

# SHREE MINERALS LTD

ASX Announcement 23<sup>rd</sup> July 2019

## DSO Iron Ore, Nelson Bay River Iron Project Progresses

### Highlights

- Advanced working draft of DPEMP submitted to the EPA for the DSO operations, following completion of various technical studies
- Economic assessment of the project based on recent surge in the Iron Ore spot price

Following on from its activities update announced to ASX on 29th May 2019 which included details on Nelson Bay River Iron (NBR) Project, Shree Minerals Ltd (Shree or the Company) is pleased to advise that the Company is actively advancing the re-permitting activities forming part of the development process of the Direct Shipping Ore ("DSO") project at NBR in North West Tasmania.

An advanced working draft of Development Proposal and Environment Management Plan ("DPEMP") has been submitted to EPA for their review, as part of the assessment process.

#### Favourable iron ore market conditions

The iron ore price has continued to improve and has risen to a range around US\$120/t (CFR China) for the common benchmark 62% Fe. There has also been a substantial reduction in discounts for medium grades Iron Ore such as the 58% Fe that the Company produces.

There has been further improvement in premiums for material with lower impurities like low alumina (as per the NBR ore produced previously) as Chinese authorities continue emphasis on environment control.

The Iron Ore Prices in Australian Dollar terms have further improved due to the exchange rate of AUD with USD at around \$0.70 levels compared to around \$0.95 levels when the NBR project was last operating in 2014.

Effectively, the market prices have more than doubled for the Company's DSO Iron Ore products in the last one year, due to improving fundamentals in the sector.

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.

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#### Nelson Bay River Iron Project

Shree's wholly owned Nelson Bay River Project ("NBR" or the "Project") including Mining Lease 3M/2011 is engaged in the mining and shipment of iron ore. The location of the Mining Lease 3M/2011 is shown in Figure 1.



Figure 1: Location Plan – NW Tasmania

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.

The project has three types of resources: Direct Shipping Ore ("DSO"), Beneficiable low-grade resource ("BFO") and a Magnetite Resource.

The NBR occurrence is a 4km long magnetic feature (anomaly). The iron mineralisation is hosted by a steeply SW dipping mafic dyke, intruded into siliciclastic country rocks. The magnetic feature has been divided into two parts, northern and southern.

#### 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.

The Resource at NBR covers approximately 1km in strike length of goethite-hematite mineralisation including approximately 400 metres of magnetite. The Magnetite Resource can produce high grade concentrates for Blast Furnace Pellets ("BFP") and Dense Media Magnetite ("DMM"). A cap of oxide Resource covers the magnetite Resource and extends southwards for a further 600 metres of strike. The oxide Resource is composed of goethitic-hematite "DSO" and magnetic goethitic-hematite material amenable to beneficiation "BFO".

NBR was previously producing direct shipping Iron Ore (Fines & Lump) products until being placed on care and maintenance since June 2014 following sharp iron ore price falls.

Following the recent improvement in Iron Ore Prices, the Company has commenced actively pursuing re-permitting activities forming part of development process of DSO project at NBR.

Shree is seeking approval to re-open the mine that would allow the company to complete the existing DSO pit by extraction, processing and shipment of the remaining hematite ore. The revised project will utilise associated infrastructure including the existing Waste Rock Dump (WRD), Run of Mine pad, roads, water and other infrastructure, all located within the current mine footprint.

#### NBR DSO Project Development

The DSO requires no major processing beyond crushing and screening. It is then trucked to the port and shipped. The south DSO pit ("SDSO") was developed in 2013 with production commencement in November 2013 and first shipment in January 2014. The operation has been developed as an all contract mining, processing and haulage operation with local contractors in the region. The iron ore shipments totalled 181,000 tonnes historically. The NBR product (DSO Lump and Fines) has been very well received and is in demand by customers due to its low impurities like alumina (Al2O3) at only 1.3%.

#### **Development Approvals for Mine**

The Company applied to the Circular Head Council for a permit under the Tasmanian Land Use Planning and Approvals Act for the Direct Shipping Iron operations in August 2018. This was referred by the Council to the Tasmanian EPA who issued draft guidelines for public consultation and comment for preparation of a DPEMP (Development Proposal and Environment Management Plan). These Guidelines have now been finalized and final guidelines were issued during November 2018.

Consequently, Shree has actively worked on the requisite technical studies. These studies are now complete and the Company has submitted an advanced working draft of DPEMP to the EPA. In consultation with the EPA and after finalisation of the draft over the next few months, it is expected that draft DPEMP will be put up for public display for review by concerned stakeholders as part of the assessment process.

All proposed mining operations will be within the existing pit boundaries. The SDSO pit is approximately 25% completed to a depth of 15 m (Figure 2).



Figure 2: Mine Site (Google Image 2015)

The SDSO pit is proposed to be deepened to mine the remains of the near-surface oxidised ore body, comprising DSO hematite, to a depth of approximately 80 m. Figure 3 shows the proposed SDSO pit development.



Figure 3: Mine Development - SDSO operations

#### **About Shree Minerals Limited**

Shree Minerals Limited is an exploration and mine development company including being engaged in mining and production of iron ore and dense media magnetite at its Nelson Bay River Iron Project in the north-western Tasmania and Gold exploration at its Golden Chimney Project in Western Australia.

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#### Annexure 1

#### **Resource & Reserves**

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

Category	Tonnes	Fe %	AI2O3 %	P ppm	S ppm	SiO2 %	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
Total	640,000	57.5	1.3	938	380	9.4	6.4

The in-situ DSO Mineral Resource Estimates, September 2015

(Nominal 54% Fe cut off; average density 3t/m3; 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
Total	730,000	46.8	2.7	180	680	23.7	4.7

(30% Fe cut off; average density 3t/m3; 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
Total	11.3	36.3

(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
Total	7.8	38.3		2,991

(20% DTR cut off; average density 3.71t/m3; 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
Total	65.5	0.22	0.30	5.2

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Category	M tonnes	Fe %	AI2O3 %	Р%	S %	SiO2 %	LOI %
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
Total	0.46	56.5	1.4	0.091	0.035	8.7	6.5

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

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

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.