ASX ANNOUNCEMENT **29 July 2021**

QUARTERLY ACTIVITIES REPORT JUNE 2021

Greenvale's growth momentum increases with Alpha Torbanite Project moving straight to DFS, major exploration program underway at Georgina and additional key appointments

Highlights

Alpha Torbanite Project, QLD:

- **Extensive 2,195m, 62-hole core drilling program successfully completed.**
- **Successful installation of test retort and commencement of retort testing.**
- **Alpha Project to proceed directly to a Definitive Feasibility Study (DFS).**
- **This reflects the rapid progress achieved with drilling and retort testing and will save considerable time and resources.**
- **DFS on track to be completed in late 2021/early 2022.**

Georgina Basin IOCG Project, NT:

- **Core viewing workshop at the AGES Conference provides insight into the emerging East Tennant Creek mineral province.**
- **Two successful co-funding applications awarded under Round 14 of the Northern Territory Geophysics and Drilling Collaborations Program.**
- **Work programs underway to confirm priority targets for a maiden drill program scheduled to commence in the September Quarter.**

Corporate:

- **Highly-experienced global mining and oil & gas executive, Mrs Dagmar Parsons, appointed as a Non-Executive Director.**
- **After Quarter-end, experienced mining and exploration executive Matthew Healy appointed as CEO.**
- **Successful $3 million placement to a strategic institutional investor, to fund expanded exploration activities at the Alpha and Georgina Projects.**
- **Disposal of the Company's holding in Canadian-listed explorer Gold Basin Resources, realising gross proceeds of AU$720,036.**
- **Cash holdings of $9.86 million at Quarter-end.**

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

Overview

The June Quarter was another active and highly productive period for Greenvale Mining Limited (ASX: **GRV**) (**GRV** or **the Company**) which saw its two-pronged growth strategy continue to gain significant momentum.

Key highlights included the completion of an extensive core hole program at the Company's rare and high-value Alpha Torbanite Project as well as significant progress with the installation and calibration of the test retort at its Gold Coast-based laboratory.

The 62-hole core program was completed on-time and all but confirmed the extensive historical geological data already collated on the area. Early interpretation of the results has provided the Company's Board and management with the confidence to proceed directly to a Definitive Feasibility Study (DFS), eliminating the cost and time associated with completing the previously foreshadowed Pre-Feasibility Study.

At the Georgina Project in the East Tennant Province of the NT, program planning and data interpretation has continued, and the Company's technical team has now developed an extensive and robust works program that will continue to enhance our geological understanding of the East Tennant area.

The work completed by Greenvale so far has already begun to pay off, with the award of two co-funding grants during the quarter by the Northern Territory Government. The grants will be used to further enhance and refine previously identified drill-ready targets in the central and north-western groups of tenements.

An extended magnetics and gravity program will also commence shortly, which is expected to provide our team with greater insights and to assist with the design of the maiden drill program due to commence in the September Quarter.

The Company has also continued to strengthen its senior leadership team to oversee the commercialisation and development of the Alpha Project. During the Quarter, the Company announced the appointment of Mrs Dagmar Parsons, highly experienced global mining and oil & gas executive, to the role of Non-Executive Director. She brings a wealth of experience which, together with her knowledge of the Queensland resource sector, will be invaluable as the Alpha Project moves into production.

Immediately after Quarter-end, the Company announced the appointment of experienced mining executive Matthew Healy as CEO.

The Company further strengthened its cash position during the quarter with the successful completion of a $3 million placement to a strategic institutional investor and the disposal of its interest in Canadian-listed explorer, Gold Basin Resources.

Greenvale is well-funded and well-resourced, with a clearly articulated strategy to unlock the value of both of its key assets through the delivery of the DFS on the Alpha Torbanite Project and the commencement of a major drilling program at the Georgina Basin IOCG Project.

Projects

Alpha Project, Queensland

Background

The Alpha Torbanite Project is located approximately 50km south of the Central Queensland town of Alpha. The Alpha torbanite deposit consists of two seams, an upper seam of low-grade torbanite with an average thickness of 1.12m and a lower seam containing lenses of torbanite up to 1.9m thick.

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 Pty Ltd ("SRK") was engaged to reassess the project's commercialisation strategy. This reassessment resulted in a report by SRK setting out a potential new development strategy 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 deposit 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. The upper and lower bituminous shales also produce similar products, albeit at lower yields of 110-140 litres per tonne. Additionally, the torbanite and bituminous shales can deliver high-quality value-added products through appropriate investment in processing infrastructure.

SRK was engaged to undertake a staged work program to assist in evaluating the commercial viability of the project.

Activities During the Quarter

During the Quarter, the Company successfully completed an extensive core hole drilling program at the Alpha Project. The program saw 284m of 4C core samples collected across 62 drill holes, for a total of 2,195m drilled.

Since the last Alpha update, provided in the March Quarterly Activities Report, the Company has built upon the previously completed preliminary drill program, tightening the grid spacing from 500m by 500m to 250m by 250m around the high-priority torbanite zones (see Figure 1 for hole locations).

Drill-holes were partly cored, with an open hole (non-core) pre-collar from the surface through the overburden strata and broad diameter (4C 100mm in diameter) coring through the target cannel coal and torbanite intervals, including immediate roof and floor strata.

All core hole locations have been geophysically logged with wireline tools providing down-hole gamma, density and verticality surveys.

An optical televiewer was run in selected core holes. The wireline logs allow accurate measurements of both Upper and Lower seam intervals.

All core samples are currently in a cold storage facility in the Stratum Reservoir Laboratory in Brisbane, and all core hole and open hole sites have been rehabilitated.

The test retort was also successfully installed at the Company's laboratory facility on the Gold Coast during the Quarter and significant advancements have been made in calibrating the apparatus.

Notably, the Company has already been able to synthesise small quantities of asphaltene (bitumen) material. Further work will be required in the current Quarter to produce samples of an appropriate scale for assaying and testing by potential customers.

Activities Planned for the September 2021 Quarter

Results from the core hole program will underpin the completion of geological modelling and the samples collected will assist in calibrating the Company's test retort.

Detailed logging of the core will continue into the September Quarter. Confirmation of lithotypes and analysis of sample intervals will be followed by a detailed laboratory testing program, including raw assay analysis, organic petrology and reservoir characterisation of the deposit.

The program will also include a Modified Fischer Analysis (MFA) that will provide the Company with an indication of the potential bitumen and synthetic-light crude yields from the torbanite. The MFA process sees a small sample of the torbanite crushed and heated, to a standardised level, in a small aluminium retort. The amount of synthetic-light crude and bitumen derived from the MFA is then used as a point of measure for updating the current geological model, determining volumetrics and for further evaluation and calibration of the Company's own retort testing.

The Company also intends to provide asphaltene (bitumen) material samples for preliminary evaluation to interested parties in the September Quarter.

The completion of the core program and the significant advancements achieved in the retort testing have allowed the Company to by-pass the previously foreshadowed Pre-Feasibility Study (PFS) and move directly to a Definitive Feasibility Study (DFS).

The Company is confident that it will be able to deliver the DFS in the late stages of 2021/early 2022.

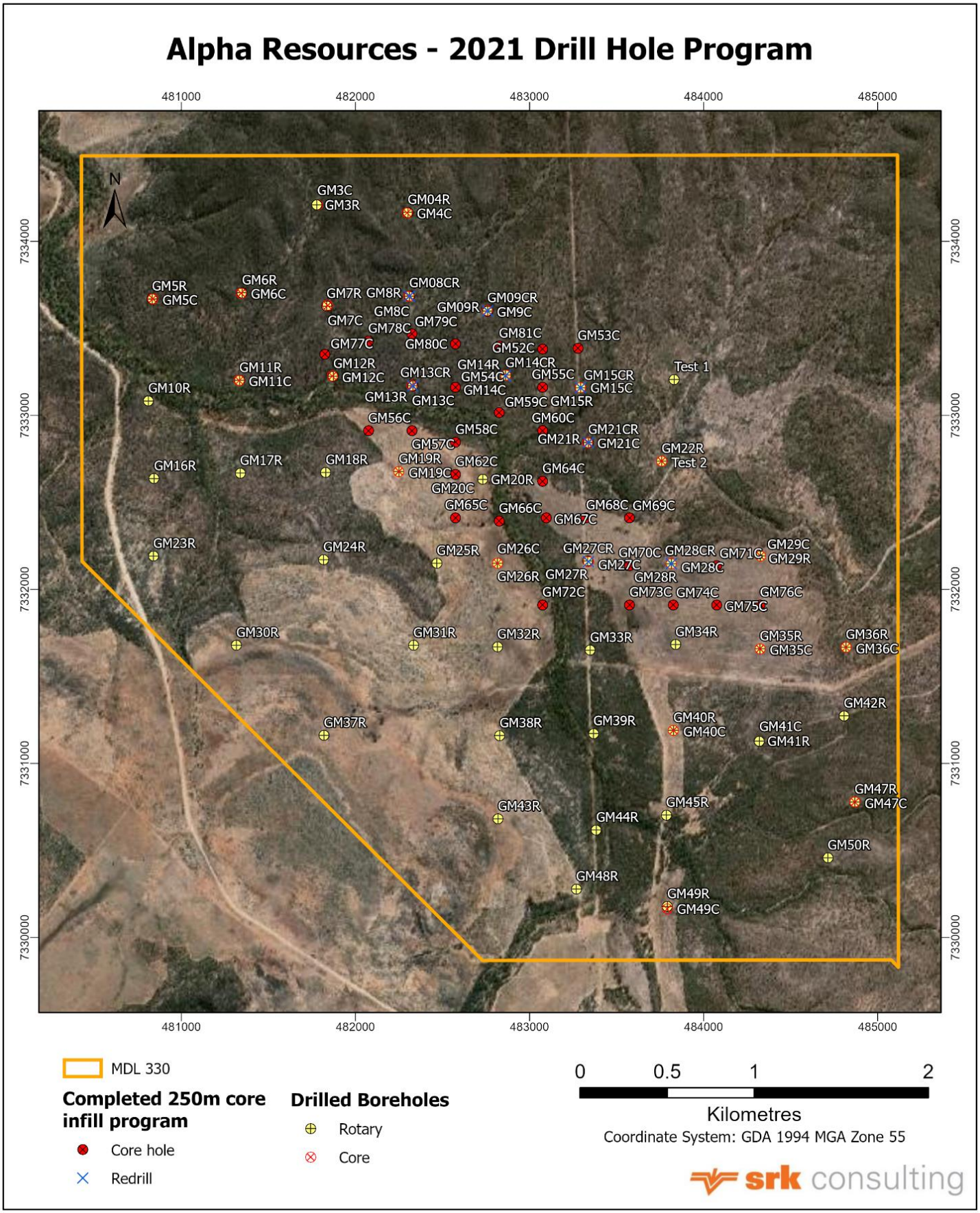

Figure 1: Alpha Torbanite Project 4C Core Drill Hole Program – Drill Hole Locations.

Georgina Basin IOCG Project, Northern Territory

Background

The Georgina Basin Project, held by Greenvale's wholly-owned subsidiary Knox Resources Pty Ltd, has provided a low-cost entry into one of Australia's most significant emerging regional exploration areas.

Following the establishment of government funding programs aimed at boosting mineral exploration in northern Australia, significant work was undertaken by the Northern Territory Geological Survey and Geoscience Australia to progress initiatives aimed at unlocking the resource potential of the Barkly and Gulf regions (which includes the Georgina Basin) by upgrading geophysical coverage and data accessibility to assist in understanding the potential for large-scale IOCG mineral systems within the Georgina Basin.

IOCG deposits are an important and highly valuable global source of copper, gold and uranium, as well as having the potential to host other minerals including silver, bismuth, molybdenum, cobalt and rare earth elements.

Knox was a successful applicant under an open tender for nine Exploration Licences over four distinct locations, covering a total area of 4,475km^2 situated between the historical IOCG provinces of Tennant Creek and Mount Isa.

On 23 September 2020, Knox was granted Exploration Licences over seven of the areas, with the remaining two being subject to negotiation with the indigenous freehold landowners.

Activities During the Quarter

During the Quarter, the Company and technical representatives from its geological consultants, SRK, attended the Annual Geoscience Exploration Seminar (AGES) in Alice Springs. As part of the seminar, the Company's attendees were afforded the opportunity to inspect core samples taken from the National Drill Initiative (NDI). Of particular interest to the Company were holes NDIBK05 and NDIBK10.

NDIBK05, which was located between GRV's tenements EL32295 and EL32284, intersected granite underlying Georgina Basin cover and appears quite haematitic at the contact zone, although no sulphides were observed. The NDI program was targeting a major crustal break, which is evident within the magnetotellurics, with shallow conductors also apparent.

Inspection of core from NDIBK10 revealed some interesting and important geological insights. NDIBK10 was drilled to the north of EL32295 within what appears to be a sub-basin and a structural fault bound to the north and south. Magnetically, the area around NDIBK10 is very quiet, suggesting thick sediment accumulation. Observation of the core samples from NDIBK10 confirmed this thick sediment accumulation, with over 700m intersected before reaching basement granite.

This basement granite was quite fine grained and sheared. Cover sequences were Georgina Basin limestones and marbles. Interestingly, trace sulphides were evident in NDIBK10.



Figure 2: Picture taken from the AGES NDI core viewing workshop.

Overall observations from the NDI core viewing were promising and provided the Company's technical team with invaluable context for planning a ground-based gravity survey and an extended airborne geophysics program.

In relation to these geophysics programs, the Company's wholly-owned subsidiary, Knox Resources Pty Ltd, was successful during the quarter in two applications for co-funding, submitted to the Northern Territory Government under the Northern Territory Geophysics and Drilling Collaborations Program (Round 14).

The Northern Territory Government will contribute A$26,054.60 (50% of the total cost) towards the ground-based gravity program and A$54,963.32 (50% of the total cost) towards the airborne geophysics program, both of which are scheduled for completion in the coming Quarter.

Activities Proposed for the September 2021 Quarter

The September 2021 Quarter will see the commencement of ground-based exploration activities at the Company's Georgina Basin IOCG Project.

As part of the upcoming work programs, GRV's north-western tenements (EL32282 & EL32296) will undergo a significant ground gravity survey aimed at considerably enhancing the quality of information around several drill-ready targets identified through previous airborne geophysics. The addition of detailed gravity data – including targeted higher-resolution line data – across the two north-western tenements will further assist in understanding important structural corridors, as well as the distribution and architecture of prospective geological horizons and potential fluid sources, while also providing greater confidence in drill targeting across the project area.

Current ground gravity coverage within EL32282 is relatively sparse, with most of the tenement only covered by gravity data acquired using a 4km x 4km station spacing (Tennant Creek 2001 NTGS survey). Improving the resolution of the ground gravity data will assist in interpreting stratigraphic units and structures within the project area, particularly in areas that are magnetically quiet and, in EL32282, where only sparse 4km spaced gravity data is currently available.

The upcoming program will improve the resolution of data within EL32282 and EL32296 by acquiring more gravity data using a station spacing of 1km x 1km, resulting in a total of 911 gravity stations in the project area. The proposed stations are shown in Figure 3, overlain on a filtered gravity anomaly image that was generated using the currently available gravity data.

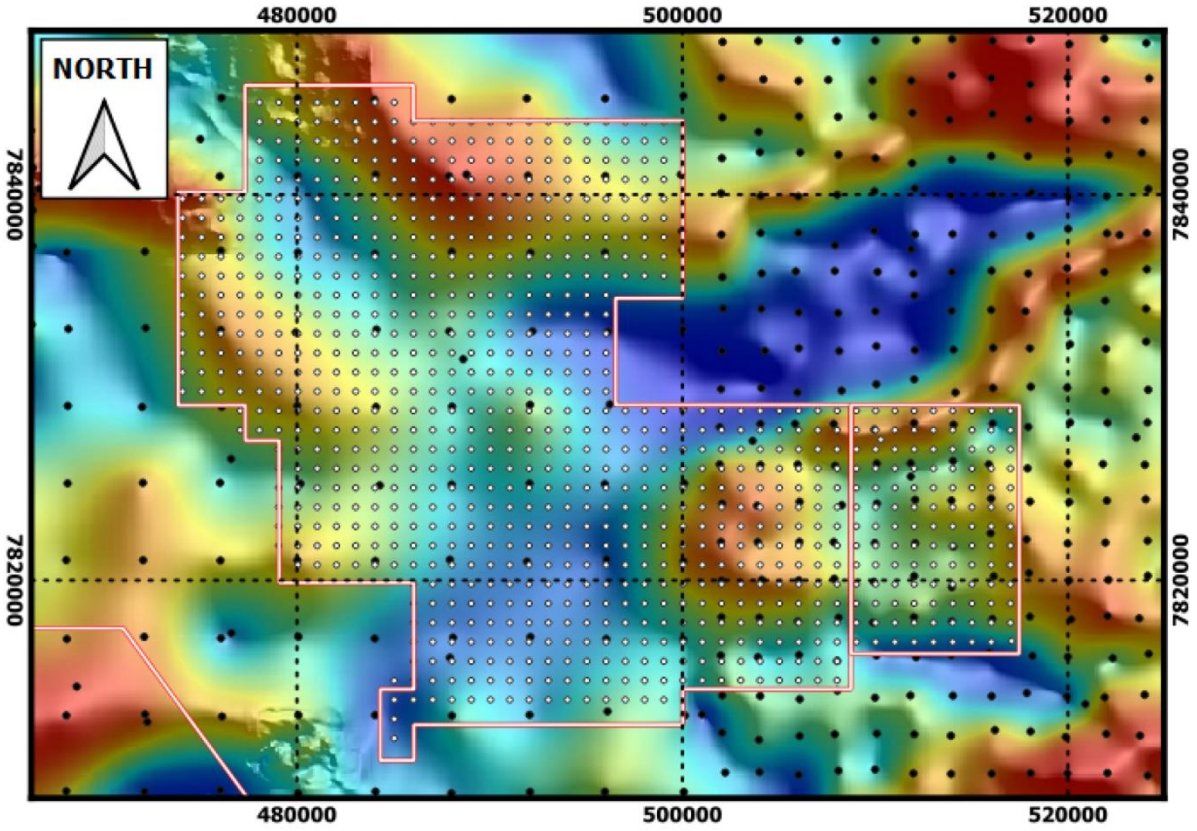

Figure 3: Proposed gravity stations shown as white dots overlain on a filtered gravity image generated using the available regional gravity data (black dots).

Ancillary to the extensive ground gravity program, the Company also plans to carry out high-resolution airborne magnetic, radiometric and DEM geophysical surveying over EL32283 and EL32284. The planned airborne geophysical survey will consist of a total of 12,618 survey line kilometres, covering an area of over 1,100 sq km.

The proposed airborne survey will be carried out by experienced airborne geophysical acquisition contractor MAGSPEC Airborne Surveys Pty Ltd (MAGSPEC). MAGSPEC successfully completed the airborne geophysical survey program for GRV late last year.

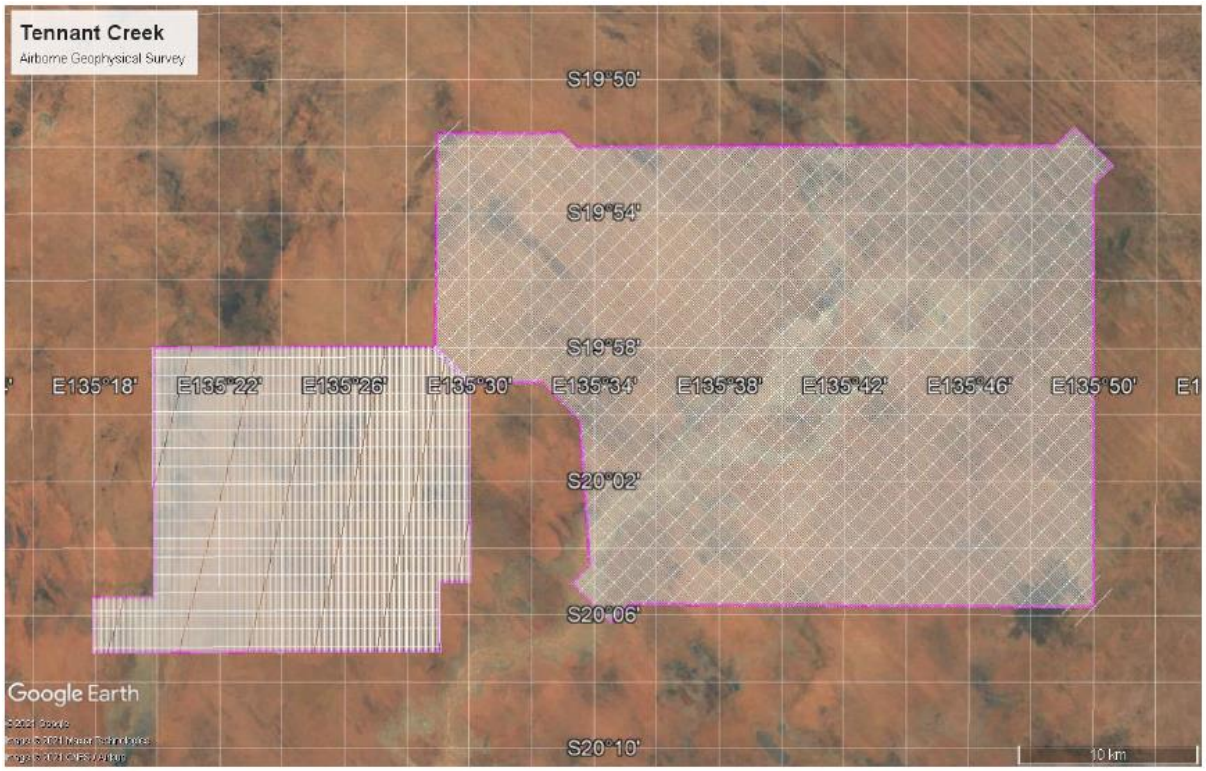

Figure 4: Flight lines and spacing shown on EL32283 and EL32284.

The data collected from the airborne geophysics and ground gravity program will be compiled with existing geological information and assist in refining the design of the Company's maiden drill program, scheduled to commence midway through the September Quarter.

The Company's management team is monitoring the current COVID-19 situation closely and, while there are contingencies in place to deal with border closures, further travel restrictions and/or lockdowns may impact delivery timelines.

Mineral Exploration Spending During the June Quarter

During the Quarter the Company expended some $766,000 on exploration activities. This included $82,000 with respect to further geophysical analysis and interpretation of data on the Georgina Project with emphasis on determining priority targets for proposed drilling program. The balance was expended at the Company's Alpha Torbanite Project with some $637,000 being expended on the drilling program including drilling, site preparation, down hole surveys, core logging and transport of core and samples to laboratories. A further $35,000 was expended on site rehabilitation at the completion of the drilling program and an additional $12,000 on sundry exploration and evaluation costs.

No expenditure was incurred during the Quarter on mining production and development activities.

Corporate Activities

Personnel

On 28 June 2021, the Company announced the appointment of Mrs. Dagmar Parsons, a highly-experienced global mining and oil & gas executive as a Non-Executive Director of the Company.

Mrs. Parsons is a mechanical engineer with over 25 years' experience in the mining and oil & gas sectors across a wide range of functions including strategic and business development, planning, project evaluation and optimisation, risk management and mergers and acquisitions. During her career she has held many roles within the sector including senior executive roles with Worley Parsons, AECOM and Downer, both within Australia and internationally.

Mrs. Parsons holds a master's degree in mechanical engineering from Rhineland Westfalia Technical University, Aachen, Germany, an MBA from Deakin University and is a graduate member of the Australian Institute of Company Directors.

Capital Raising

On 30 April 2021, the Company undertook a placement of 15,000,000 fully-paid ordinary shares at $0.20 per share to a strategic institutional investor to raise $3,000,000 before costs. This represented a 3.5% discount to the volume weighted average share price for the 10 trading days immediately prior to the placement. A further 900,000 Ordinary shares were issued at $0.20 per share in part satisfaction of brokerage fees, together with the issue of 4,000,000 unlisted options (GRVAO) with an exercise price of $0.35 per option with an expiry date of 29/4/2023. These securities were issued within the Company's existing Listing Rule 7.1 capacity

During the quarter, a further $100,000 (before costs) was raised through the exercise of all outstanding 2,000,000 Options (GRVAA) with an exercise price of $0.05 per option and expiry date of 1 December 2023.

Other Transactions

During the Quarter, the Company disposed of its holding in Canadian-listed company Gold Basin Resources (CSE: GXX). The gross proceeds received in June 2021 were $720,036, giving rise to a surplus of AU$120,000 over carrying value. These securities were originally issued to the Company in September 2020 in part satisfaction of the disposal of the Company's interests in the Gold Basin Gold project located in Arizona, USA.

Small Holding Buyback

On 2 June 2021, the Company announced that it was proceeding with an opt-out unmarketable parcel sale facility for holders of parcels of fully-paid ordinary shares in the Company valued at less than $500 (an Unmarketable Parcel.) As at the Record Date for this facility (1 July 2021) an unmarketable parcel was 1887 Ordinary Shares.

This facility closed on 17 July 2021, wherein those security holders who have not opted out will have their shares sold by the Company and proceeds distributed to them at no cost.

Corporate Governance

On 24 June 2021, the Greenvale board adopted a revised Corporate Governance Plan (including a revised Securities Trading Policy) that is available for review on the Company's website, (www.greenvalemining.com).

Funding

As detailed in the Appendix 5B lodged for the June 2021 the Company's cash holdings increased during the Quarter by $2.45 million to $9.85 million at 30 June 2021.

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	Current to 14 February 2026

Georgina Basin Project, Northern Territory

Tenement	%age Ownership	Owned by	Status
EL 32281	100%	Knox Resources Pty Ltd	Current to 22 September 2026
EL 32282	100%	Knox Resources Pty Ltd	Current to 22 September 2026
EL 32283	100%	Knox Resources Pty Ltd	Current to 22 September 2026
EL 32285	100%	Knox Resources Pty Ltd	Current to 22 September 2026
EL 32286	100%	Knox Resources Pty Ltd	Current to 22 September 2026
EL 32296	100%	Knox Resources Pty Ltd	Current to 22 September 2026

Georgina Basin, Northern Territory

Tenement	%age Ownership Of Applicant	Applicant	Status
EL 32280	100%	Knox Resources Pty Ltd	Under Application
EL 32284	100%	Knox Resources Pty Ltd	Under Application

Related Party Payments

As per Section 6 of the Appendix 5B lodged with the ASX today, payments to related parties and associates totaled $135,000. This included some $129,000 in respect of directors' fees and wages, as well as some $6,000 to Bardoc Gold Limited for office and support facilities. Bardoc Gold Limited is a related party as it shares some common directors with the Company.

Authorised for Release

This announcement and the accompanying Appendix 5 B have been approved by the Board for release.

Alan Boys
Company Secretary
Contact

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

Media Inquiries:
Nicholas Read – Read Corporate
Nicholas@readcorporate.com.au
Mobile: 0419 929 04