



# SHREE MINERALS LTD

## Nelson Bay River Iron Project Update

**ASX Announcement**

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### Highlights

- **Substantial Progress in re-permitting efforts of the direct shipping Iron ore project at Nelson Bay River Iron Project**
- **Firm Iron Ore prices with favourable outlook**
- **Mine in ready state to recommence production at short notice with existing development in place**

Shree Minerals Ltd (“Shree” or the “Company”) is pleased to advise that the Company is actively advancing the Direct Shipping Ore (“DSO”) project at Nelson Bay River Project (“NBR” or the “Project”).

### Favourable iron ore market conditions

The iron ore price has been robust since mid-2018 and has continued to improve more recently. This has been due in part to continued supply disruptions, primarily as a result of tailings dam issues in South America and the impact of COVID on labour forces and operations in more recent times. Demand outlook remains favourable given significant Government stimulus globally with a material portion of this spending expected to fund infrastructure investment, potentially underpinning global steel demand. Any near-term supply response is expected to be limited, particularly with little latent capacity left at major Iron Ore exporting ports and railways in Australia.

There continues to be strong demand for material with lower impurities like low alumina (as per the NBR ore produced previously) as Chinese authorities continue emphasis on environment control.

### Nelson Bay River Iron Project update

Shree’s wholly owned Project including Mining Lease 3M/2011, is engaged in the mining and shipment of iron ore. NBR previously produced a direct shipping product until being placed on care and maintenance in June 2014 following sharp iron ore price falls.

Following the ongoing improvement in Iron Ore Prices since mid-2018, the Company has been actively engaged in re-permitting activities at NBR. The strategy of this re-permitting has been to recommence the development and ultimate production of the existing DSO resources at NBR.

As previously reported in various Company announcements, to resolve the legal issues with the current permits, the Company applied for a new Tasmanian environmental permit for direct shipping iron operations. After public consultation in November 2018, the Environmental Protection Agency (“EPA”) issued guidelines for the preparation of a Development Proposal & Environment Management Plan (“DPEMP”).

Consequently, Shree has worked towards adopting this framework and has initiated the requisite technical studies to develop a working draft of the DPEMP earlier this year. As part of the process, Shree has been working with the Government & technical experts to incorporate a number of changes to our initial plan to capitalise on the expert recommendations. Consequently, Shree has in recent few months been progressing further technical studies, surveys, laboratory test work, modelling and engineering. These have now been completed and the Company now hopes to finalise the draft DPEMP in the coming weeks to enable the EPA assessment process to follow. On that basis, the company hopes to be in a position in 2021 to consider a formal decision for recommencement of the mine.

## Background

NBR Project is located in the far North-West of Tasmania, an area that has substantial infrastructure devoted to major mining activities and is approximately 100 kilometres by mostly sealed road to Port Latta, approximately 150 kilometres to the Burnie Port.

The Project is within an established mineral province in the region. Operating mines include Grange Resources’ (ASX: GRR) Savage River Iron Ore and MMG’s Roseberry Mine.



Figure 1

## NBR DSO Project Development

The NBR operation was previously developed as an all-contract mining, processing and haulage operation using local contractors in the region. The DSO requires no major processing beyond crushing and screening following which, the ore is then trucked to the port and shipped. The South DSO pit (“SDSO”) was developed in 2013 with production successfully commencing in November 2013 with the first shipment of ore leaving the Port of Burnie in January 2014.

Historical production from the previous mining campaign totalled 181,000 tonnes shipped with average grades of Fe 57.5%, SiO<sub>2</sub> 7.7%, Al<sub>2</sub>O<sub>3</sub> 1.3%, P 0.07% and S 0.04%. Demand from historic customers was driven by positive metallurgy, specifically low impurities like alumina (Al<sub>2</sub>O<sub>3</sub>) and phosphorus (P).

The historic price received for NBR ore was enhanced with a premium for low impurities and for Lump Ore in line with market benchmarks. Historic costs during FY 2014 when the mine was last in production was approximately AUD \$ 72 per ton FOB Burnie Port (as derived from 2014 Annual Report to Shareholders).

The SDSO pit is some 25% complete, with waste rock materials deposited in two dumps designated as the Non-Acid Forming (“NAF”) waste rock dump and the Potentially Acid Forming (“PAF”) waste rock dump.

Figure 2 shows the existing mine development on site. The main features are the SDSO pit and waste dumps. Other elements are the mine water treatment dams, ROM stockpile area and the facilities area. Figure 3 on the following page shows a Google Image.

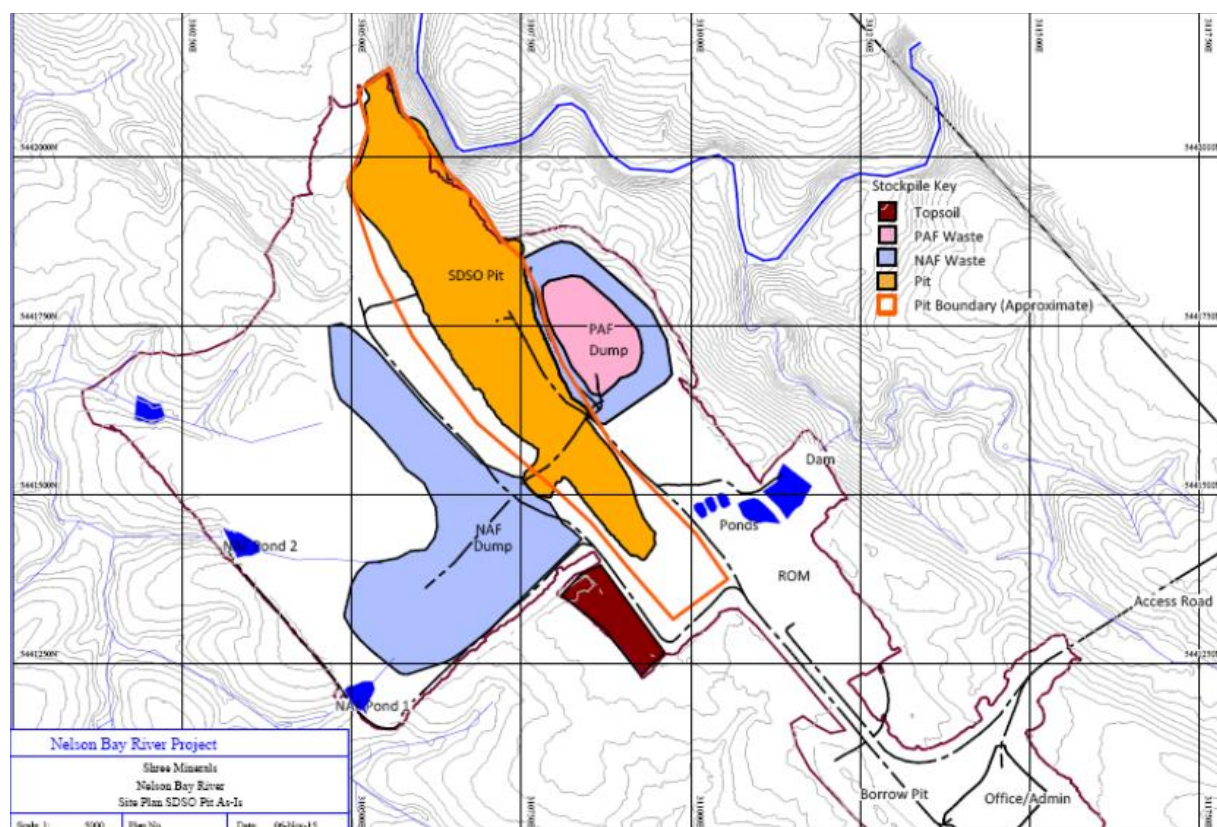


Figure 2: Existing site plan

Source: SHH



Figure 3 Source: Google Images

The next stage after completion of SDSA pit will be the north pit that targets the main magnetite ore body. At the top of this pit, there is an approximate 20 metre section of higher-grade ore - the beneficial oxide resource ("BFO"). This will require only dry magnetic separation in addition to crushing and screening before shipping. The BFO operation is a transition between the DSO operation and the magnetite production stage. The BFO circuit will require only a nominal capital expenditure of circa A\$1 million. The BFO section is fed by a -3mm size ore stream, which is upgraded by dry Low Intensity Magnetic Separation ("LIMS"). Test work by crushing and passing the ore over a coarse LIMS unit at 600 gauss pass produced an upgraded product with grades Fe 57.5%, SiO<sub>2</sub> 11.5% and Al<sub>2</sub>O<sub>3</sub> 1.55% at 82.3% mass recovery.

For the magnetite project, completed studies have mine planning for an open pit that will extract ore for processing through a local plant that will include circuits to grind, mill, magnetically separate to produce high grade magnetite concentrate for Blast Furnace Pellets ("BFP") and Dense Media Magnetite ("DMM"). Magnetite Pellets fetch a premium to hematite iron ore as they are higher grade and allow for less energy consumption in blast furnace.

## Resources

NBR has a JORC compliant global iron Resource of 11.3Mt, including goethitic-hematite Resource of 1.4Mt and magnetite Resource of 7.8Mt. The Resource & Reserve tables are attached in Annexure 1.

## Exploration

The current Resource at NBR covers approximately 1km in strike length of goethite-hematite mineralisation including approximately 400 metres of magnetite. It is based on drilling at the northern end of the strike line, where magnetic survey work indicated that the main strike line of mineralisation extends for at least 2,300 metres and is open along strike and at depth. The mineralisation in some cases is deeper than 300 metres.

A study of ground magnetics by Shree and the Tasmanian Government's airborne magnetic survey data suggests that the strike length of iron mineralisation at NBR extends to in excess of 2.3km. Mineralisation remains open along strike and down dip and in some parts extends to greater than 300 metres in depth.

The 3D Magnetic Inversion study based on aeromagnetic data from Mineral Resources Tasmania ("MRT") suggests continuity between the Main Body (Northern Anomaly) and the South Anomaly, but with in-between areas of non-magnetic material that could be inferred to be oxide mineralisation. Scattered detrital gossan fragments were noticed during recent reconnaissance in the Southern Anomaly area. The modelling indicates substantial continuation at depth of the magnetite-bearing ultramafic dyke.

This provides exploration upside for Shree. In addition to the NBR deposit, four additional targets have been identified from airborne magnetic surveys on the project area and remain to be drill tested.

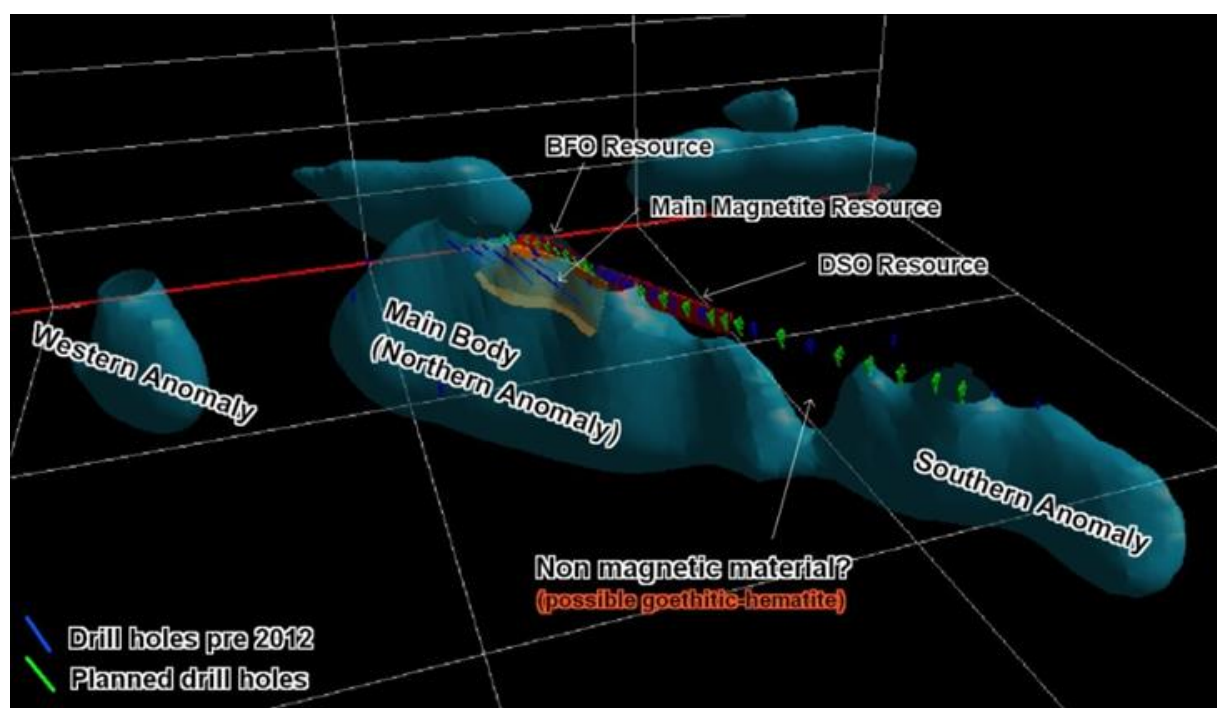


Figure 4: 3D Magnetic Inversion Study (Source: SHH)

SHH remain committed to driving value for Shareholders and look forward to updating the market as it continues to progress this advanced junior iron ore project towards recommencement in a very strong macro environment for producers.

The release of this document to the market has been authorised by the Board.

## Annexure 1

### Resource & Reserves

Mineral Resources & Reserves Estimates, summarised by JORC classification are as follows:

#### The in-situ DSO Mineral Resource Estimates, September 2015

Category	Tonnes	Fe %	Al <sub>2</sub> O <sub>3</sub> %	P ppm	S ppm	SiO <sub>2</sub> %	LOI %
Measured	300,000	57.6	1.3	947	362	9.2	6.4
Indicated	190,000	57.5	1.4	919	377	9.3	6.3
Inferred	150,000	57.3	1.2	945	421	10.0	6.2
<b>Total</b>	<b>640,000</b>	<b>57.5</b>	<b>1.3</b>	<b>938</b>	<b>380</b>	<b>9.4</b>	<b>6.4</b>

(Nominal 54% Fe cut off; average density 3t/m<sup>3</sup>; minor rounding errors)

#### BFO Resource Estimates 2012

Category	Tonnes	Fe %	Al <sub>2</sub> O <sub>3</sub> %	P ppm	S ppm	SiO <sub>2</sub> %	LOI %
Inferred	730,000	46.8	2.7	180	680	23.7	4.7
<b>Total</b>	<b>730,000</b>	<b>46.8</b>	<b>2.7</b>	<b>180</b>	<b>680</b>	<b>23.7</b>	<b>4.7</b>

(30% Fe cut off; average density 3t/m<sup>3</sup>; minor rounding errors)

“This information was prepared and first disclosed under the JORC Code 2004. It has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.”

#### Skarn Dyke Global Iron Resource Estimates (Includes Magnetite Resource)

Category	M Tonnes	Fe %
Indicated	1.8	38.6
Inferred	9.5	35.9
<b>Total</b>	<b>11.3</b>	<b>36.3</b>

(30% Fe cut off, fresh rock material; minor rounding errors)

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#### Skarn Dyke Recoverable Magnetite Resource Estimates

Category	M Tonnes	DTR Mag %	Magnetite Kt
Indicated	1.7	38.5	667
Inferred	6.1	38.2	2,324
<b>Total</b>	<b>7.8</b>	<b>38.3</b>	<b>2,991</b>

(20% DTR cut off; average density 3.71t/m<sup>3</sup>; fresh rock material; minor rounding errors)

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#### Magnetite Resource Estimate Concentrate Grades

Category	Fe %	Al <sub>2</sub> O <sub>3</sub> %	S %	SiO <sub>2</sub> %
Indicated	66.4	0.16	0.21	4.6
Inferred	64.3	0.31	0.42	6.0
<b>Total</b>	<b>65.5</b>	<b>0.22</b>	<b>0.30</b>	<b>5.2</b>

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### **In situ DSO Ore Reserve Estimates for the Southern DSO pit, September 2015**

<b>Category</b>	<b>M tonnes</b>	<b>Fe %</b>	<b>Al<sub>2</sub>O<sub>3</sub> %</b>	<b>P %</b>	<b>S %</b>	<b>SiO<sub>2</sub> %</b>	<b>LOI %</b>
Proved	0.27	56.5	1.4	0.091	0.035	8.7	6.5
Probable	0.19	56.5	1.5	0.092	0.036	8.8	6.5
<b>Total</b>	<b>0.46</b>	<b>56.5</b>	<b>1.4</b>	<b>0.091</b>	<b>0.035</b>	<b>8.7</b>	<b>6.5</b>

*(Minor rounding errors; cut off based on a nominal 54% Fe; default density of 3t/m<sup>3</sup>)*

### **Competent Person Statement**

*The information in this report that relates to Mineral Resources is based on information evaluated by Mr Simon Tear, who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM). And who has sufficient experience 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’ (“the JORC Code”). Mr Tear is a Director of H&S Consultants Pty Ltd and he consents to the inclusion in the report of the Mineral Resources in the form and context in which they appear.*

*The information in this report that relates to Ore Reserve Estimates for the Nelson Bay deposit is based on information evaluated by Mr Richard Beazley who is a Member of The Australasian Institute of Mining and Metallurgy and a Chartered Professional (MAusIMM CP(Min)) and who has sufficient experience 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 (the “JORC Code”). Mr Richard Beazley is the Principal of Altair Mining Consultancy Pty Ltd and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*