ASX ANNOUNCEMENT **15 February 2021**

GREENVALE COMMENCES PIVOTAL RESOURCE EVALUATION AND PILOT-SCALE PROCESSING PROGRAM AT ALPHA TORBANITE PROJECT

Multi-stage, $1.5 million program expected to underpin a JORC compliant Resource/Reserve and Pre-Feasibility Study due by mid-2021

Highlights

- **Three-stage drilling program to commence shortly at the Alpha Torbanite Project in central Queensland. Pre-drilling site works have been completed.**
- **Stage 1: 51-hole chip drilling program (2,700m) to facilitate down-hole geophysical surveys.**
- **Stage 2: 20–25-hole HQ Diameter coring program (~1,600m) for verification of geological and structural models and to obtain geotechnical data for open pit planning and design, laboratory analysis of torbanite plus bench scale retort testing for extraction of saleable products.**
- **Stage 3: 4–6-hole broad diameter (200mm) coring to provide sufficient samples for definitive process plant design.**
- **Outcrop sample collection currently underway from old workings to provide test material for preliminary pilot scale processing.**
- **Program expected to provide underlying data required for a Feasibility study and for 2012 JORC compliant Resource/Reserve estimate. Greenvale plans to have a PFS (Pre-Feasibility Study) due by the end of June 2021.**

Greenvale Mining Limited (ASX: GRV; "**Greenvale**" or "**the Company**") is pleased to advise that it has taken further key steps in its strategy to fast-track the development of the **Alpha Torbanite Project** in central Queensland with a comprehensive field work program now underway.

The $1.5 million, multi-pronged program will include three stages of drilling and bulk sample collection to provide test material for preliminary pilot-scale processing. It is expected to generate sufficient data to underpin a JORC compliant

REGISTERED OFFICE:
130 Stirling Hwy, NORTH FREMANTLE, WA 6159 | Locked Bag 4, North Fremantle, WA Australia, 6159
t:+61 8 6215 0372 | e: admin@greenvalemining.com | www.greenvalemining.com
ABN 54 000 743 555

Resource/Reserve, as well as product specifications and process plant design to support marketing initiatives and underpin a Pre-Feasibility Study by mid-2021.

Alpha is the only remaining Australian deposit of torbanite – a mineral that contains up to 650 litres of hydrocarbons per tonne. Studies have demonstrated that it has the potential to produce three high-value products – bitumen, light crude (a precursor to diesel) and activated carbon.

Greenvale is initially targeting a development strategy for Alpha to become a domestic supplier of bitumen in Australia, which currently imports around 800,000tpa of the critical road surfacing and building materials product. Work is also continuing to evaluate markets for the other value-added products.

Greenvale Managing Director, Neil Biddle, said: *"We're very pleased that our commercialisation strategy for this unique deposit is now rapidly taking shape, with a multi-pronged fieldwork program underway that will underpin all the key components required to deliver the first-ever economic study on the deposit by mid-2021.*

"The multi-stage drilling and bulk sampling program will deliver all the data we require to calculate a JORC Resource and Reserve, verify our geological and structural models, obtain geotechnical data for pit design and extract samples for pilot-plant test-work and determination of product specifications. The initial pilot-scale retort testing program will begin later this month once bulk samples are received.

"In parallel with these activities, we have already started the process of engaging with potential off-take partners, customers and strategic investors while also evaluating the various target markets for our products. While the bitumen market is the most tangible and immediate opportunity, there are other exciting avenues also opening up for us.

"Shareholders can look forward to regular updates on the progress of our work programs, as well as updates on customer engagement, potential off-take agreements and strategic marketing arrangements. This is an exciting time for Greenvale."

Background

The Alpha Torbanite Project is located approximately 50km south of the Central Queensland town of Alpha (Figure 1). The Alpha Torbanite deposit consists of three seams – an upper seam of bituminous oil shale with an average thickness of 1.12m, a middle seam containing a lens of high-grade torbanite with a thickness of up to 1.9m and a lower seam containing a lens of bituminous oil shale up to 2m thick. The upper seam is not present in all the historical drill holes.

The project has been subject to extensive exploration and laboratory testing since its initial discovery in 1939, over 80 years ago. During 2019, SRK Consulting (Australia) Pty Ltd (SRK) was engaged to reassess the project strategy. This resulted in a report by SRK setting out a potential new development strategy, which is based on the production of a diversified suite of value-added products.

SRK noted that, in contrast with typical oil shale deposits, the Alpha Torbanite is exceptionally high-grade, containing up to 650 litres of hydrocarbons per tonne of torbanite, and can produce high-value bitumen, light crude oil and activated carbon. Additionally, the torbanite can deliver high-quality value-added products through appropriate investment in processing infrastructure.

The lower grade bituminous oil shales above and below the Torbanite also contain hydrocarbons in potentially economic concentrations.

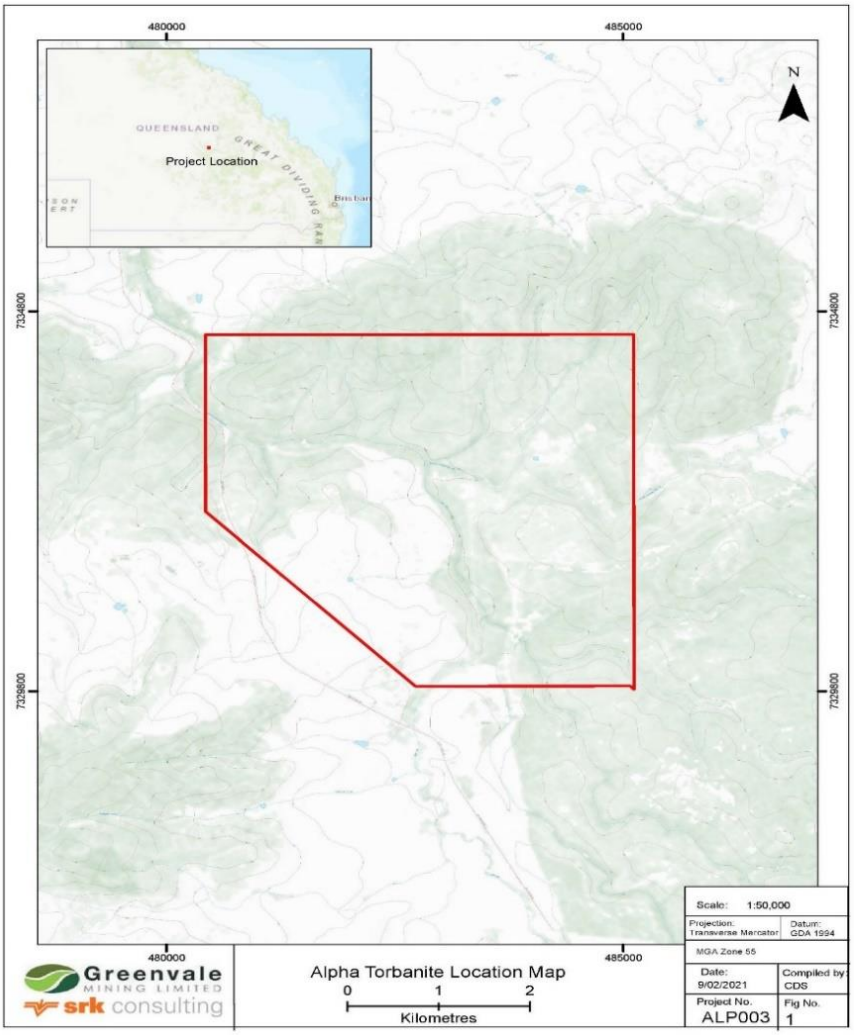

Figure 1: Alpha Torbanite Project Location Map

The torbanite is continuous over an area of approximately 3km by 2km. The deposit occurs at approximately 5 metres below surface along its eastern margin and dips gradually to the west at approximately 2 degrees, reaching a maximum depth in excess of 50 metres at its western margin.

Greenvale has engaged SRK to undertake a staged work program to assist in the assessment of the commercial viability of the project. This multi-pronged program will initially focus on the extraction and analysis of a torbanite bulk sample from a shallow

old working at one or more locations to characterise the deposit, as well as undertaking an initial pilot scale retort testing program across a range of conditions to assess optimal outputs.

In conjunction with the initial outcrop sampling program, a comprehensive 80-hole drilling program is scheduled to commence shortly.

The drill program will comprise 51 open holes to facilitate down-hole geophysical surveys, 20-25 HQ core holes to complete structural and geological modelling and provide geotechnical data for mine planning, and 4-6 broad diameter (200mm) cores of the oil shale/torbanite seams for definitive process design work.

In the meantime, the design and construction of the pilot retort plant and ancillary equipment has already been completed and is being readied for test works to commence immediately after the initial bulk sample is received later this month.

The Program

Field work activities recently commenced at the Alpha Project. The Company has entered into Access Agreements with the landowners of the Mt Surprise and Glen Avon properties which entirely overlay the Alpha torbanite deposit.

In addition, the Company has appointed Mr Paul Quinn as Site Senior Executive (SSE) to supervise the statutory requirements under the Environmental Authority (EA) relevant to the Alpha Project. Depco Drilling (www.depco.com.au) has been contracted to undertake the three phases of the drill program.

51 drill pads have been prepared for the commencement of the open hole program, due to commence on 23rd February. This program is expected to be completed within 2-3 weeks and will be immediately followed by a down-hole geophysical survey to map the continuity of the lenses of torbanite and upper and lower oil shale.

The open hole drill logs and down-hole data will be utilised to complete preliminary structural and geological models of the bituminous lenses and provide accurate locations for the 20–25-hole HQ diamond coring program.

HQ diamond core will provide detailed geotechnical data for mine planning and confirmation of the preliminary structural and geological models. Detailed metallurgical testing will also be conducted on the HQ torbanite and oil shale intersections.

Prior to the commencement of drilling, the Company is collecting a 400-500kg sample of torbanite from one or more of the old shallow workings, believed to date back to the 1940s.

The old workings consist of a shaft, approximately 2-3m deep, which is being re-commissioned by an excavator to reach fresh samples of the torbanite and upper and lower oil shale lenses.

These samples will be immediately refrigerated and sent to Greenvale's testing facility on the Gold Coast, Queensland where preliminary pilot scale processing will be conducted to optimise the extraction of bitumen, light crude oil and value-added carbon products such as activated carbon.

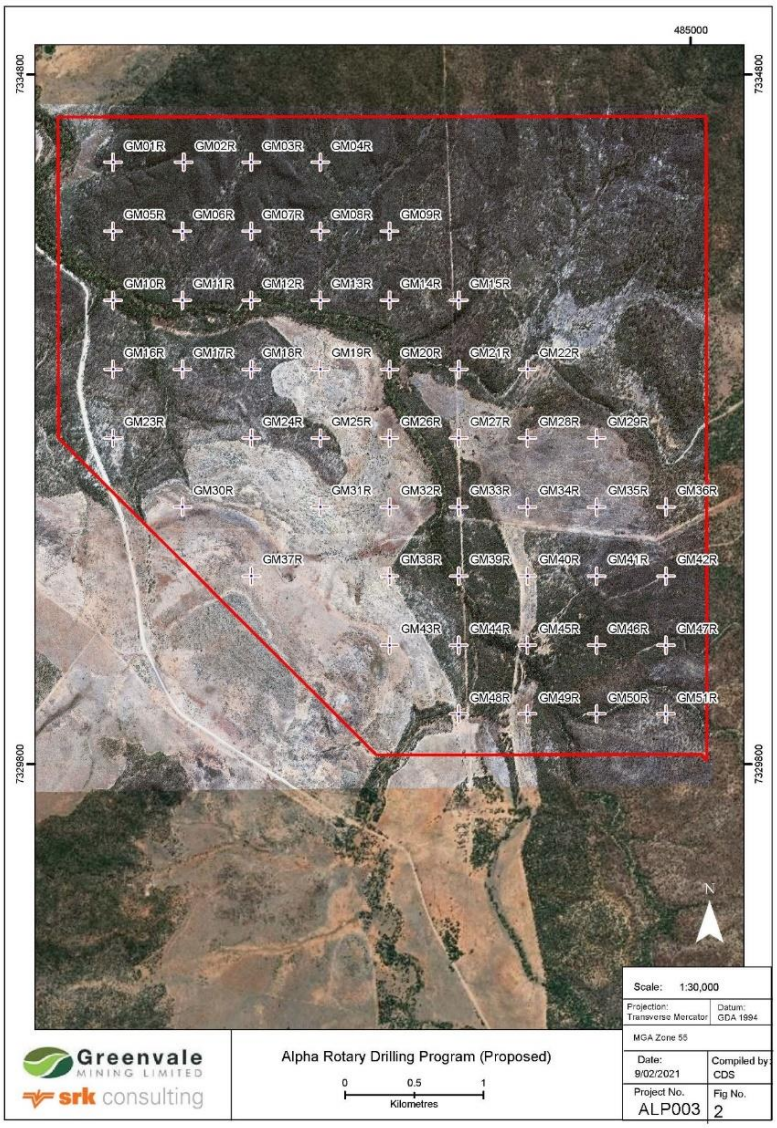

Figure 2: Alpha rotary drilling program drill hole locations

The final stage of the field program will be the drilling of 4-6 broad diameter (200mm) core holes which will be sited to extract a 400-500kg sample representative of the three bituminous lenses within the lower seam across the entire deposit. Core sampling of the upper seam will also be taken if there is a prospect of economic recovery.

Based on optimisation study results from the initial pilot scale program, the broad diameter core is expected to provide a definitive optimal processing route for the torbanite, which will lead to final process design for input to the Feasibility Study.

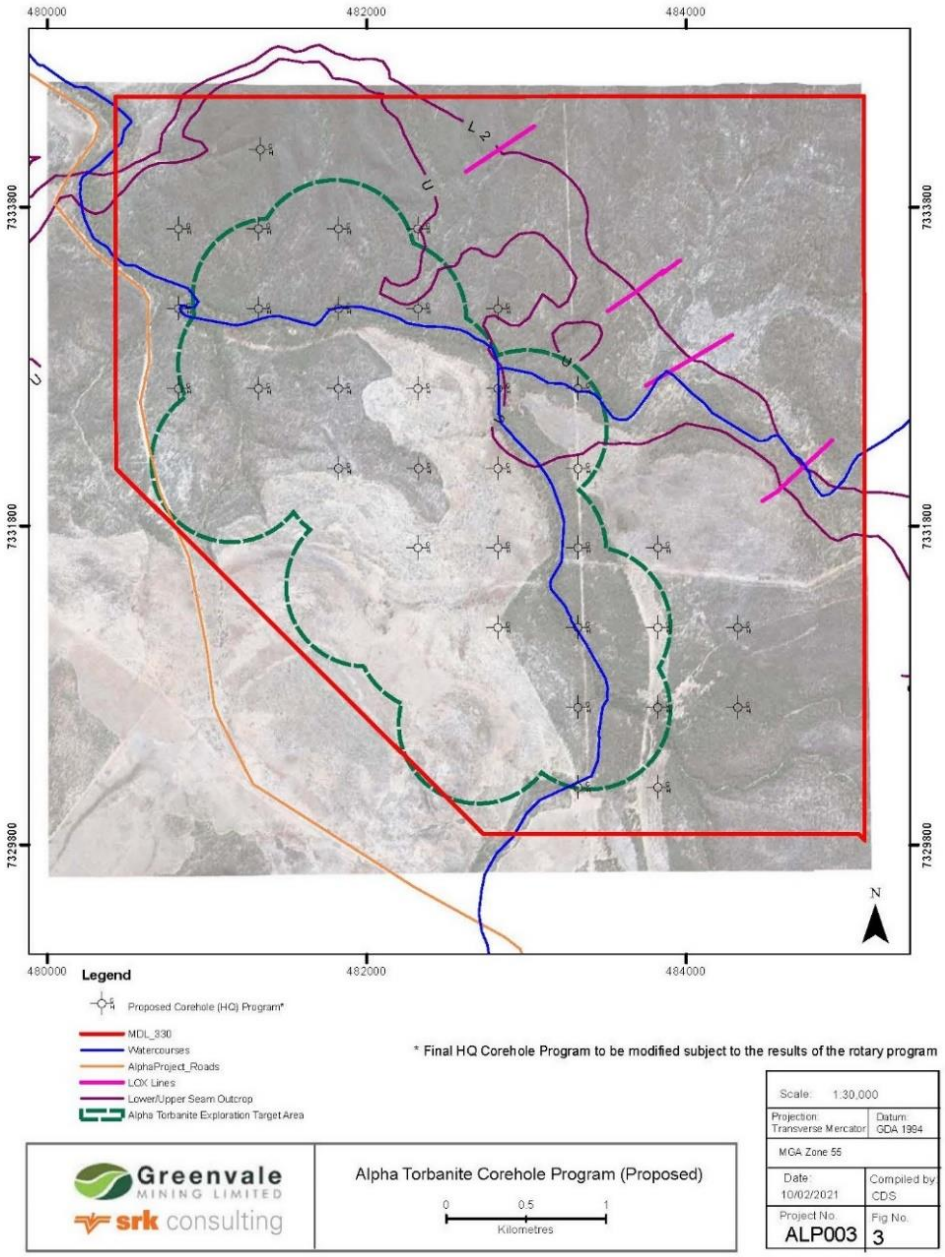

Figure 3: Alpha Diamond Drill Hole Locations (Proposed)

All Tenement Details

Alpha Project, Queensland

Tenement	%age Ownership	Owned by	Status
MDL 330	99.99%	Alpha Resources Pty Ltd	Current to 31 January 2022

Alpha Project, Queensland

Tenement	%age Ownership of Applicant	Applicant	Status
EPM 27718	100%	Alpha Resources Pty Ltd	Under Application

Approved for release by the Greenvale Mining Ltd Board.

Contact

For further details, contact:
Neil Biddle, Managing Director 0418 915 752

Media Inquiries
For further details, contact: Nicholas Read – Read Corporate
Nicholas@readcorporate.com.au
Mobile: 0419 929 046