

ASX Announcement 29 July 2021

ASX Code SHH

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# SHREE MINERALS LTD

## Quarterly Activity Report Period ending 30<sup>th</sup> June 2021

## HIGHLIGHTS

- Exploration licence granted at Rock Lodge project in the Lachlan fold belt, NSW
- Exploration licences granted at Edwards Creek copper and Box Hole zinc & lead projects in NT as part of Arunta Joint Venture
- New copper occurrences identified at Edwards Creek project
- Reconnaissance mapping of the quartz veins and workings at the Bruce Gold Project and additional rock chip samples along the gold mineralised trend
- Drainage geochemistry identifies gold anomalies at Turondale Project, in NSW
- Application for two new exploration tenements at Hale River project in NT and Prince of Wales project in NSW
- Comments on draft DPEMP ("development proposal & environment management plan") received from EPA as part of re-permitting process of the direct shipping iron ore ("DSO") project at Nelson Bay River Iron Project ("NBR")
- Settlement of \$0.6 M completing total placement of \$3.0 M announced in March 2021

#### **Rock Lodge Project**

Exploration Licence, EL9155 (formerly ELA 6147) has been granted over the historic Rock Lodge gold workings near Cooma in the Lachlan Fold Belt, NSW (Figure 1). The Rock Lodge Project covers an area of 163 km<sup>2</sup> and is located 35 km south of Cooma. It is prospective for orogenic, Intrusion Related Gold Systems (IRGS) and skarn related gold mineralisation.

The Rock Lodge prospect exhibits high-grade polymetallic mineralisation associated with structurally controlled epigenetic massive sulphide veins. The grades intercepted during historical drilling show the area is highly mineralised and the mineral assemblages are like other major mineral deposits within the Canberra to Cooma region of the Ordovician Lachlan Fold Belt.

The East Lachlan Fold Belt has a long history of mineral production including gold (80 Mozs), copper (13 Mt), lead, zinc, silver and tin. It contains several large operating copper and gold mines including Evolution Mining's Lake Cowal Gold Mine, Newcrest Mining Ltd.'s giant Cadia Mine. Also located within the East Lachlan Fold Belt is Alkane Resources' 2019 market moving Boda discovery (502 metres at 0.2% copper and 0.48 g/t gold from 211 metres).



*Figure 1.* Regional location of Shree's granted tenement Rock Lodge, south of Cooma, within the East Lachlan Fold Belt.

The Project (EL9155) covers a folded sequence of Ordovician aged Adaminaby Group shales/siltstones and Gungoandra Siltstones (Figure 2). At the Rock Lodge prospect there is a steeply dipping sequence of predominantly siltstone with sandstone interbeds to the west and strongly carbonaceous shales to the east (Figure 3). The siltstones and shales have been locally silicified and disseminated pyrite is common throughout the foliated rock sequence.



*Figure 2.* Regional geology and mineral occurrences within the Rock Lodge tenement. Ordovician rocks have the symbol 'Os'.

#### Previous Exploration at Rock Lodge.

The Rock Lodge prospect has been explored by only two companies in the last fifty years. Their exploration programs progressed to RC and diamond drilling, but significant intersections were not followed up. In addition, consideration was not given to the prospectivity away from the old workings. Several target areas generated from geochemical and geophysical surveys at Rock Lodge were not followed up, including the Monaro Prospect and the Bobundara Gold Mine.

Historical exploration from 1988 – 2018 has included diamond drilling, RC drilling, IP geophysics, rock chip sampling, stream sediment sampling, trenching and acquisition of IP data on a 3.5km grid. Rock chip sampling of outcropping quartz veins at Rock Lodge by Southern Gold NL returned assay results of up to **11.1g/t Au**<sup>6</sup>. Diamond drilling (SGDH01 to SGDH011) in 1985 targeted the historic workings. The holes intersected up to 8m of massive sulphide with recorded grades up **to 4.28g/t Au**, **35g/t Ag**, **0.79% Cu and 13.5% Zinc**<sup>1</sup>. Diamond hole SGDH08 intersected **12m @ 1.2 g/t Au**, **9.8 g/t Ag and 0.2% Cu**. The location of these holes is illustrated in Figure 3.

The mineralisation is associated with massive and disseminated pyrite-arsenopyrite-chalcopyritesphalerite sulphides and quartz, within host phyllites and sandstone of the Adaminaby group. This is exposed on the surface as a distinct gossan and ironstone.

Six RC holes (MYRC001 to MYRC006) were also drilled underneath old workings at Rock Lodge by Alt Resources in 2018<sup>2</sup> (Figure 3). Significant drilling intercepts by Alt Resources included:

- MYRC001, 3m @ 2.1 g/t Au, 3.7 g/t Ag and 174 g/t Bi from 17m and 2m @ 2.7 g/t Au, 11.8 g/t Ag, 300 g/t Bi and 0.48% Cu from 62m.
- MYRC003, 1m @ 5.4 g/t Au, 55.6 g/t Ag, 212 g/t Bi and 0.11% Zn.
- MYRC005, 2m @ 1.6 g/t Au, 9.5 g/t Ag, 903 g/t Bi from 19m and 1m @ 1.4 g/t Au, 375 g/t Ag, 163 g/t Bi, 1.6% Pb from 23m and 1m @ 4.8 g/t Au, 0.48% Pb, 1.46% Zn from 57m.



*Figure 3.* Historical exploration summary diagram showing the main geological features of the Rock Lodge prospect. Past drill hole locations, anomalous rock chip sampling and IP chargeability anomalies are also illustrated.

Drilling cross section B-B' is illustrated in Figure 4.



Figure 4. Cross section B-B' at Rock Lodge. Section location is shown in Figure 3.

#### Desk Top study.

Work by Shree Minerals has revealed that **two very strong IP anomalies remain undrilled** at the Rock Lodge Prospect, illustrated in Figure 5. The presence of abundant sulphide, from past drilling, in other IP anomalies at Rock Lodge, strongly suggest the untested IP anomalies may also be due to sulphides. Both IP anomalies are over 350m long.

- Northern IP Anomaly. Anomalous rock chips with grades up to 2.52 g/t Au, 10.2 g/t Ag<sup>6</sup>, as well as anomalous arsenic, bismuth, and copper. Follow up field work at this zone identified outcropping boxwork gossans and ironstones, located to the west of cross section C C' in Figure 3. The anomaly remains open to the south.
- 2. **Southern IP Anomaly.** There has been no recorded sampling or drilling around the southern IP anomaly, located 1 km south of the northern IP anomaly.



**Figure 5.** Compilation of the historical work done at the Rock Lodge Prospect. Also shown are the historical drill collars, rock chip samples and the location of the northern and southern IP anomalies.

The historical workings at the nearby Bobundara prospect (location in Figure 2) have a recorded production of 575g Au (18.5oz) with an average grade of 21 g/t Au (Herzberger and Barnes, 1978<sup>4</sup>). Mining occurred during two periods from 1928-30 and 1948-49. The mineralisation occurs as disseminated sulphide minerals in a narrow, north striking, discontinuous quartz-chlorite lode parallel to the host slates' cleavage. The workings consist of 3 or 4 shafts, an adit and shallow pits along a north south orientation. Historical underground channel sampling has assayed up to 9 g/t Au<sup>1</sup>. There has been no recorded drilling at Bobundara.

#### **IRGS Models.**

The polymetallic sulphide rich mineralisation at Rock Lodge has possible affinity with the Intrusion Related Gold System (IRGS) group of deposits, indicated by anomalous Au, Ag, Bi, Cu, Pb, Zn. Trace element enrichment may include Sn, W, Mo, As, Te, Sb. Alt Resources noted the elevated bismuth (<0.12%) in drill holes MYRC001-6 as evidence for an affinity with the IRGS group<sup>3</sup>.

IRGS deposits are commonly within a large hydrothermal system with potential for large tonnage, low grade (1 - 2 g/t) gold mineralisation in disseminated systems or higher grades in vein systems. Deposit sizes range from 700 Kozs at Timbarra to 140 tonnes gold at Kidston in North Queensland. Production is typically for gold only. Metallurgical credits can include Ag, Cu and Zn, (e.g., Red Dome). Many mines overseas typically contain greater than 3 Moz. High-grade examples include Pogo (9.98 Mt at 17.8 g/t Au; quoted in Lang et al., 2000<sup>5</sup>).

#### **Next Steps**

**Geophysical Surveys:** Consideration will be given to conducting detailed aerial magnetic surveys because IRGS deposits are commonly associated with aeromagnetic anomalies. Induced polarisation (IP) surveys will also be considered to assist with the generation of drill targets following the success of surveys conducted by previous exploration companies.

**Soil and Rock Sampling:** Soil sampling is planned in areas with outcrop. Closer spaced grid sampling (200m x 50m) will be conducted on priority targets with a hand-held auger. Rock chip samples will be taken of gossans, ironstones and quartz veins.

**Regional Stream Sediment Sampling:** Stream sediment sampling is planned over areas with prospective Ordovician age rocks. The sample density will be increased in proximity to the mineralised areas at Mount Pleasant Creek, Bobundara Gold Mine, Rock Lodge and the Monaro Prospects.

Drilling: Targets generated by the geophysical and geochemical sampling will drill tested.

Land Access: Discussions with landholders regarding land access agreements for planned drilling are well advanced

#### References

<sup>1</sup> Sourced from NSW Geological Survey Open File: Report GS1984\_166. Southern Gold NL Annual Report.

<sup>2</sup> Alt Resources (ASX: ARS) announcement, 23 March 2018. Alt Resources reports polymetallic gold, copper, lead, and zinc at Myalla Project, NSW.

<sup>3</sup> Alt Resources (ASX: ARS) announcement, Quarterly Activities Report June 2016.

<sup>4</sup> Herzberger, G.A., Barns, R.G. 1978. Bega 1:250K Metallogenic Map. Geol Surv NSW.

<sup>5</sup> Lang, J. R., Baker, T., Hart, C. J. R., and Mortensen, J. K., 2000. An exploration model for intrusion-related gold systems. Society of Economic Geology Newsletter, 40.

6 Sourced from NSW Geological Survey Open File: Alt Resources EL8416 Final Report including the Fourth Annual Report – Rock Lodge Project, Myalla, 2019.

#### **Turondale Project**

Fieldwork has identified significant gold assays from drainage geochemistry at the company's 100% owned Turondale Project (Exploration Licence 9017) in the East Lachlan Fold Belt, NSW. The project is located 15km north of Bathurst.

Shree completed a review of previous exploration at the Turondale Project in 2020 and conducted an interpretation and target generation study (refer ASX announcement of 8th September 2020).

Following the target generation study, stream sediment sampling was considered the most cost-effective sampling technique in the well-drained and elevated terrain. Seventy-four stream sediment samples have been collected at Turondale. Due to delays in gaining access to the private land, a further sixty-three samples remain to be collected.



The results of the sampling survey are shown in Figure 6

**Figure 6.** Summary image of stream sediment anomalies, drainage network and the regional geology at the Turondale Project EL9017 **Stream sediment geochemistry.** 

Regional stream sediment sampling at Turondale has identified two standout gold anomalies: Oakey Creek and Box Ridge South, illustrated in Figure 6. At Oakey Creek, highly anomalous assays up to 126 ppb Au, against statistical background assays of 1.4 ppb Au, are located along the Oakey Creek, within EL9017. Pleasingly, the anomalous samples are clustered together along Oakey Creek, suggesting the peak assay of 126 ppb Au is not a spurious or isolated occurrence of gold.

Similarly, a clustering of anomalous samples is present at Box Ridge South, where assays up to 4.5 ppb Au have been received against statistical background assays of 1.4 ppb Au.

The anomalous river catchments are also spatially associated with structural dislocations of the regional geology. The Oakey Creek catchment in Figure 6 is spatially related to an area with more intense folding of the sedimentary rock units. Such folding may give rise to the focussing of gold-bearing fluids along zones with strong cleavage or axial planar faulting and shearing associated with the folding.

At Box Ridge South, the anomalous river catchment is spatially related to a trend (structure?) along strike of the Box Ridge Gold Workings, located 6 kms to the north in Figure 2. The Box Ridge Prospect is a typical gold-bearing quartz reef common within the Hill End Trough. Gold mineralisation is hosted in north-south trending 'pinch and swell' quartz veins within folded volcanics and sediments. The quartz veins have widths ranging from 0.3m to 3m and extend up to 2.4km along strike (Derriman, 2014).

As discussed in Shree's ASX announcement of 8th September 2020, another priority target area is located near the historic alluvial and hard-rock workings at Cheshire Creek and Winburndale prospects (Figure 2), where highly encouraging geochemical results were reported by Nickel Mines Ltd (NML) in 1972, (Lynch 1972). Stream sediment samples (-80 mesh) returned highly anomalous assays of up to 2.5 g/t Au within several creeks draining radially from a hill 2km long by 1.5km wide. Copper and lead values were also highly anomalous with values up to 3700 ppm Cu and 980 ppm Pb. The source of the gold and base-metals is interpreted to be from the central hill that comprises a folded sequence of interbedded sediments and volcanic rock.

#### Planned Work program:

Shree intends to continue the stream sediment sampling program over the northern portion of EL9017 to locate possible extensions of the Quartz Ridge and Box Ridge gold mineralised trends. Some upstream sampling of anomalous drainages may also be required to accurately locate the source of the anomalous gold geochemistry. Quartz veins encountered during the stream sediment sampling program will be sampled.

Shree's exploration program will also consist of stream-sediment sampling of the creeks between Oakey Creek and Cheshire Creek. Following stream-sediment sampling, a grid-based soil sampling program and geological mapping is required to identify the source of the mineralisation and generate targets for follow up drilling.

#### References.

Derriman, M., Ardent Resources. 2014. Exploration Licence 7592. Final report for the period 4 August 2010 to 3 August 2014. Turon Gold Project. MINVIEW Report 7592/2.

Lynch, J., Nickel Mines Ltd. 1972. Final report MEL 197. MINVIEW Report, GS1972/128.

#### **Edwards Creek Copper Project**

Several new copper occurrences have been discovered during the first field visit to the Edwards Creek Copper Project in the Northern Territory (Figure 7). In late May 2021, a reconnaissance trip was made to the project to assess access and to check the location of copper and base metal occurrences recorded by previous exploration companies and the Northern Territory Geological Survey.



Figure 7. Regional location of the Arunta Joint Venture projects and major resource projects in the region

Sixteen rock chip samples were taken at Edwards Creek and have been submitted to the laboratory for analysis of gold, copper and multielement. Results will be announced when available.

The site visit has confirmed the presence of copper and base metal occurrences at the Edwards Creek gossan (Figure 8) and the extensions to the north and south within the folded sequence of felsic and mafic granulite, marble, calcsilicate and amphibolite. Copper mineralisation is most evident within the siliceous gossan where it forms green malachite coatings on rockfaces (Figure 9-10). Lead-zinc mineralisation in the form of white oxide coatings on rocks occurs along strike to the north within carbonate rocks.



Figure 8: Ferruginous ridge (siliceous gossan) at Edwards Creek looking west. Access tracks and drill pads for CRAE and Territory Exploration drill holes visible on hillside.



Figure 9-10: Green malachite occurrences at the Edwards Creek gossan.

Reconnaissance mapping in the broader Edwards Creek area has resulted in the discovery of a new copper occurrences ~750m to the east of the main gossan. The new occurrences comprise coarse ironstone with malachite staining within a poorly exposed horizon ~1m wide (Figure 11-12). The ironstone horizon is exposed intermittently for over 200m trending in a

north-easterly direction (Figure 13). This new occurrence has not been reported by previous exploration companies that focussed exploration work on the area around the main gossan.

The trend of the mineralised ironstone does not fit with previous mapping and interpretations of the geology that have been largely based on mapping originally conducted in 1985. The new copper occurrences suggest the structural setting may be more complex than previously thought.



Figure 11: Poorly exposed ironstone containing malachite (copper carbonate)



Figure 12: Malachite-stained ironstone



Figure 13: Edwards Creek prospect geology interpretation showing location of previous drilling and new copper occurrences

#### Background

The Edwards Creek Project (EL32420) is located ~75km north-northeast of Alice Springs and was recently granted. The project forms part of the Arunta Joint Venture between Shree Minerals and Territory Lithium Pty Ltd covering an area of ~380 square kilometres in the highly prospective Arunta Region in the Northern Territory.

The Edwards Creek prospect is centred on a 'siliceous gossan' that forms a prominent brown ferruginous ridge. Green malachite staining prompted the acquisition of exploration licences over the prospect in the 1970s. In 1980, CRAE identified an electromagnetic (EM) conductor

associated with the siliceous gossan and drilled two diamond drill holes (DD80EC01 and DD81EC02) intersecting stratabound base metal mineralisation. Better historic results include.

#### 4.5m at 2.25% Cu, 0.11% Pb, 1.54% Zn, 0.14 g/t Au from 47.45m<sup>1</sup> in hole DD80EC02. Includes 0.72m at 7.11% Cu, 1.9% Zn, 0.24 g/t Au.

Territory Exploration Pty Ltd acquired new EM data over Edwards Creek in 2017 and identified a strong EM conductor that was interpreted to be caused by sulphide mineralisation at depth. Two reverse circulation holes were drilled to test the conductor intersecting relatively weak zones of copper mineralisation in a clay zone. No further work was conducted.

#### Next Steps

Shree will engage a geophysical consultant to conduct remodelling of the electromagnetic data at Edwards Creek to assist with the targeting of further drilling. The site visit has revealed that the collars for the previous drillholes are still open. Depending on the results from the remodelling of the airborne electromagnetic data the old drillholes could be re-entered and cleaned out to allow a downhole electromagnetic survey. This will allow the EM conductor to be modelled with greater accuracy. The intense folding evident at Edwards Creek suggests that sulphide bodies could form narrow plunging shoots like those at the Rockface prospect at KGL Resources (ASX: KGL) Jervois project approximately 200km to the east. Narrow plunging sulphide shoots are difficult targets to intersect with drilling and can be easily missed.

Additional geological mapping, rock chip sampling and detailed soil sampling is planned around the new copper occurrences. The regolith profile over much of the prospect area appears suitable for soil sampling. If soil sampling is successful the program may be extended to cover additional areas, particularly the north and east limb of the folded prospective horizon that contains undrilled lead-zinc occurrences.

#### References

<sup>1</sup> CRA ML426H Drill hole logs Edwards Creek. Unpublished NT Open File Report CR1983/80.
 <sup>2</sup> Shree Minerals (ASX: SHH) announcement 12th April 2021. Two highly prospective tenements for copper and lead-zinc granted in the Northern Territory.

#### **Bruce Gold Project**

A site visit was undertaken in May 2021 to conduct additional reconnaissance mapping of the quartz veins and workings at the Bruce Gold Prospect and to take additional rock chip samples along the gold mineralised trend. Drill targets have been identified at the Bruce Project in the Northern Territory and Shree will now commence planning and approvals for a RC drilling program.

Eighteen rock chip samples have been collected and submitted to the laboratory for analysis of gold and multielement. Assay results will be reported when available.

The Bruce Gold Prospect is located ~300km by road from Alice Springs and has good access. The prospect is 13km north of the Plenty Highway which has been sealed to the Harts Range town site with upgrade of the unsealed road to the east in progress.

The gossanous and ferruginous quartz veins at Bruce extend for over 1.5km in an east-west direction within a sequence of mica schist, calcsilicate and amphibolite that form part of the Irindinia Gniess (Figure 14). The veins are 1-2m thick and dip at a shallow angle to the north (~15 degrees) and are interpreted to be thrust faults. Previous sampling by the Northern Territory Geological Survey (NTGS) returned a highest grade of 53g/t Au<sup>1</sup>.



Figure 14: Bruce Gold Prospect gossanous quartz veins. Olympia Resources' soil geochemistry contours (Au, ppb), rock chip geochemistry (Au, ppm) and drill hole collars. Aerial photo image.

The eastern portion of the quartz vein located to the east of the station boundary fence and access track is a single well defined quartz vein that forms a low rubbly ridge (Figure 15). Close to the access track there is a shallow working sunk on a ferruginous quartz vein with green copper carbonate (malachite) staining (Figures 16-17). Immediately west of the access track the quartz vein is poorly exposed where it divides into two main veins with possible linking structures. The veins change orientation from east-west to east northeast and appear to have been disrupted by a cross cutting structure forming a possible dilation zone.



Figure 15: Outcropping gossanous quartz vein forming a low rubbly ridge.



Figure 16: Shallow workings on quartz veins at Bruce Gold Prospect. Figure 17: Ferruginous quartz vein with copper carbonate (malachite).

Drill chips on the surface from previous Reverse Circulation (RC) drilling conducted in 2008 indicate that Olympia Resources focussed on a small portion of the quartz vein immediately west of the access track where exposure of the veins is poor. One of the two drill traverses was mostly ineffective with only one hole drilled directly on the vein. The second traverse was better located, stepping out at intervals to intersect the interpreted position of the shallow north dipping vein, although in an area of poor exposure.

#### **Next Steps**

Shree will commence planning and seek required approvals for a Reverse Circulation (RC) drilling program to test the gossanous quartz veins at the Bruce Gold Prospect. The drilling will target areas where the quartz veins are best exposed to the east and west of the access track.

The traverses will be located along strike from the small section of the quartz vein drilled by Olympia Resources.

Detailed mapping of the quartz veins is also planned to improve understanding of the structural setting and assist targeting of the drilling. Reconnaissance mapping and sampling will also be conducted to locate other mineralised quartz veins in the area.

Discussions have been held with the landholders and Native Title holders regarding land access for drilling. The Bruce Gold prospect is located on a station boundary. An agreement has been signed with one landholder but discussions with the other landholder are continuing.

#### References

<sup>1</sup> Baxter, J. 2005: Olympia Resources Limited. Reconnaissance mapping and soil sampling at Bruce's Copper prospect EL9851, Northern Territory. Unpublished NT Open File Report CR2005/275.

#### Nelson Bay River Iron Project

During the quarter, the Company has received comments from Environmental Protection Agency, Tasmania (EPA) on the draft Development Proposal & Environment Management Plan (DPEMP) for the Nelson Bay River Iron Project (NBR) submitted in January 2021.

The Company has commenced working with its technical consultants and the EPA to revise the draft DPEMP with requested additional details and clarifications on the proposed mining operation and the management measures. These include further management plans in few areas, engineering designs and action plans on proposed additional infrastructure to be developed at site for water management including new water storage dams & water treatment facilities, design details for development of waste rock dumps & mine development stages, construction timelines etc. The DPEMP involves a multi discipline functional inputs from several technical experts & the Company is working on updating the DPEMP as per availability of relevant technical experts & consultants. An independent review by a competent authority of the final DPEMP is also being arranged prior to lodgement with EPA. The company is targeting to complete these activities in coming weeks & hopes this will facilitate to progress further with the permitting process.

Figure 18 shows the existing mine development on site. The main features are the DSO pit and waste dumps. Other elements are the mine water treatment dams, ROM stockpile area and the facilities area.

Figure 19 shows the proposed DSO operations. The main features are the deepening of the existing DSO pit, extension of the existing NAF & PAF waste dumps & new PAF dump, new mine water storage dam including Mixing cell, completion of partly constructed Recycle Dam, additional ROM (Run of Mine Ore) stockpile area.

The Company remains committed to driving value for Shareholders and looks forward to updating the market as it continues to progress the iron ore project towards recommencement in a very strong macro environment for producers.



Figure 18: Existing site plan

Source: Google Earth



Figure 19: Proposed DSO Operations

#### Background

NBR Project (Mining Lease 3M/2011) is in the far north-west of Tasmania and is approximately 150km from the Burnie Port (Figure 20). 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 20

The Direct Shipping Ore (DSO) project at NBR is an all-contract mining, processing and haulage operation using local contractors in the region. It requires no major processing beyond crushing and screening after which the ore is then trucked to the port and shipped. It was developed in 2013 with the first shipment of ore leaving the Port of Burnie in January 2014. NBR project was placed on care and maintenance in June 2014 following sharp iron ore price falls.

With the improvement in the iron ore price since mid-2018, the Company has been actively working to re-permit the NBR. The strategy has been to recommence the production of the DSO resources from the existing open pit at NBR. To resolve legal issues with the existing permit, the Company applied for a new Tasmanian environmental permit covering the DSO operations. After public consultation in November 2018, the EPA issued guidelines for the preparation of a DPEMP. Working towards adopting this framework, the Company has completed the requisite technical studies to develop a draft of the DPEMP which was lodged with the EPA for review (*refer ASX announcement of 27 January 2021*).

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 DSO pit is some 25% complete. The next stage after completion of SDSO 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.

#### 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 (Figure 21). 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 21: 3D Magnetic Inversion Study (Source: SHH)

#### CORPORATE

Settlement of \$0.6 M completed following shareholder approval on 14<sup>th</sup> May 2021, completing total placement of \$3.0 M at \$0.012 per share before costs announced on 25<sup>th</sup> March 2021. The capital structure after these placements is as follows:

	Fully Paid Ordinary Shares "FPO"	Unlisted Options
Issued Capital	1,063,236,892	62,500,000

During the Quarter, a total sum of \$ 131 Thousand was paid to related parties and their associates. The Company advises that this relates to executive directors' salaries, non-executive director's fees and superannuation.

Exploration and Evaluation Expenditure during the Quarter was \$ 63 Thousand. Details of exploration activity as included in this Quarterly Activities Report.

Mining Development activities during the Quarter was \$7 Thousand as per details of permitting efforts for NBR project as included in this Quarterly Activities Report. There were no substantive mining production activities during the Quarter.

#### Business Development.

Shree is continuing to identify and assess exploration and early development opportunities throughout Australia in Gold and Base Metals projects. During the quarter, the Company made two Exploration Licence applications as following:

#### Hale River: EL32785

The Hale River ELA was applied for on 29<sup>th</sup> June 2021 and covers an area of 361kmsq. The application is located 120km northeast of Alice Springs, Northern Territory and covers several gold and copper prospects within the Illowa Schist Zone.



Figure 21: Location plan ELA32785 (Source: Strike NT)

#### Prince of Wales: ELA6297

The Prince of Wales ELA is a single graticular block with an area of ~11kmsq. The application is located 5km northwest of Gundagai in NSW and covers the historic Prince of Wales gold mine. The NSW Minview website describes the Prince of Wales as an underground mine with shafts, drives with a strike length of 500m and a depth of 170m.



Figure 22: Location plan ELA6297 (Source: Minview NSW)

#### Tenements

• The mining tenements held at the end of quarter and their location.

Mine Lease/		Locality	Remarks
Exploration License			
3M/2011	ML	Nelson Bay	100% Shree Minerals Ltd
		River	
E40/378	EL	Golden Chimney	100% Shree Minerals Ltd
E40/384	EL	Ulysses South	100% Shree Minerals Ltd
E63/2046	ELA	Dundas	100% Shree Minerals Ltd
E63/2048	ELA	Dundas	100% Shree Minerals Ltd.
EL9017 (formerly	EL	Turondale	100% Shree Minerals Ltd.
ELA6044)			
EL9155	EL	Rock Lodge	100% Shree Minerals Ltd.
(Formerly			
ELA 6147)			
EL31225	EL	Bruce Project	Part of farm-in & JV
			agreement with Territory
			Lithium Pty Ltd (Arunta JV) *
EL 32420	EL	Edwards Creek	Part of farm-in & JV
			agreement with Territory
			Lithium Pty Ltd (Arunta JV) *
EL 32419	EL	Box Hole	Part of farm-in & JV
			agreement with Territory
			Lithium Pty Ltd (Arunta JV) *
ELA 6297	ELA	Prince of Wales	100% Shree Minerals Ltd
EL 32785	ELA	Hale River	100% Shree Minerals Ltd

ELA: Exploration Licence Application

- The mining tenement interests relinquished during the quarter and their location
  NIL
- The mining tenements interests acquired and disposed of during the quarter and their location
  - > 2 new Exploration Licence applications, being ELA 6297 & EL 32785)
  - EL 9155 (formerly ELA 6147) granted at Rock Lodge project
- The beneficial percentage interests held in farm-in or farm-out agreements at the end of the quarter
  - NIL. Please refer to details of Arunta Joint Venture as below. The Company is yet to earn an interest.
- The beneficial percentage interests in farm-in or farm-out agreements acquired or disposed of during the quarter
  - > NIL

\* The Company has a farm-in and joint venture agreement (Arunta Joint Venture whose principal terms include:

- SHH can earn a 50% equity interest in the Joint Venture through the total expenditure of \$50,000.
- Once SHH has earned a 50% equity interest, further Joint Venture expenditure contributions will be pro-rata, or else a non-contributing party's equity will be diluted using the standard industry dilution formula.
- If SHH were doing sole expenditure, its share of equity in the Joint Venture would increase to 90% by it making a total expenditure of \$450,000.
- Should a party's equity in the Joint Venture fall to 10%, its share will be automatically acquired by the other party in exchange for a 1% NSR Royalty.
- SHH will manage the Joint Venture during the earn-in stage, and while ever it holds majority equity.

#### **Competent Person Statement**

The review of historical exploration activities and results contained in this report is based on information compiled by Martin Bennett, a Member of the Australian Institute of Geoscientists. He is a fulltime employee of Shree Minerals Ltd. He has sufficient experience which is relevant to the style of mineralisation and types of deposits 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).

Martin Bennett has consented to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information in the original reports, and that the form and context in which the Competent Person's findings are presented have not been materially modified from the original reports.

Where the Company refers to the Mineral Resources in this report (referencing previous releases made to the ASX), it confirms that it is not aware of any new information or data that

materially affects the information included in that announcement and all material assumptions and technical parameters underpinning the Mineral Resource estimate with that announcement continue to apply and have not materially changed.

#### **Cautionary Statement**

- The Exploration Results for Rock Lodge, Turondale, Edwards Creek, Box Hole, Bruce Projects have been reported by former owners.
- The source and date of the Exploration Results reported by the former owners have been referenced in the company's various announcement to ASX.
- The historical Exploration Results have not been reported in accordance with the JORC Code 2012.
- A Competent Person has not done sufficient work to disclose the historical Exploration Results in accordance with the JORC Code 2012.
- It is possible that following further evaluation and/or exploration work that the confidence in the prior reported Exploration Results may be reduced when reported under the JORC Code 2012.
- That nothing has come to the attention of the acquirer that causes it to question the accuracy or reliability of the historical Exploration Results; but
- Shree has not independently validated the historical Exploration Results and therefore is not to be regarded as reporting, adopting, or endorsing those results
- A summary of the work programs on which the Exploration Results quoted in this announcement are included as Appendices in the company's previous announcements to ASX.
- There are no more recent Exploration Results or data relevant to the understanding of the Exploration Results.
- An assessment of the additional exploration or evaluation work that is required to report the Exploration Results in accordance with JORC Code 2012 will be undertaken following acquisition & will be funded by the Company.

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

## Appendix 5B

## Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity			
Shree Minerals Limited			
ABN Quarter ended ("current quarter")			
74 130 618 683	30/06/2021		

Cons	olidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers		
1.2	Payments for		
	(a) exploration & evaluation		
	(b) development	(9)	(115)
	(c) production (Care & Maintenance)	(7)	(80)
	(d) staff costs	(110)	(272)
21	(e) administration and corporate costs	(69)	(197)
1.3	Dividends received (see note 3)		
1.4	Interest received	4	18
1.5	Interest and other costs of finance paid		
1.6	Income taxes paid		
1.7	Government grants and tax incentives		20
1.8	Other (provide details if material)		
1.9	Net cash from / (used in) operating activities	(191)	(626)

2.	Cash	flows from investing activities		
2.1	Payme	ents to acquire or for:		
	(a) en	tities		
	(b) ter	nements		
	(c) pro	operty, plant and equipment		
	(d) ex	ploration & evaluation	(63)	(257)
	(e) inv	vestments		
	(f) oth	ner non-current assets	(7)	(7)

Cons	solidated statement of cash flows	Current quarter \$A'000	Year to date (12 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities		
	(b) tenements		
	(c) property, plant and equipment		
	(d) investments		
	(e) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other (provide details if material)		
2.6	Net cash from / (used in) investing activities	(70)	(264)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	600	4200
3.2	Proceeds from issue of convertible debt securities		
3.3	Proceeds from exercise of options		
3.4	Transaction costs related to issues of equity securities or convertible debt securities	(33)	(247)
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings		
3.7	Transaction costs related to loans and borrowings		
3.8	Dividends paid		
3.9	Other (provide details if material)		
3.10	Net cash from / (used in) financing activities	567	3956

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	3614	854
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(191)	(626)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(70)	(264)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	567	3956

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (12 months) \$A'000
4.5	Effect of movement in exchange rates on cash held		
4.6	Cash and cash equivalents at end of period	3920	3920

5.	Reconciliation of cash and cash equivalents 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	3920	2406
5.2	Call deposits		1208
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	3920	3614

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	99
6.2	Aggregate amount of payments to related parties and their associates included in item 2	32
Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments.		

### Appendix 5B Mining exploration entity or oil and gas exploration entity quarterly cash flow report

7.	<b>Financing facilities</b> Note: the term "facility' includes all forms of financing arrangements available to the entity. Add notes as necessary for an understanding of the sources of finance available to the entity.	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1	Loan facilities		
7.2	Credit standby arrangements		
7.3	Other (please specify)		
7.4	Total financing facilities		
7.5	Unused financing facilities available at qu	larter end	
7.6	Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.		) the lender, interest itional financing ter quarter end,

8.	Estim	ated cash available for future operating activities	\$A'000	
8.1	Net ca	Net cash from / (used in) operating activities (item 1.9) (191		
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))		(70)	
8.3	Total relevant outgoings (item 8.1 + item 8.2)		(261)	
8.4	Cash a	Cash and cash equivalents at quarter end (item 4.6) 3920		
8.5	Unused finance facilities available at quarter end (item 7.5)			
8.6	Total a	vailable funding (item 8.4 + item 8.5)	3920	
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)		15	
	Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.			
8.8	If item 8.7 is less than 2 quarters, please provide answers to the following questions:			
	8.8.1 Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?			
	Answer: N/A			
	8.8.2 Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?			
	Answe	Answer: N/A		
	L			

8.8.3	Does the entity expect to be able to continue its operations and to meet its business
	objectives and, if so, on what basis?

Answer: N/A

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

#### **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.

Date: 29/07/2021 .....