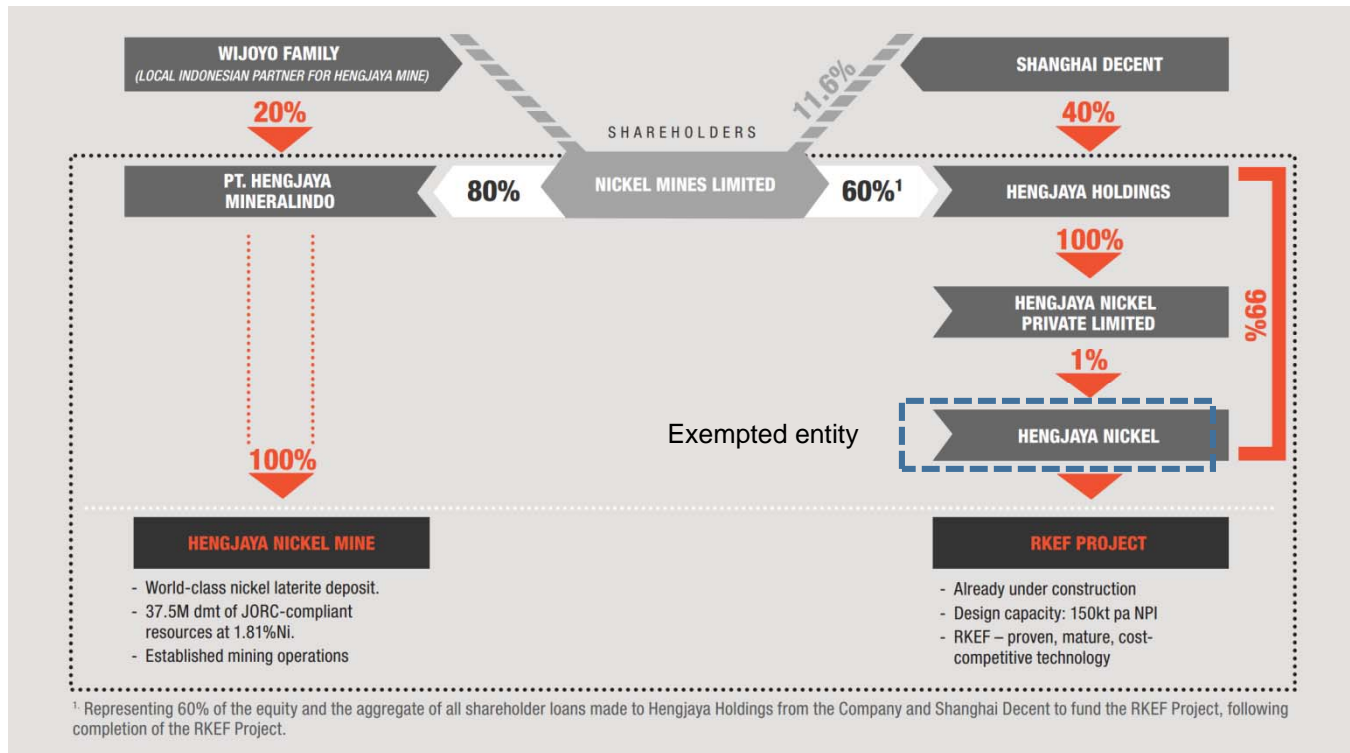
During the quarter, the Minister of Finance of the Republic of Indonesia granted the Company's Indonesian operating entity, PT Hengjaya Nickel Industry ('Hengjaya Nickel'), material corporate income tax relief for its Hengjaya Nickel Project.

Notice of the tax relief was communicated to the Company by official decree from the Minister of Finance of the Republic of Indonesia on the basis that Hengjaya Nickel had "met the criteria and requirements for the reduction of corporate income tax as regulated in Article 3 of the Regulation of the Minister of Finance Number 35/PMK.101/2018 concerning Provision of Corporate Income Tax Reduction Facilities".

The corporate income tax reduction will be applied as follows:

- a Corporate Income Tax Reduction of 100% for a period of seven tax years, starting from the tax year in which commercial production is achieved;
- a Corporate Income Tax Reduction of 50% of payable income tax for a period of two tax years, starting from the end of the initial seven year period;
- exemption from withholding and tax collection by third parties on sales proceeds that would normally be remitted to the Indonesian Revenue Department for a period of seven years, also commencing from the tax year in which commercial production is achieved.

It should be noted that these concessions may be revoked and are maximum periods that may be amended or adjusted if certain conditions are not met, the most important condition being the satisfaction of a minimum investment realisation which Hengjaya Nickel's project comfortably exceeds.



## Ranger Nickel Project (17% interest held by Nickel Mines)

### Execution of Collaboration Agreement

During the quarter, the Company elevated an MoU to an executed binding Collaboration Agreement ('CA') with its partner Shanghai Decent Investment Group Co., Ltd ('Shanghai Decent') to acquire up to an 80% equity interest in 2 additional RKEF lines currently under construction within the IMIP.

The additional RKEF lines, the Ranger Nickel Project, will be owned under a replica structure to the Company's Hengjaya Nickel Project with Nickel Mines acquiring its interest through a Singaporean incorporated holding company, Ranger Investment Private Limited ('Ranger') that will wholly own an Indonesian incorporated PMA operating company, PT Ranger Nickel Industry ('Ranger Nickel') that will wholly own the Ranger Nickel Project.

The CA provides for Nickel Mines to acquire its interest in the three tranches:

- An initial acquisition, the 'First Acquisition', saw Nickel Mines acquire an initial interest of 17% in Ranger and 17% of all shareholder loans due to Shanghai Decent (and its affiliates) at a cost of US\$50M (based on a valuation of US\$300M).
- A 'Second Acquisition Option', will permit Nickel Mines to increase its interest in Ranger and in the total shareholder loans to between 51% and 60% before 31 December 2019. If the Second Acquisition is completed within 60 days after the first batch of nickel pig iron ('NPI') is produced from the Ranger Nickel RKEF lines, the additional percentage acquired will be calculated based on a discounted valuation of US\$280M. If the Second Acquisition is completed more than 60 days after the first batch of NPI is produced from the Ranger Nickel RKEF lines, the additional percentage acquired will be calculated based on a valuation of US\$300M.

- Conditional upon completion of the Second Acquisition Option, a 'Third Acquisition Option', will permit Nickel Mines to increase its interest in Ranger and in the total shareholder loans to up to 80% within 18 months of the first batch of NPI being produced from the Ranger Nickel RKEF lines. Any additional interest acquired under the Third Acquisition Option will be calculated based on a valuation of US\$300M.

The terms of the CA provide for Shanghai Decent to take a lead role in the design, construction and operation of the Ranger Nickel RKEF lines, with an annual production capacity of no less than 14,000 tonnes of equivalent contained nickel, to be funded by Shanghai Decent (or its affiliates) by way of shareholder loans to Ranger and for construction to be completed within 20 months from the date of the CA.

Ranger Nickel will conduct the sale of its NPI products through a tender process, however, where Ranger Nickel does not receive a price higher than 90% of the LME nickel price via this tender process, Shanghai Decent irrevocably and unconditionally undertakes to procure the purchase (through itself or one of its affiliates) of all (and not some of) NPI products of Ranger Nickel offered at such tender process at a price equivalent to 90% of the LME nickel price.

The First Acquisition was completed within the required 10 business days after the execution of the CA, with the Company funding its initial 17% interest in the Ranger Nickel Project from proceeds raised from its IPO.

## Construction Update

The execution of the CA not only secured Nickel Mines' interest in an additional 2 RKEF lines but it has also seen Shanghai Decent further expedite their construction progress.

By the end of the December quarter, all component equipment had been shipped to the IMIP ahead of assembly with the Ranger Nickel Project on schedule to produce its first NPI just 3 months after the Hengjaya Nickel Project. As with Hengjaya Nickel, commissioning at Ranger Nickel will target reaching 80% capacity 6-8 weeks from first NPI production.



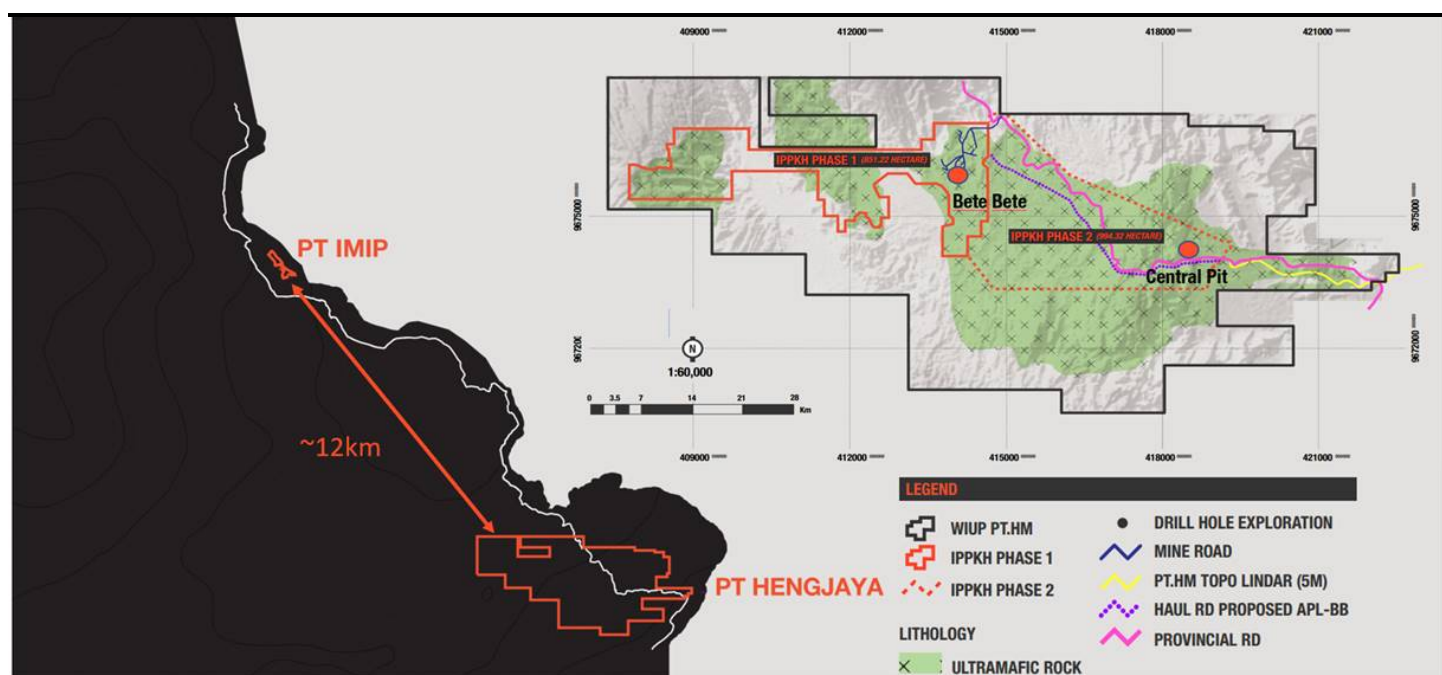
***Construction progress at Ranger Nickel which is currently scheduled for commissioning 3 months after commissioning at Hengjaya Nickel***

## MOU to Supply Limonite Ore to New HPAL Plant

In December 2018, the Company signed an MoU to supply limonite ore to a new High Pressure Acid Leach ('HPAL') plant recently announced to be constructed within the IMIP.

In September 2018, a consortium including two Tsingshan group companies, announced the planned construction of a new HPAL plant within the IMIP with an annual nameplate output of 50,000t nickel and 4,000t cobalt. Nickel production will be in the form of nickel intermediates that will be used to produce both nickel sulphate and nickel hydroxides to be sold into the burgeoning electric vehicle ('EV') battery market.

Unlike the IMIP's RKEFs which require saprolite ore (>1.8% nickel), the HPAL plant will utilise a lower grade limonite ore (~1.0% nickel) for which the Company's 80% owned Hengjaya Mine is ideally placed to supply, being located ~12km south of the IMIP.



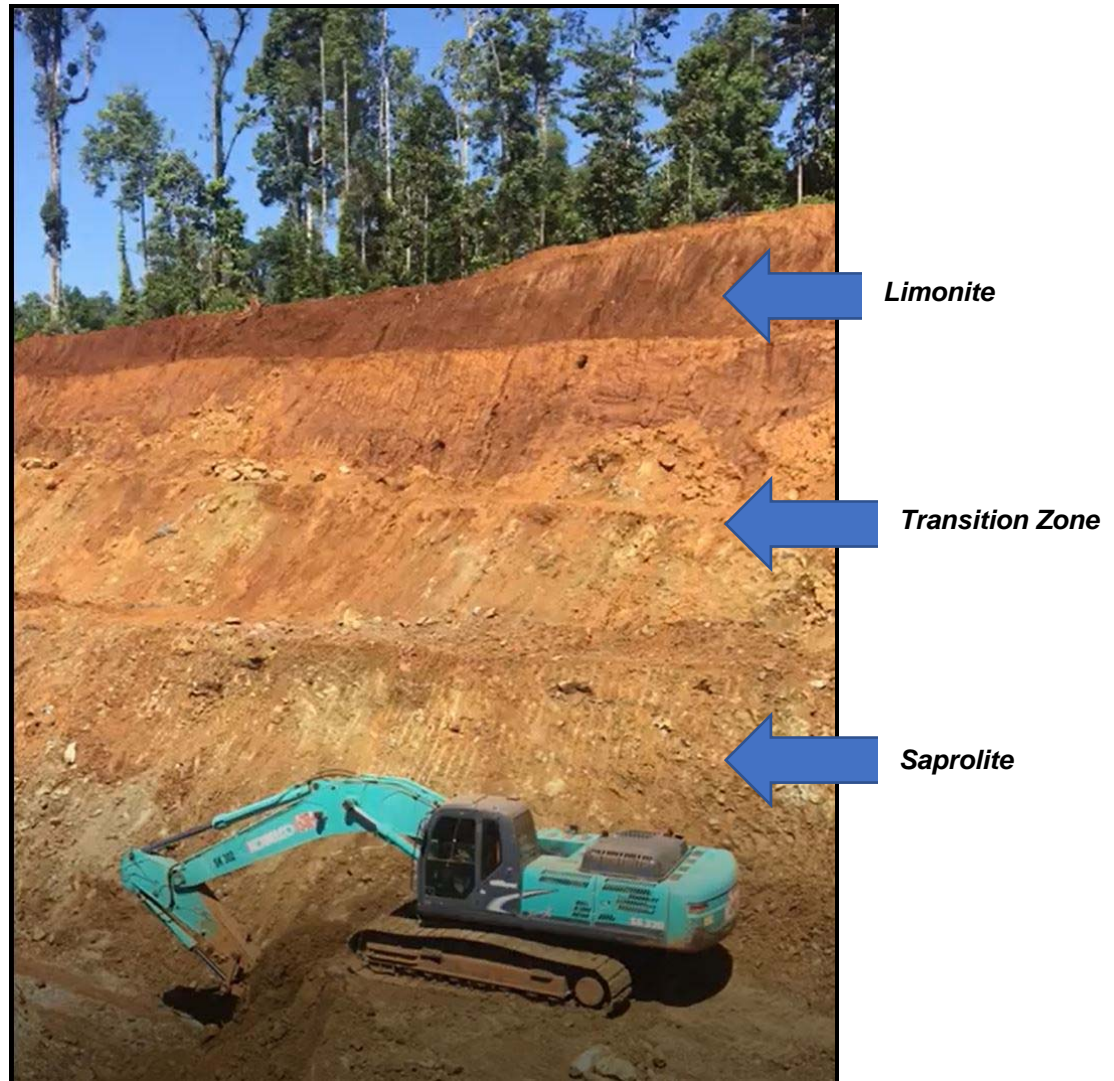
**Map showing HM Mine proximity to the IMIP**

The Hengjaya Mine is one of the largest tonnage, high grade operations in close proximity to the IMIP in central Sulawesi. Using a 1.0% Ni cut-off grade, the Hengjaya Mine hosts a JORC compliant resource of 180 million dry tonnes at 1.3% Ni and 0.08% Co, containing 2.3 million tonnes of contained nickel and 140,000 tonnes of contained cobalt as follows:

Category	Dry Tonnes (million)	Ni (%)	Co (%)	Fe (%)
Measured	6.9	1.2	0.07	23
Indicated	50	1.4	0.07	26
Inferred	120	1.3	0.08	29
<b>Total</b>	<b>180</b>	<b>1.3</b>	<b>0.08</b>	<b>28</b>

Resources at the Hengjaya Mine are not fully defined and further exploration activities have commenced as discussed below.

The opportunity to supply limonite ore to the new HPAL plant will enable the Company to optimise and extract further significant value from its Hengjaya Mine resource. Where mining to date has seen the ore body's limonite layer removed as overburden to reach the higher grade saprolite ore, the ability to now monetise this lower grade limonite material (comprising both nickel and cobalt) will materially improve the efficiency of the Hengjaya Mine operations, lower mining costs and improve profitability.



***Picture showing a cross section of the Hengjaya Mine ore body***

Volume and pricing terms contemplated in the MoU remain commercial in confidence. Exclusivity to provide ore to the HPAL plant is not possible due to normal supply-risk management considerations.

In addition to the supply of limonite ore, the MoU also contemplates the potential for Nickel Mines' future equity participation in the HPAL plant, offering the Company significant diversity into the rapidly growing nickel sulphate and hydroxide markets.

The Company will continue to work closely with Tsingshan to progress this MoU into a binding definitive agreement as the HPAL plant nears completion and commissioning.

## Hengjaya Mine Operations

### Hengjaya Mine (80% interest held by Nickel Mines)



*Aerial image of the Hengjaya Mine*

### About the Hengjaya Mine

The Company holds an 80% interest in PT Hengjaya Mineralindo, the owner of 100% of the Hengjaya Mine, with the remaining 20% interest owned by the Company's Indonesian partner, members of the Wijoyo Family.

The mine is located in the Morowali Regency, Central Sulawesi, Indonesia within an IUP licence covering 6,249 hectares. The IUP holds a 20 year mining operation/production licence with two further 10 year extension periods.

Using a 1.5% Ni cut-off grade, the Hengjaya Mine hosts a JORC compliant resource of 37.5 million dry tonnes at 1.81% Ni (~680 tonnes contained Ni; 0.7Mt Measured, 15.0Mt Indicated and 22.0Mt Inferred), equivalent to 57.7wmt at approximately 35% moisture content.

Resources at the Hengjaya Mine are not fully defined and further exploration activities have commenced as discussed below.

### December Quarter Production Report

Sales for the quarter totalled 139,707 wet metric tonnes ('wmt') at an average grade of 2.02%, a 34,087 wmt increase on the September 2018 quarter. Grade is being incrementally decreased to meet the 1.9% RKEF feed grade and to maximise Bete Bete resources.

Production totalled 123,176 wmt for the quarter at an average stripping ratio of 2.1 which decreased over the quarter as two new pits in the Bete Bete mining area were opened up bringing the total available pits to four.





## Production Overview

		October	November	December	Quarter Total
<b>Tonnes mined</b>	wmt	40,579	43,322	39,275	123,176
<b>Overburden mined</b>	Bcm	105,754	82,725	66,125	254,604
<b>Strip ratio</b>	Bcm/wmt	2.6	1.9	1.7	2.1
<b>Tonnes sold</b>	wmt	55,949	40,106	43,652	139,707
<b>Average grade</b>	%	2.05	2.00	1.96	2.02
<b>Average price received</b>	US\$/t	33.36	31.17	28.78	31.78
<b>Average cost of production</b>	CIF US\$/t	23.88	28.24	24.15	25.55

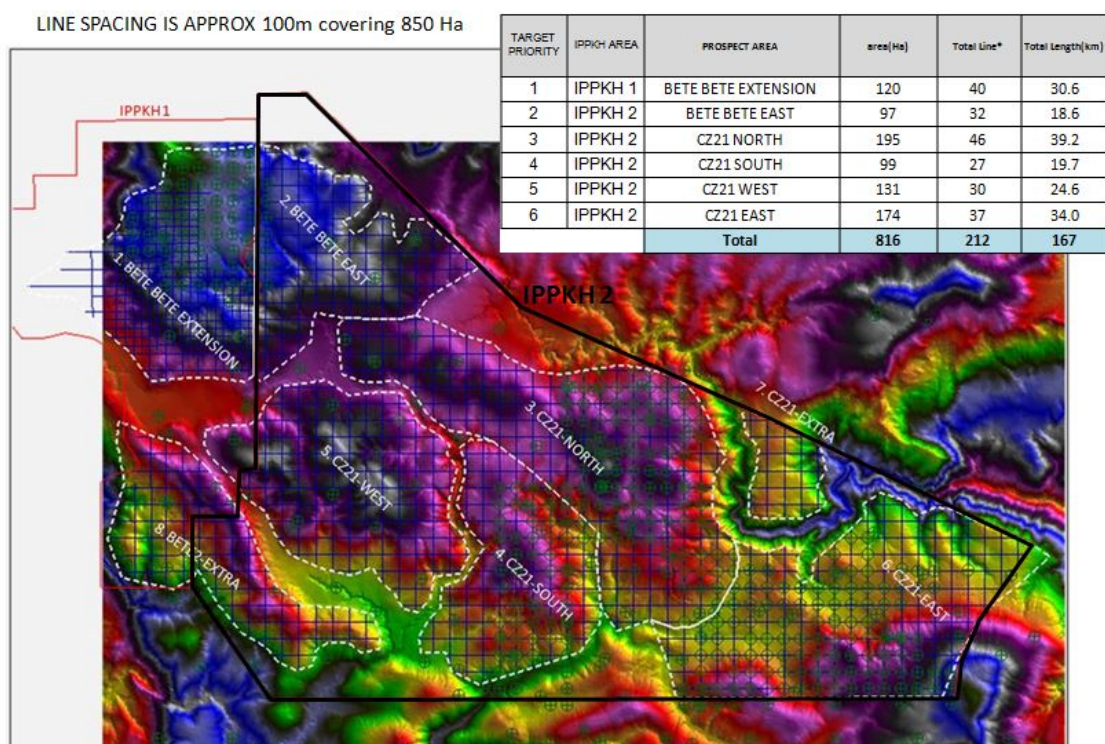
The Company received final approval to access the new mine area in IPPKH Phase 2 (994.32 hectares) in December. The construction of the new haul road, linking the jetty to Bete Bete and IPPKH 2 along with commencement of mining pre-stripping is planned for early 2019 followed by first ore mining which will enhance production and open up additional mining areas during the ramp up period.

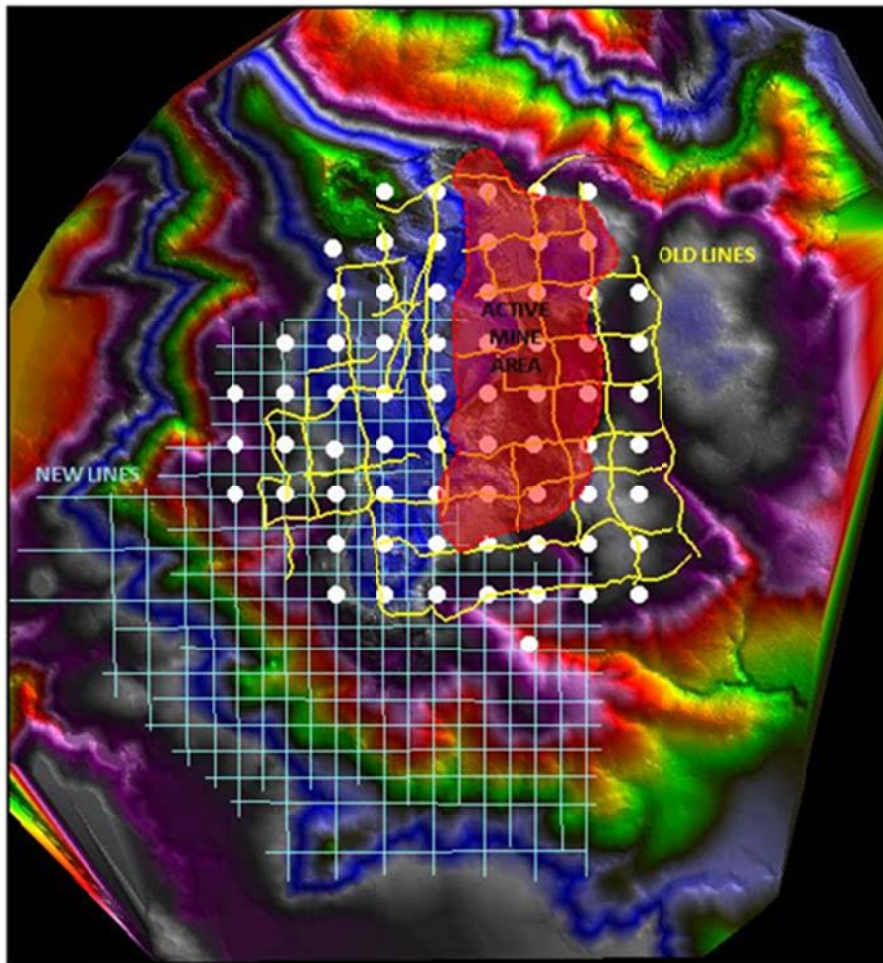
Expansion activities continued including land compensation and clearing, completion of a new jetty stockpile area to allow capacity for increased production and civil works on expansion of the jetty.

To commence the production ramp up at the Hengjaya mine, additional mining trucks and excavators arrived on site in December and more equipment is scheduled to arrive during the current quarter.

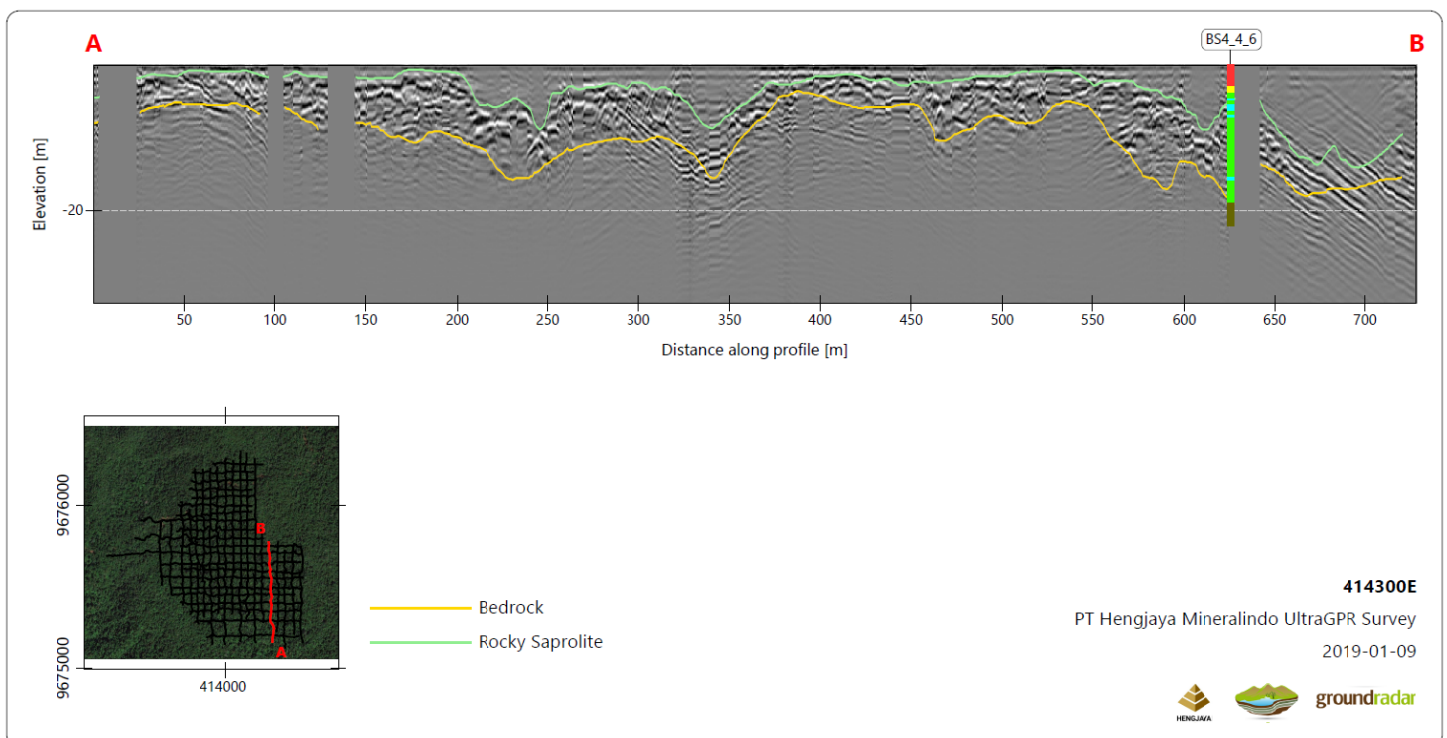
## Exploration

Ground penetrating radar ('GPR') work was completed to the north and east of the current Bete Bete mining blocks ('Bete Bete extension') in area covering 120 hectares. Initial interpretation indicates significant resource upside potential in the Bete Bete extension with rocky saprolite thicknesses logged up to 10+ metres thickness. The GPR will be followed up with a detailed infill drilling program in the coming months.

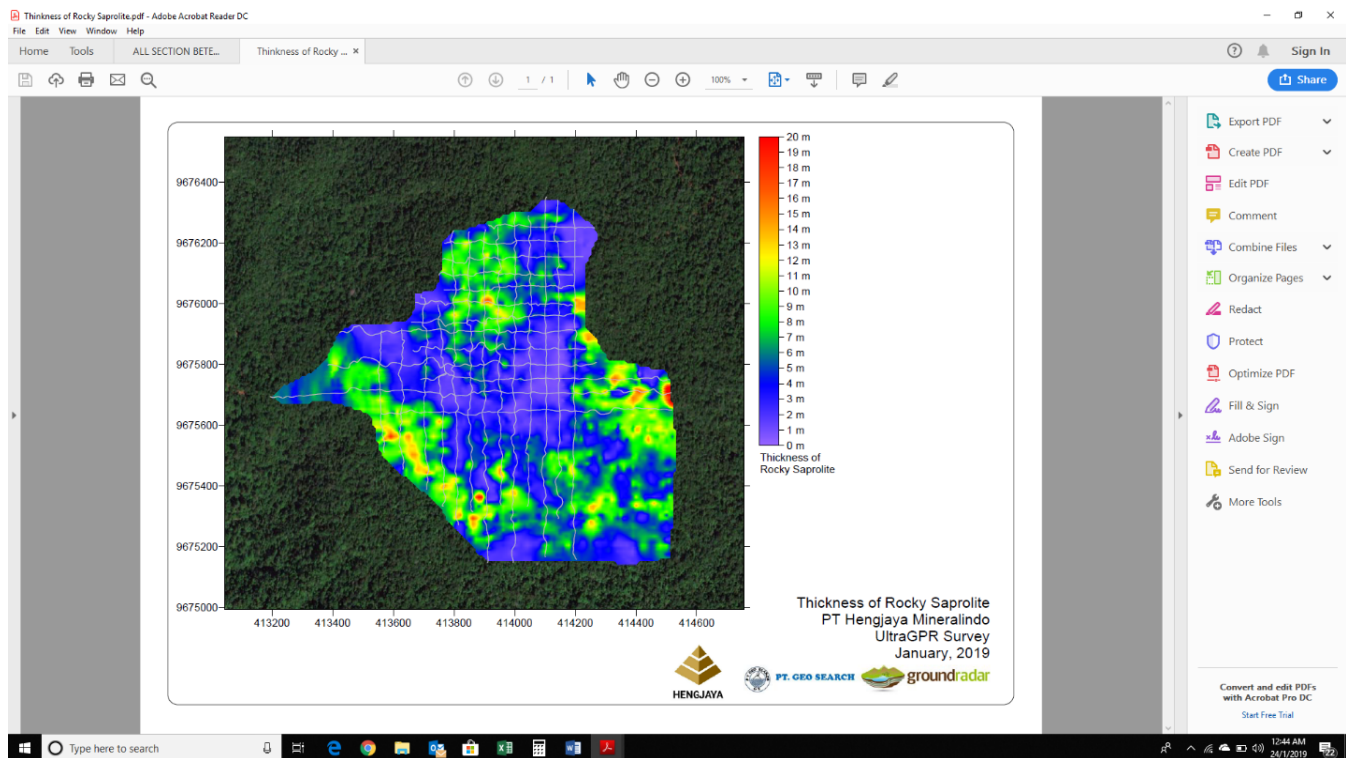




*Completed area of GPR survey*



*Sample GPR cross section demonstrating good rocky saprolite extension from existing drill point*



**Figure showing rocky saprolite thickness**

## QUARTERLY PROGRESS

Commenting on the progress achieved this quarter, Managing Director Justin Werner noted:

*“The Directors of Nickel Mines are pleased to report on another very productive quarter, where excellent progress has been made on Hengjaya Nickel, with the first rotation of kiln 21 without issue and the lining of the electric furnace progressing well. Nickel Mines looks forward to updating the market of progress as we near commissioning of Hengjaya Nickel and enter into the ramp up phase.*

*To convert the Company’s MoU on Ranger Nickel into a full binding agreement and initial interest further underscores Nickel Mines strong relationship with its major shareholder and partner, Shanghai Decent, and we thank them for their support and efforts to date. Nickel Mines looks forward to updating the market of the progress of Ranger Nickel in the coming weeks and months as it nears commissioning and full scale production.*

*The recent significant tax concessions granted by the Government of Indonesia for Hengjaya Nickel underscore the commitment and support of the Indonesian Government to the significant value adding benefits that are being recognised from IMIP and its associated industries. These concessions considerably enhance the economic profile of Hengjaya Nickel and the Company is actively working to secure the same benefits for Ranger Nickel.*

*Lastly, the recently announced MoU for the supply of lower grade limonite to the recently announced HPAL plants that have started construction within IMIP will allow Nickel Mines, through its 80% owned Hengjaya Mine to significantly increase the value of its sizeable ore body. That, coupled with a potential possible future equity interest in the HPAL plant will allow Nickel Mines to diversify its interest from high grade nickel ore miner and low cost NPI producer to a potential producer of high value nickel and cobalt sulphate producer to meet a growing and emerging electric vehicle market.”*

## MINE SAFETY AND ENVIRONMENT

### Safety

No lost time injuries were recorded for the quarter. The Hengjaya Mine site continues to develop and maintain a safety management system.

### Environment

No environmental incidents were reported during the quarter, with work continuing on contouring and rehabilitating previously mined production areas. The mine site remains in compliance in respect to the operational licence.

### Community

A number of community projects continued including focus on educational, health, religious and agricultural projects. The Company continues to work and communicate with both local and regional stakeholders which includes the Tangofa, Bete Bete and Bahodopi village regions.

For further information please contact:

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pjn9785

## Statement of Compliance

The information in this report that relates to Mineral Resources and Exploration Results is based on information compiled by Mr Brett Gunter, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. Information relating to the Mineral Resource was first disclosed in the ASX announcement 'Replacement Prospectus' dated 20 August 2018. Mr Gunter has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being 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'. Brett Gunter consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## About Nickel Mines Limited

Nickel Mines Limited (ASX: NIC) is an ASX listed company on the cusp of becoming a significant player in the global nickel industry having established a financial, operational and strategic partnership with China's Tsingshan group, the world largest stainless steel producer.

Under the terms of two separate Collaboration Agreements with Shanghai Decent, a Tsingshan group company, Nickel Mines will own and operate RKEF processing facilities within the Indonesia Morowali Industrial Park, the world's largest vertically integrated stainless steel facility with a current stainless steel production capacity of 3.0 million tonnes per annum.

Nickel Mines also holds an 80% interest in the long life, high grade Hengjaya nickel mine located in Morowali Regency, Central Sulawesi, Indonesia just 12 kilometres from the IMIP.



*Aerial photo of the IMIP*