Greenvale MINING LIMITED

ASX ANNOUNCEMENT **10 March 2022**

RE-RELEASE OF ANNOUNCEMENT OF 09 MARCH 2022

In response to a request made by the ASX, the Company advises that this release is a revised version of the announcement dated 9 March 2022 titled "Maiden JORC Resource for Alpha Project".

The revised announcement now includes a drill hole summary table which can be found as an appendix to this announcement (pp. 22-25).

In addition, the release contains supplementary commentary regarding the JORC Tables, which are unchanged from the prior release.

Authorised for Release
This announcement has been approved by the Managing Director for release.

Alan Boys
Company Secretary

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ASX ANNOUNCEMENT

10 March 2022

OUTSTANDING MAIDEN JORC MINERAL RESOURCE HIGHLIGHTS STRATEGIC POTENTIAL OF THE ALPHA TORBANITE PROJECT, QLD

High-quality 18.6Mt JORC Mineral Resource together with enhanced renewable energy strategy confirms substantial value of Greenvale's Alpha Project

Highlights:

- **Maiden JORC Mineral Resource Estimate (MRE) completed for the Alpha Torbanite Project by highly regarded consultants, SRK Consulting.**
- **Inferred Resource of 18.6Mt of Torbanite and Cannel Coal at a yield of 179 litres per tonne at zero moisture (LTOM) for 21.29 million barrels of synthetic oil equivalent.**
- **Mineral Resource includes 4.6Mt of rare Torbanite.**
- **Potential to expand the Resource both down-dip, as well as on the adjacent EPM.**
- **Mineral Resource is in line with expectations for the deposit, confirming pre-JORC and non-JORC historical records.**
- **Large, high-quality MRE highlights the strategic importance of the Alpha Project as a potential domestic source of bitumen, synthetic oil critical to major infrastructure projects.**
- **Application made for four geothermal licences (and corresponding mineral rights) as part of an enhanced renewable energy strategy now being pursued for the Alpha Project.**
- **The Company is examining the opportunity for an exploitable geothermal power source to provide sufficient carbon credits to offset production at Alpha, while also opening exciting new potential income streams.**

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Summary

Greenvale Mining Limited (ASX: **GRV**, "**Greenvale**" or "**the Company**") is pleased to advise that it has taken another key step towards the commercial development of its flagship **Alpha Torbanite Project** in Queensland, with the completion of a maiden JORC Mineral Resource Estimate (MRE) for the deposit.

The maiden MRE, which has been completed by highly regarded independent consultants SRK Consulting, comprises a total Mineral Resource of **18.6Mt** for the Alpha Deposit, including approximately **4.6Mt** of the rare torbanite, equivalent to **21.29 million barrels of synthetic oil equivalent**.

The maiden MRE reinforces the rare and strategic nature of the Alpha Deposit, which is the only known Torbanite Deposit of its kind in Australia.

The significant scale, high-quality and high-yielding nature of the deposit reinforces its strategic importance as a long-life domestic supplier of high-value products including bitumen, critical to major infrastructure projects.

The maiden MRE will now underpin Greenvale's ongoing commercialisation strategy, including the ongoing Pre- Feasibility Study on the Project, which is being expanded to include an enhanced green energy strategy based on geothermal power (see below).

Geology of the Alpha Deposit

The Project contains a cannel coal and torbanite oil shale deposit situated in the axis of a southwest-plunging syncline structure that occurs on the eastern flank of the Permian Galilee Basin. The deposit is part of the Permian Colinlea Sandstone, which contains 150 m of cross-bedded sandstone with minor conglomerate, siltstone and mudstone. The sequence has a gentle dip of 2 to 5 degrees to the west and south. The oil shale resource comprises an upper cannel coal seam (Upper Seam) and a lower seam that contains a torbanite lens enclosed in cannel coal (Lower Seam). The Lower Seam is interpreted to be equivalent to the 'E' Seam which is recognised more broadly across the Galilee Basin.

The Upper Seam is composed entirely of cannel coal ranging in thickness from 0.3 m to 1.4 m. The Lower Seam interval comprises a cannel coal seam ranging from 1.3 m to 2.8 m thick, with a torbanite lens in excess of 1.6 m thick at its maximum. The torbanite is lenticular in shape and has a variable thickness. The interval between the two seams is dominantly quartzose to lithic sandstone with minor conglomerate, siltstone and claystone. The thickness of the inter-seam interval ranges between 13 m and 18 m (Figure 1).

The Lower Seam is the main oil-yielding unit of the deposit. It consists of two main types of oil shale namely cannel coal and torbanite, which is olive-grey to olive-black and is finely laminated. The Lower Seam can generally be split into three plies, as described below:

- **L1 –** comprising a relatively clean cannel coal interval
- **LT –** comprising the main torbanite interval, including coal bands
- **L2 –** comprising a relatively clean cannel coal interval.

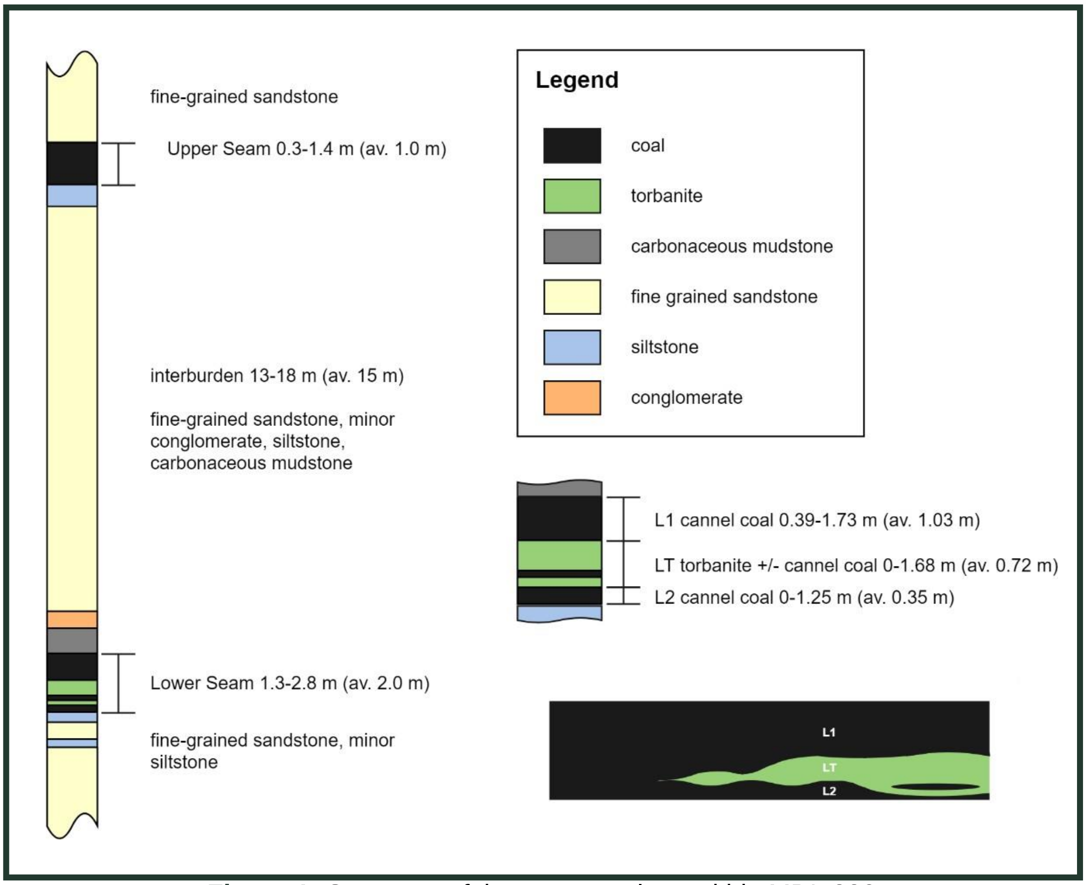

Figure 1: Summary of the seam geology within MDL 330

Drilling techniques

The Project has been subject to extensive exploration and laboratory testing since its initial discovery in 1939, over 80 years ago. Due to exploration, sampling and analysis practices at the time and loss of verifiable records, much of the historical exploration information is considered unsuitable for a modern-day assessment of the Resource potential of the deposit.

An open hole (non-core) drilling program (Stage 1 program) was competed by Greenvale in MDL 330 between 28 February and 12 March 2021. A total of 49 open holes were completed for a total of 3,027 m. All drill holes were drilled vertically from the topographic surface to depths ranging from 38 to 116 m, averaging approximately 62 m.

Drill holes were geophysically logged (except re-drills) by Weatherford International Plc, based in Emerald, Queensland. The slimline tools used included downhole gamma, density and verticality surveys. An optical televiewer tool was run in selected drill holes. The wireline logs provided accurate measurement of the Upper and Lower seam intervals (depth and thickness) but were unable to provide an accurate measurement of the torbanite lens.

A partly cored drilling program (Stage 2 program) was competed in MDL 330 between 31 March and 31 May 2021. A total of 62 partly cored holes (4C – 100 mm diameter) were drilled for a total of 2,222 m. The core drill holes were sited on an approximately 250 m × 250 m infill grid pattern (including 8 re-drills and one test hole) across the priority area as indicated by the Stage 1 program.

All drill holes were drilled vertically from surface using a hammer bit until the coring point was reached. Rods were then pulled and a 4C (100 mm) core barrel was run into the drill hole. A total of ~284 m of 4C core was acquired during the program. The partly cored program drill hole depths ranged from 11 m to 75 m, averaging approximately 36 m in depth. Wireline geophysical logs were also acquired on the core holes and all drill holes were professionally surveyed by Precise Positioning Solutions Pty Ltd.

Geological interpretation of drilling results

The density and distribution of the 2021 drill holes support a reasonable level of confidence in the depth and thickness of the Upper and Lower seams across the MDL area. Open hole drilling alone is insufficient to determine the geometry of the deposit as the torbanite lens within the Lower Seam cannot be accurately determined in chip samples or readily distinguished in the downhole wireline logs (due the similar density of the cannel coal and torbanite lens). Accurate mapping of the oil shale sub-units, including the torbanite lens, are provided by drill core measurements.

The Upper Seam was intersected in a total of 20 drill holes (including three core holes) at depths from approximately 7 m to 47 m, with thickness ranging from 0.31 m to 1.41 m (and an average thickness of 1.01 m). The distribution of the seam is controlled by subcrop in the northeast of the drilling area. The Upper Seam interval consists mainly of cannel coal, which is generally consistent and clean in the density log, with little to no stony bands where well developed.

The Lower Seam thickness ranged from 1.28 m to 2.80 m, averaging 2.09 m. Spatial analysis of the Lower Seam thickness suggests a general decrease in thickness down-dip to the west and south of the deposit area.

The L1 ply is generally consistent across the Project area ranging from absent to, where present, a minimum of 0.39 m to 1.73 m thick with an average thickness of 1.03 m (Table 1). The L1 ply generally does not appear to have any consistent stony bands or partings. Local instances of claystone and bands exist but are not laterally continuous into adjacent holes and usually represent less than 5% of the L1 ply where present.

The LT ply is variable across the Project area ranging from absent to a minimum of 0.07 m to 1.68 m thick, with an average thickness of 0.71 m. The upper and lower boundaries of the LT unit are variable with examples of sharp and planar boundaries and highly gradational and interbedded/ interlaminated torbanite and cannel coal intervals evident in drill core. The LT ply appears to be split into three or more lithotypes with logged torbanite often comprising an upper and lower section with a more cannel coaly middle section. The LT unit generally does not appear to have any consistent stony bands or partings. Local instances of claystone bands do exist, but these do not appear to be laterally continuous into adjacent holes and usually represent less than 5% of the LT where present.

The L2 ply is fairly consistent across the Project area ranging from absent or, where present, to a minimum of 0.05 m to 1.23 m thick, with an average thickness of 0.38 m. The L2 ply generally does not appear to have any consistent stony bands or partings. Local instances of claystone and tuffaceous bands do exist; these do not appear to be laterally continuous between nearby drill holes and usually represent less than 5% of the L2 ply where present. There are three instances where the L2 ply appears to have pinched out, in three drill holes. These holes are not spatially related and therefore, while locally anomalous, they are not specific to one or more areas of the deposit.

Table 1: Lower Seam ply thickness statistics

Statistic	L1 ply	LT ply	L2 ply
Minimum (m)	0.39	0.07	0.05
Maximum (m)	1.73	1.68	1.23
Average (m)	1.03	0.71	0.38
Count	58	58	54
Sum	59.65	42.46	20.63
Lower Seam (%)	48	34	18

Sampling and sub-sampling techniques

Greenvale personnel supervised the field acquisition program under the technical guidance of SRK. Appropriate core handling, transport and storage procedures were employed to minimise oxidation coal and torbanite samples and ensure a chain of custody from the field to the laboratory.

Chip samples were recovered from each drill hole at 1 m intervals for lithological logging, but no laboratory analysis of the samples was undertaken.

The core was briefly logged on surface, before being cut into 50 cm lengths with the core preserved in mylar bags and refrigerated on site to preserve the drill core. Drill core samples dispatched from the field were maintained in cold storage in Stratum Reservoir laboratories in Brendale, Brisbane.

Detailed core logging of the core and marking of samples intervals was completed at the Stratum Laboratories Brendale, by experience SRK personnel. The core was then slabbed with one third crushed and prepared for laboratory analysis as per Australian Standards and two thirds being preserved for future analysis.

Drill core samples were assayed for reservoir characterisation including coal quality, organic petrology and source rock analyses. Key analysis on core samples included:

- bulk density
- proximate analysis
- ultimate analysis
- forms of sulphur
- calorific value
- TOC
- programmed pyrolysis by SRA
- XRF elemental analysis

A total of 14 cannel coal and torbanite samples were selected for Modified Fischer Assay (MFA) and dispatched to ALS Global laboratory in Gladstone, Queensland for analysis. MFA is generally accepted as the main pillar of oil shale exploration programs and is the industry standard to compare oil shale deposits. MFA is used to determine oil yield, gas plus loss yield, pyrolysis water and spent shale yield using mass balance on dry basis samples.

MFA involves heating an amount of crushed sample (~typically 100 g) to 500°C for 40 minutes. Then the distilled vapours of oil and water plus gas, pass through a condenser to liquefy the vapours into a graduated centrifuge tube. Oil yield results are reported as litres per tonne on a zero-moisture basis (LT0M).

Fischer Assay provides a guide for the relative richness of oil shale intervals, they neither guide the design of production process nor predict product quality and quantity that result from those processes.

Alpha JORC Mineral Resource

The maiden JORC Mineral Resource Estimate for the Alpha Deposit is set out in Tables 2, 3 and Table 4 below, with the Inferred Resource Area shown in Figure 2. A total Mineral Resource of 18.6 Mt is estimated for the Alpha deposit. The Mineral Resource is classified as Inferred.

Table 2: MDL 330 Inferred Mineral Resource summary

Description	Volume 000s cu m	Density g/cc in situ	Measured Mt	Indicated Mt	Inferred Mt	Total Mt
Cannel coal	9,873	1.21	-	-	14	14
Torbanite	3,878	1.18	-	-	4.6	4.6
Cannel coal & Torbanite	**13,751**	**1.20**	**-**	**-**	**18.6**	**18.6**

Table 3: MDL 330 Inferred Mineral Resource estimate by seam and ply unit

Seam /Ply	Area (m^2)	Volume (cu m)	Waste Thickness (m)	Waste Volume (bc m)	Tonnes (Air-Dried)	Tonnes (Dry)	Tonnes (In-Situ)
U	2,587,232	2,733,615	13.27	77,182,496	3,280,338	3,362,346	3,253,002
L1	6,322,012	6,466,130	13.18	111,466,664	7,912,602	8,082,663	7,824,017
LT	6,242,029	3,878,046	0.24	1,174,048	4,595,434	4,614,875	4,576,094
L2	6,081,965	2,344,780	0.10	522,118	2,862,935	2,930,975	2,837,184
				Total	**18,651,309**	**18,990,859**	**18,490,297**

Source: SRK analysis

Table 4: MDL 330 preliminary volumetrics for Mineral Resource estimate

Seam /Ply	Inferred Dry Tonnes (Mt)	% of Total	Synthetic Oil (MMboe)	% of Total	Oil Yield LTOM	No. of Drill Holes
U	3.36	17.8%	2.22	10.4%	105	2
L1	8.08	42.8%	5.29	24.8%	104	4
LT	4.51	23.9%	11.22	52.6%	395	4
L2	2.93	15.5%	2.58	12.1%	140	4
Total	**18.68**	**100%**	**21.29**	**100%**	**179**	**6**

Source: SRK analysis

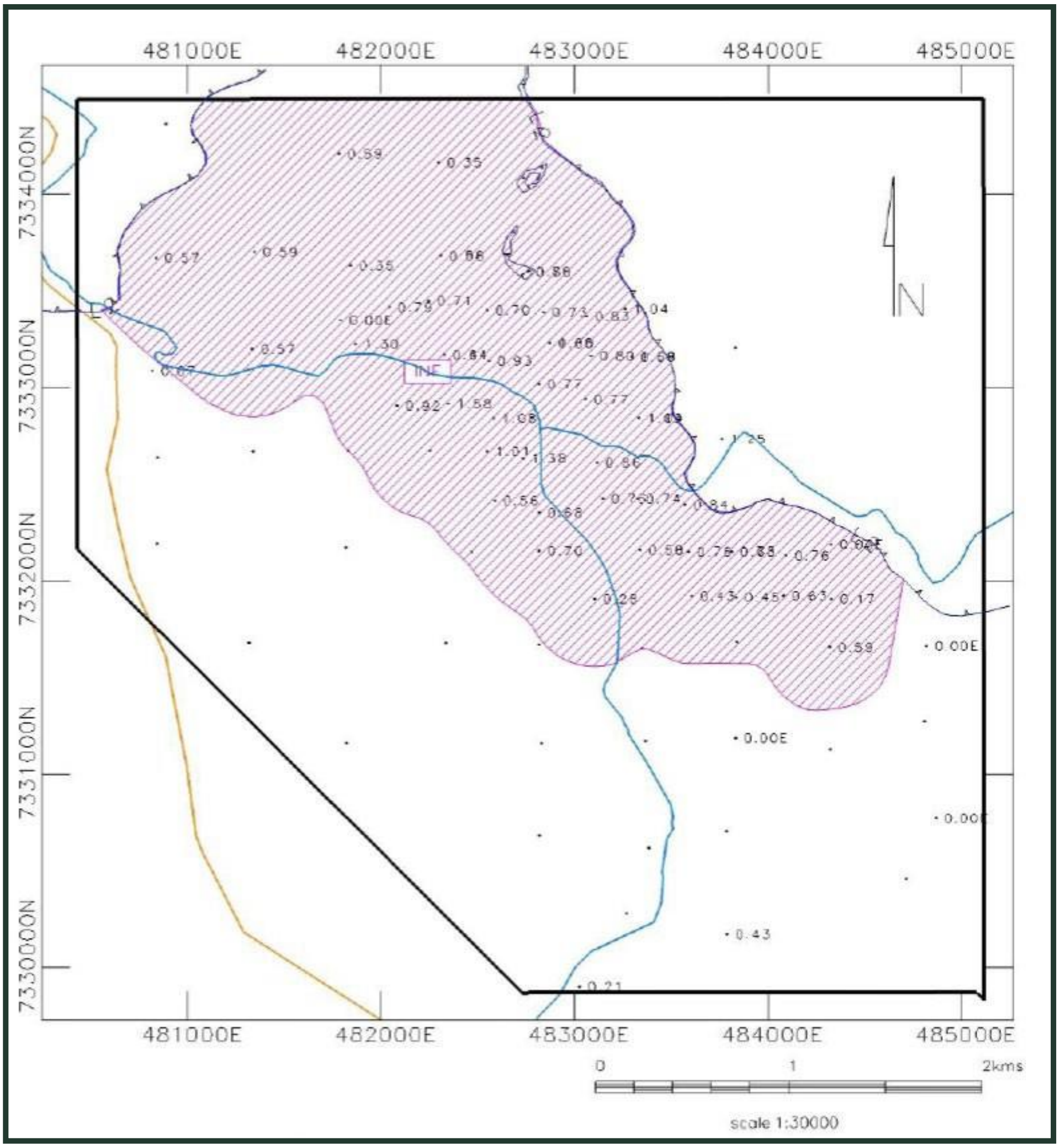

Figure 2: Alpha Torbanite Project (MDL 330) Inferred Resource Area with cored Torbanite thickness

Estimation Methodology

The 2021 drill hole data were compiled by SRK and used to prepare an updated geological model for the deposit. The Project drill hole database contains 177 drill holes, of which 91 were deemed suitable for the development of the geological model. Excluded drill holes include historical open and cored holes without any record of geophysical wireline logs to support the downhole measurements, twinned core holes and pilot open holes with an adjacent core hole.

The final modelling database for the Project comprises:

- 60 partly cored drill holes
- 31 open drill holes with downhole geophysical logs

The geological model was developed using Geovia Minex software and is based predominantly on the newly acquired drilling data, with only a small number of historical drill holes included to support the continuity of the model (mainly outside the MDL boundary). The updated model is supported by partly cored drill holes that have allowed accurate downhole measurement of cannel coal and torbanite intervals (not previously possible using open holes). The updated model has enabled a more robust interpretation of the deposit structure, resource limits and in situ strip ratios, and provided a better understanding of the thickness and distribution of the higher value Torbanite lens in the Lower Seam interval.

The structure floor grid for the Lower Seam basal cannel coal ply (L2) was initially developed, incorporating drill hole and geometry (contour) data. The Strata Build function in Minex was used to construct the seam structure model. The process involved first preparing seam structure thickness and interburden grids for all of the model seams using the Multi-Seam Multi-Variable Gridding function. Following this, the L2 ply structure floor was used as a control grid to 'stack' the other plies above. Cannel coal qualities and source rock parameters were incorporated in the geological model for each of the modelled plies/units.

The Mineral Resources were estimated for each of the modelled plies for which there are reasonable prospects for economic extraction. The Resource was estimated using the Detail Report Generator in the Minex system. This tool has been used extensively and proven to be accurate when compared to manual estimations of Resources.

The cannel coal and torbanite Resource tonnage calculations were based on the bulk density model for the cannel coal seam on an in-situ basis. The modelled laboratory air dried bulk density data for the cannel coal and torbanite units was used to calculate air-dried tonnages and was subsequently adjusted to an in-situ moisture basis using the Preston and Sanders (1993) calculation.

As in-situ moisture cannot be measured directly, an assumed in-situ moisture of 14% was used for the Alpha cannel coal, based on an air-dried moisture regression equation developed by Fletcher and Sanders (2003). The resultant in-situ moisture for the sampled cannel coal seams typically equates to the air-dried moisture +4.6%. Due to its finer pore structure, lack of cleat and resultant lower air-dried moisture content (av. 4.9% ad) compared with the cannel coal plies, a lower in-situ moisture of 6% was assumed for the torbanite lens.

Classification criteria

Mineral Resources have been estimated for Upper and Lower seams (U, L1, LT, L2). The torbanite lens (LT) development was used as a first order control to define the Alpha Mineral Resource area as the LT development is the fundamental value driver. Points of Observation for determining cannel coal and torbanite thickness continuity include cored bore seam intersections, with a geophysical wireline log.

The Mineral Resource classification of the torbanite and cannel coal is based on a qualitative and holistic assessment of the deposit by the Competent Person. The assessment is based on the drill spacing, the stratigraphic correlation, the results of analysis of the samples and on the geological and quality variability of the deposit, and in particularly on the thickness and quality variability of the torbanite lens. The Competent Person is confident in the reliability of geological data and in the understanding of the geology including the continuity of the cannel coal seams and the torbanite and cannel coal plies. The estimates appropriately reflect the Competent Persons view of the deposit.

The up-dip (northern and eastern) limits were defined by the modelled base of weathering. The down-dip (western and southern) extent was limited to within 350m of a core hole with LT unit present (minimum 0.1m thickness measured in core).

Mineral Resources are limited to the area within MDL 330 and do not, currently, allow for any extension of the deposit into the Company's surrounding exploration permit, EPM27718.

Cut-off grades

No cannel coal quality limits/grade cut-offs were applied to the estimate.

Assumptions regarding the oil yields form the torbanite and cannel coal are currently based on limited MFA results, which give an indication of maximum potential oil yield. The theoretical oil yields from the MFA support the assumptions regarding reasonable prospects for eventual economic extraction of the torbanite and cannel coal. Further investigations are required regarding the processing, potential products, and practical yields in order to support higher Mineral Resource classifications.

Mining and metallurgical factors

Detailed mining studies have not yet been completed. It is expected that torbanite and cannel coal will be extracted using conventional shallow open pit mining methods.

Next Steps

Higher Resource classification may be achieved with further sampling and testing of the cannel coaland torbanite units to provide additional confidence regarding potential products and oil yield. The resolution of the existing topographic (and by extension, the base of weathering) model is insufficient to support higher Resource classifications.

The JORC MRE, together with the Company's previously completed and announced Modified Fischer Assay results, confirm the exciting commercial potential of the Alpha Project and will underpin the advancement of the Pre-Feasibility Study.

The new JORC compliant MRE provides Greenvale's Board, Management and Shareholders with a clear, unambiguous, and reliable estimate of the Alpha Deposit's scale and nature, previously not found within the available historical data.

The tabling of the maiden JORC compliant MRE is a significant milestone for the Company, providing the GRV technical team with greater clarity and visibility regarding the optimal commercial development strategy for the Alpha Torbanite Project.

Commercial Update

As part of the Company's previously released commercial development and green energy strategy for Alpha, Greenvale has investigated numerous potential renewable energy sources as part of its feasibility and commercial analysis processes.

Management has identified the importance of establishing an economical and reliable green power source. Securing a reliable source of green energy is of mounting strategic importance for the Alpha Project, not only from an operational point of view but also from an ESG perspective, providing a clear pathway for the offsetting and abatement of Scope 1, 2 and 3 emissions relating to the project.

Therefore, the Company is now evaluating alternative renewable energy sources beyond the previously announced preference for a solar/gas hybrid power solution. As such, Alpha Resource Pty Ltd, a subsidiary of Greenvale Mining, has made applications to the Queensland Department of Natural Resources Mines and Energy for four geothermal licences and applications for the corresponding mineral rights over the requested tenements.

The four geothermal application areas – Longreach, Moura, Quilpie and Winton – have been selected due to their interpreted temperature at depth (Figure 3), proximity to existing power infrastructure and roads, and location in relation to the Alpha Torbanite Project (Figure 4).

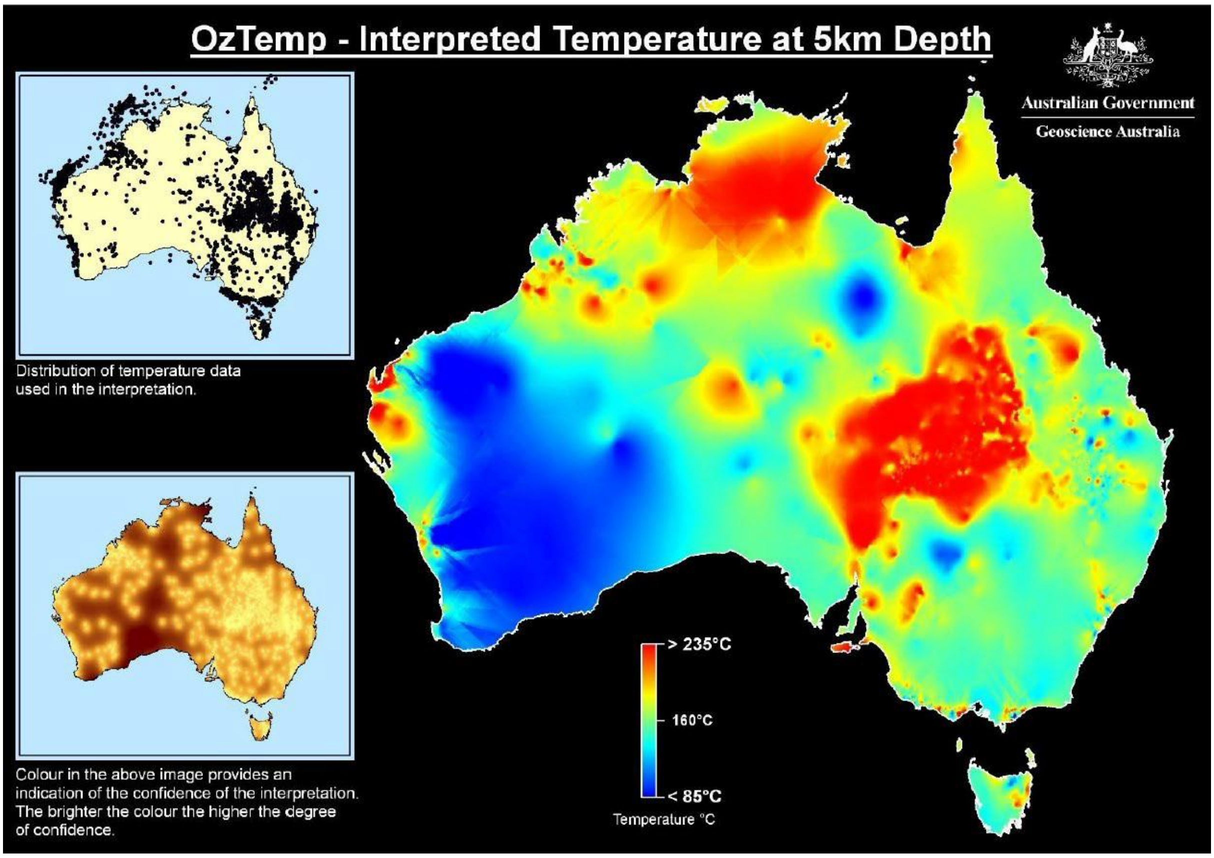

Figure 3: 5km Depth Temperature Map – constructed from national borehole temp. data

The Company believes that an exploitable geothermal power source will provide adequate carbon credits to offset production at Alpha. Furthermore, Greenvale's technical team forecasts that additional income streams relating to the sale of surplus Renewable Energy Certificates (RECs) and Australian Carbon Credit Units (ACCUs) may be of significant commercial bearing, further strengthening the viability of the project.

Early-stage assessment of the four application areas have identified opportunities to potentially exploit shallower geothermal systems utilising an Organic Rankine Cycle (ORC) closed binary power system. ORC technology allows for the exploitation of lower-grade heat sources, between 80-120°C, typically found at shallower depths. This ability to generate geothermal power at lower temperatures can significantly reduce initial capital costs associated with exploiting source systems. The ORC binary system technology has been successfully applied around the world, with over 150 binary cycle geothermal plants in production globally. In the US, binary cycle systems are currently contributing over 4,100MWh of energy, with capacity growing by up to 4% per year.

Greenvale's technical team will also look to leverage the experience and knowledge of Managing Director Neil Biddle, gained during his time at Pilbara Minerals, in assessing the brine associated with any potential geothermal sources for a suite of minerals, including lithium.

Greenvale's geothermal and corresponding mineral rights applications are uncontested, and the Company anticipates that these applications will proceed to grant imminently.

Figure 4: Location of Mineral & Geothermal Applications (Alpha Project indicated in green)

Table 5: Exploration Permits for Minerals

Map	Permit	Name	Purpose	Stage	Lodge Date	Area (SUBBL)	Area (km^2)
1	EPM28264	Longreach	Minerals	Application	25/01/2022	96	302
2	EPM28267	Moura	Minerals	Application	25/01/2022	78	244.22
3	EPM28266	Quilpie	Minerals	Application	25/01/2022	90	275.55
4	EPM28265	Winton	Minerals	Application	25/01/2022	87	277.55
						Total	**1,099.32**

Table 6: Exploration Permits for Geothermal

Map	Permit	Name	Purpose	Stage	Lodge Date	Area (SUBBL)	Area (km^2)
1	EPG2020	Longreach	Geothermal	Application	23/12/2021	1,116	3,514.6
2	EPG2019	Moura	Geothermal	Application	23/12/2021	462	1,447.3
3	EPG2022	Quilpie	Geothermal	Application	23/12/2021	1,250	3,833.6
4	EPG2021	Winton	Geothermal	Application	23/12/2021	986	3,141.7
						Total	**11,937.20**

Management Comment:

Greenvale Mining's Mark Turner, Executive Director & General Manager – Alpha Project commented:

"The completion of our maiden JORC Mineral Resource for our flagship Alpha Project is a huge milestone for Greenvale, marking a major step towards commercial development. Our technical consultants SRK Consulting, must be commended on the delivery of this substantial piece of work. Under challenging circumstances and hampered by an unstable working environment due to COVID-19, the SRK team have produced a maiden MRE that highlights the significant value of this asset for our shareholders.

"We are delighted with the outcome, which confirms that we have a significant, rare deposit capable of yielding high-value strategic products including becoming Australia's only domestic source of bitumen, critical to major infrastructure projects.

"The maiden JORC MRE provides us with a clear line of sight to move forward withour feasibility activities, which are now being expanded to encompass an exciting new geothermal energy strategy. This strategy is evolving as part of our broader green energy strategy at Alpha, which is now considering the potential to source exploitable geothermal power sources in the vicinity of the Alpha Deposit. We will be updating themarket further on these exciting developments in the near future."

Authorised for Release

This announcement has been approved by the Managing Director of Greenvale Mining Limited for release.

Alan Boys
Company Secretary

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Competent Person's Statement:

The information in this report that relates to Exploration Results is based on information compiled by Mr. Carl D'Silva, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (Member number 333432). Mr. D'Silva is a full-time employee of SRK Consulting (Australasia) Pty Ltd, a group engaged by the Company in a consulting capacity.

Mr D'Silva has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Mr D'Silva consents to the inclusion in the report of the matters based on his information in the form and context in which it appears

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Table 1 – JORC Code 2012

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	▪ Nature and quality of sampling (e.g., cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling. ▪ Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. ▪ Aspects of the determination of mineralisation that are Material to the Public Report. ▪ In cases where 'industry standard' work has been done; this would be relatively simple (e.g., 'reverse circulation drilling was used to obtain 1 m sample from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g., submarine nodules) may warrant disclosure of detailed information.	**Stage 1 – Open hole drilling** ▪ 49 open holes were drilled on a nominal 500 x 500 m grid, for the purpose of stratigraphic modelling. (Total drilling - 3,027 m) ▪ Chip samples representative of each metre drilled were laid out by the driller in and logged and collected in chip trays. **Stage 2 – Partly cored hole drilling** ▪ 62 partly cored holes drilled (4C – 100 mm diameter), on a nominal 250 x250 m grid, for the purpose of obtaining torbanite and cannel coal quality samples from the Upperand Lower seams (total drilling - 2,222 m). ▪ The core was briefly logged on surface, before being cut into 50 cm lengths with the core preserved in mylar bags and refrigerated on site. All samples were transported to Stratum Reservoir Laboratories in Brisbane on completion of the coring program for the follow-up assay program.
Drilling techniques	▪ Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit, or other type, whether core is oriented and if so, by what method, etc.).	**Stage 1 – Open hole drilling** ▪ Drill holes were oriented and levelled to produce vertical (i.e., 90°) holes. ▪ All chip holes were hammer drilled with air. ▪ 6-inch blade for unconsolidated and weathered section near the surface hole. ▪ Set 100 mm surface PVC casing. ▪ Drill 4.5-inch hammer bit to final depth. **Stage 2 – Partly cored hole drilling** ▪ Partly cored holes were drilled vertically from surface using a hammer bit until the coring point was reached. ▪ Rods were then pulled and a 4C (100 mm) core barrel was run into the drill hole. ▪ A total of ~284 m of 4C core was acquired during the program. The partly cored program drill hole depths ranged from 11 m to 75 m, averaging approximately 36 m in depth.

Criteria	JORC Code explanation	Commentary
Drill sample recovery	▪ Method of recording and assessing core and chip sample recoveries and results assessed. ▪ Measures taken to maximise sample recovery and ensure representative nature of the samples. ▪ Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	▪ Chip samples were collected at approximately 1 m intervals. ▪ All chip samples were geologically logged and photographed. ▪ All drill samples were collected and stored in sample trays at a Greenvale Mining storage facility. ▪ Core recovery was good, and samples are representative of the seams. ▪ Poor mechanical state was noted in some holes due to ground conditions. The upper ply of Lower Seam (L1) had the broken and fragment core in some drill hole. However, core recovery from these holes was still good. ▪ Greenvale personnel supervised the field acquisition program under the technical guidance of SRK. ▪ All core was measured, geologically logged and photographed. ▪ The core was then cut into 50 cm lengths with the core preserved in mylar bags and refrigerated on site and preserved as per the SRK Field Manual to avoid oxidation of torbanite and cannel cannel coal and to ensure a chain of custody from thefield to the laboratory. ▪ Due to the good core recovery, of the 100 mm core, no relationship exists between sample recovery and torbanite and cannel cannel coal quality results. It is highly unlikely that any sample bias has occurred.
Logging	▪ Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. ▪ Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. ▪ The total length and percentage of the relevant intersections logged.	▪ Chip samples were collected every metre, geologically logged and photographed. ▪ All core was collected, measured, geologically logged and photographed. ▪ All drill holes have been geophysically logged with the minimum suite of tools runs including Density, Calliper, Verticality/Deviation and Gamma. ▪ Optical televiewer was run in selected boreholes. ▪ The calibration of the geophysical tools was conducted by the geophysical logging company engaged in the project at the time.

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	▪ If core, whether cut or sawn and whether quarter, half or all core taken. ▪ If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry. ▪ For all sample types, the nature, quality and appropriateness of the sample preparation technique. ▪ Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. ▪ Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. ▪ Whether sample sizes are appropriate to the grain size of the material being sampled.	▪ Chip samples were recovered from each drill hole at 1 m intervals for lithological logging, but no laboratory analysis of the samples was undertaken. ▪ Detailed core logging of the core and marking of samples intervals occurred at the Stratum Laboratories Brendale, by experience SRK personnel. ▪ The core was then slabbed with two thirds being persevered for future analysis. ▪ The one third that was crushed and prepared for laboratory analysis as per Australian Standards.
Quality of assay data and laboratory tests	▪ The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. ▪ For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. ▪ Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	▪ Laboratory analysis of was undertaken on the core samples from the partly cored holes. ▪ The Stratum Laboratories, Brendale complies with Australian Standards for all torbanite and cannel coal quality tests and is certified by the National Association of Testing Authorities, Australia (NATA).
Verification of sampling and assaying	▪ The verification of significant intersections by either independent or alternative company personnel. ▪ The use of twinned holes. ▪ Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. ▪ Discuss any adjustment to assay data.	▪ Torbanite and cannel cannel coal quality results were verified by experienced SRKpersonnel before inclusion into the geological model and resource estimate.
Location of data points	▪ Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. ▪ Specification of the grid system used. ▪ Quality and adequacy of topographic control.	▪ All holes were professionally surveyed by Precise Positioning Solutions Pty Ltd. ▪ The origin of the survey was based on the calculated site base station coordinates. ▪ All surveyed coordinates are recorded in Map Grid of Australia 1994 (MGA94) Zone 56 using the GDA datum. ▪ A topographic surface model was constructed using satellite data (SRTM) and drill hole collar data. ▪ A draft topographic surface was developed from SRTM data contoured at 2 m intervals and triangulated to develop a draft model topographic surface (TOPO). ▪ Analysis of surveyed drill hole collar RLs versus the TOPO grid indicated that the TOPO grid was on average 5.51 m higher than the drill hole collar value ▪ A revised topography grid was created (TOPS) by subtracting 5.51 m from the TOPO grid.

Criteria	JORC Code explanation	Commentary
		▪ The TOPS grid has been used as the model topographic surface from which the base of weathering grid was subsequently developed. ▪ Confidence in the topographic model is considered low – acquisition of high-resolution topographic survey data is recommended to support detailed mine planning investigations.
Data spacing and distribution	▪ Data spacing for reporting of Exploration Results. ▪ Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. ▪ Whether sample compositing has been applied.	▪ Stratigraphic drilling is on a nominal grid of 500 x 500 m. ▪ Partly core holes are on a nominal grid of 250 x 250 m ▪ However, the open holes do not support an assessment of the torbanite lens within the Lower Seam. This unit cannot be accurately determined in chip samples or readily distinguished in the downhole wireline logs (due the similar density of the cannel coal and torbanite lens). ▪ The density and distribution of drill holes supports a reasonable level of confidence in the depth and thickness of the Upper and Lower seams across the MDL area.
Orientation of data in relation to geological structure	▪ Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. ▪ If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	▪ All drill holes were drilled at 90 degrees to the surface and are assumed to be vertical. ▪ Downhole verticality survey is available for all drill holes. ▪ Seam intercepts are recorded on a downhole basis. ▪ Downhole geophysical logs were used to confirm the seam intercepts and thicknesses. ▪ As the deposit is gently dipping and drill holes are generally shallow, the downhole seam thickness will approximate the true thickness of the cannel coal.
Sample security	▪ The measures taken to ensure sample security.	▪ All chip samples are secured in a Greenvale facility. ▪ All core samples are secured at Stratum Laboratories, Brendale.
Audits or reviews	▪ The results of any audits or reviews of sampling techniques and data.	▪ A logging and sampling procedure was developed by SRK. ▪ The Competent Person is adequately satisfied that sampling techniques and procedures have been followed.

Section 2 Reporting of Exploration Results

(Criteria listed in section 1 also apply to this section.)

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Mineral tenement and land tenure status</td><td>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.
The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</td><td>MDL 330 is held by Alpha Resources Pty Ltd, a subsidiary of Greenvale Mining Limited. An application for a renewal for an addition five-year term was submitted in July 2021.
MDL 330 covers an area of 1,904.5 ha.</td></tr>
<tr><td>Exploration done by other parties</td><td>Acknowledgment and appraisal of exploration by other parties.</td><td>Historically (since the late1930s), the title has been held by a number of other parties.
Held by Alpha Resources Limited since 2002.
<table>
<tr><th>Asset Name</th><th>License Holder</th><th>License Type</th><th>Date</th></tr>
<tr><td>Anderson</td><td>H Anderson</td><td>EPM 134</td><td>1939</td></tr>
<tr><td>Anderson & other</td><td>H Anderson & others</td><td>EPM 137</td><td>1940</td></tr>
<tr><td>Anderson</td><td>H Anderson</td><td>ML 90-95</td><td>1941 - 1942</td></tr>
<tr><td>IMC Alpha</td><td>International Mining Corporation</td><td>EPM 2240</td><td>1979 - 1982</td></tr>
<tr><td rowspan="3">Alpha Oil Shale Project</td><td rowspan="3">Greenvale Mining & Esperance Minerals</td><td>EPM 2203</td><td>1978 -1985</td></tr>
<tr><td>EPM 4023</td><td>1985 - 1996</td></tr>
<tr><td>MDL 211</td><td>1996 -2001</td></tr>
<tr><td>Alpha Torbanite Project</td><td>Alpha Resources Limited</td><td>MDL 330</td><td>2002 - present</td></tr>
</table></td></tr>
<tr><td>Geology</td><td>Deposit type, geological setting and style of mineralisation.</td><td>The Alpha deposit lies within the axis of the Glen Avon Syncline, a southwest plunging fold structure that occurs on the eastern flank of the Galilee Basin.
The deposit is part of the Permian Colinlea Sandstone, which contains 150 m of cross-bedded sandstones with minor conglomerates, siltstones and mudstones.
The geology of the deposit consists of an Upper and Lower seam of cannel cannel coalwith a torbanite lens present in the lower seam.
The Colinlea Sandstone is thought to be a lower delta plain deposit with the cannel coal deposited in swamps and shallow lakes in this near shore environment. The torbanite is thought to have been deposited from algae in a lacustrine environmentwhen water entering the system held little sediment or organic material.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
Drill hole Information	▪ A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: ▪ easting and northing of the drill hole collar ▪ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ▪ dip and azimuth of the hole ▪ downhole length and interception depth ▪ hole length. ▪ If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	▪ A detailed list of the drill holes including collar coordinates, depth, azimuth, dip, hole type and logging status are included in Appendix A.. ▪ Geophysical deviation logs (verticality) are available for all holes. ▪ All drill holes have been surveyed. ▪ The verticality data for all deeper holes has been loaded and the holes were modelled with account of any inclination.
Data aggregation methods	▪ In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. ▪ Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. ▪ The assumptions used for any reporting of metal equivalent values should be clearly stated.	▪ Torbanite and cannel cannel coal were treated separately and not aggregated.
Relationship between mineralisation widths and intercept lengths	▪ These relationships are particularly important in the reporting of Exploration Results. ▪ If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. ▪ If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').	▪ All drill holes were drilled at 90 degrees to the surface and are assumed to be vertical. ▪ Downhole verticality survey is available for all drill holes. ▪ Seam intercepts are recorded on a downhole basis. ▪ Downhole geophysical logs were used to confirm the seam intercepts and thicknesses. ▪ As the deposit is gently dipping and drill holes are generally shallow, the downhole seam thickness will approximate the true thickness of the cannel coal.
Diagrams	▪ Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	▪ All appropriate diagrams are contained in the report
Balanced reporting	▪ Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced avoiding misleading reporting of Exploration Results.	▪ All available exploration data for the Alpha Torbanite area has been collated and reported. ▪ This release describes all relevant information.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	▪ Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	▪ The updated interpretation is predominantly based on the 2021 drilling results. ▪ Limited historical drill hole information was used to supplement the 2021 drilling and support the continuity of the Upper and Lower seams outside the bounds of the MDL area.
Further work	▪ The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling). ▪ Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	▪ The updated geological model has enabled a more robust interpretation of the deposit structure, and limits of the torbanite lens. ▪ The geological model will be used support the planning and execution of a core drilling program to target down-dip areas to better define the limits of the torbanite lens in the Lower Seam. ▪ Additional core drilling is also recommended in the northern sector to provide higher confidence in the modelled subcrop of the Lower Seam and the extent of torbanite lens in this area.

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	▪ Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. ▪ Data validation procedures	▪ Data was entered in the field by the field Geologist into Log Check software. ▪ Detailed off-site core logging was conducted at the Stratum Laboratories Brendale, by experienced SRK geologists. ▪ All lithological logs, and cannel coal intersection depths have been reconciled andcorrected to the downhole geophysical logs. ▪ All drilling data was reviewed and validated by SRK post correction by experienced exploration geologists.
Site visits	▪ Comment on any site visits undertaken by the Competent Person and the outcome of those visits. ▪ If no site visits have been undertaken indicate why this is the case	▪ Mr C D'Silva as Competent Person has conducted a number of site visits to the Alpha Torbanite Project area in 2021. ▪ The Competent Person's familiarity with Galilee Basin cannel coal and cannel coal seam gasprojects is extensive and his knowledge of the stratigraphy is thorough and sufficient. ▪ Mr C D'Silva had oversight of the 2021 drilling program and is familiar with the cannel coalseams and torbanite lens as described in this report.
Geological interpretation	▪ Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. ▪ Nature of the data used and of any assumptions made. ▪ The effect, if any, of alternative interpretations on Mineral Resource estimation. ▪ The use of geology in guiding and controlling Mineral Resource estimation. ▪ The factors affecting continuity both of grade and geology.	▪ The drill hole density (core and chip) in the Alpha Torbanite Project allows a good level of confidence in seam and ply structure, thickness, torbanite and cannel cannel coalquality, and the location of sub-crops. ▪ No alternative interpretations were considered for the geological interpretation of the Upper and Lower seams, due the simple and well-defined structural nature of the deposit.
Dimensions	▪ The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource	▪ The extent of the reported Mineral Resource is ~4.0 km along strike trending southeast to northwest and ~2.3 km down dip to the southwest ▪ The Upper Seam extents down dip from its subcrop to ~95 m ▪ The Lower Seam extents down dip from its subcrop to ~110 m
Estimation and modelling techniques	▪ The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen, include a description of computer software and parameters used. ▪ The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. ▪ The assumptions made regarding recovery of by-products.	▪ The 2021 drill hole data were compiled by SRK and used to prepare an updated geological model for the deposit. The geological model was developed using Geovia Minex software and is based predominantly on the newly acquired drilling data, with only a small number of historical drill holes included to support the continuity of the model (mainly outside the MDL boundary). The updated model is supported by partly cored drill holes that have allowed accurate downhole measurement of cannel coal and torbanite intervals (not previously possible using open holes). ▪ The modelling algorithm used for generating the seam structure and cannel coal quality models was the Minex Growth Technique, a proprietary 2D gridding algorithm, which calculates the most fitting surface for stratiform deposits, taking into account

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td>▪ Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</td><td>the regional trends together with the ability to honour the drill hole data, given the appropriate gridding parameters.
▪ Cannel coal qualities and source rock parameters were incorporated in the geologicalmodel for each of the modelled plies/units.
▪ Data modelled include the following: proximate analysis, ultimate analysis, TOC, and Modified Fischer Assay yields.</td></tr>
<tr><td>Moisture</td><td>▪ Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</td><td>▪ Tonnages of the cannel cannel coal and torbanite are report on an in situ moisture basis.
▪ As in situ moisture cannot be measured directly, an assumed in situ moisture of 14% was used for the cannel cannel coal, based on an air-dried moisture regression equation developed by Fletcher and Sanders (2003). The resultant in situ moisturefor the sampled cannel coal seams typically equates to the air-dried moisture +4.6%.
▪ Due to its finer pore structure, lack of cleat and resultant lower air-dried moisture content (av. 4.9% ad) compared with the cannel coal plies, a lower in situ moisture of 6%was assumed for the torbanite lens.
<table>
<tr><th>Moisture</th><th>Assumed in situ</th><th>Average air dried</th></tr>
<tr><td>Cannel coal</td><td>14%</td><td>9.1%</td></tr>
<tr><td>Torbanite</td><td>6%</td><td>4.9%</td></tr>
</table></td></tr>
<tr><td>Cut-off parameters</td><td>▪ The basis of the adopted cut-off grade(s) or quality parameters applied.</td><td>▪ No torbanite or cannel cannel coal quality limits/grade cut-offs were applied to theResource estimate.</td></tr>
<tr><td>Mining factors or assumptions</td><td>▪ Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</td><td>▪ SRK have applied a minimum thickness appropriate to the potential mining method, see ‘Modelling technique’ and deem the torbanite and cannel cannel coal resources have reasonable prospects of economic extraction
▪ Detailed mining studies have not yet been completed. It is expected that torbanite and cannel cannel coal will be extracted using conventional shallow open pit mining methods.
▪ Mining dilution assumptions have been factored into the Mineral Resource estimate.</td></tr>
<tr><td>Metallurgical factors or assumptions</td><td>▪ The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</td><td>▪ Assumptions regarding the oil yields form the torbanite and cannel cannel coal arecurrently based on a limited dataset.
▪ Modified Fischer Assay results, which give an indication of maximum potential oil yield, are reported for 14 samples from six drill holes, from the 2021 drilling program.
▪ The theoretical oil yields from the MFA support the assumptions regarding reasonable prospects for eventual economic extraction of the torbanite and cannel cannel coal.
▪ Further investigations are required regarding the processing, potential products, and practical yields in order to support higher Mineral Resource classifications.</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	▪ Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts	▪ It is SRK's opinion, that at this stage of the Project, there are no surface constraints due to environmental factors, on MDL 330, that would impede further exploration or prospects for eventual economic extraction. ▪ The resource is traversed by two ephemeral waterways (Native Companion Creek and Star Creek). These areas have been included in the Resource Estimate to allow for their consideration in future environmental assessment and mining studies. ▪ Future work will include hydrological studies, ground water and acid mine drainage assessments of the resource area. These factors have not yet been considered.
Bulk density	▪ Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. ▪ The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit. ▪ Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	▪ The cannel cannel coal and torbanite Resource tonnage calculations were based on the bulk density model for the cannel coal seams on an in situ basis which were undertaken onlump samples. ▪ The modelled laboratory air dried bulk density data for the cannel coal and torbanite unitswas used to calculate air-dried tonnages and was subsequently adjusted to an in-situ moisture basis using the Preston and Sanders (1993) calculation.
Classification	▪ The basis for the classification of the Mineral Resources into varying confidence categories. ▪ Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). ▪ Whether the result appropriately reflects the Competent Person's view of the deposit.	▪ The classification of the torbanite and cannel cannel coal as an Inferred Resource is basedon the opinion of the Competent Person. Mr C D'Silva has formed his opinion based on the drill spacing, the stratigraphic correlation, the results of analysis of the samples and on the geological and quality variability of the deposit, and in particularly on the thickness and quality variability of the torbanite lens. ▪ The Competent Person is confident in the reliability of geological data and in the understanding of the geology including the continuity of the cannel coal seams and the torbanite and cannel cannel coal plies. The estimates appropriately reflects the CompetentPersons view of the deposit.
Audits or reviews	▪ The results of any audits or reviews of Mineral Resource estimates.	▪ No independent audits or reviews have been conducted on the resource estimates, but Greenvale Mining's geology personnel have reviewed SRK's estimation. ▪ SRK's work has also undergone a round of internal peer review.

Criteria	JORC Code explanation	Commentary
Discussion of relative accuracy/ confidence	▪ Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	▪ The resource estimates have been prepared and classified in accordance with the guidelines that accompany the JORC Code (2012 edition), and no attempts have been made to further quantify the uncertainty in the estimates. ▪ A classification of Inferred is applied globally to the Mineral Resource. ▪ The Mineral Resource estimate should be considered as a global estimate only. The accompanying model is considered suitable in terms of supporting preliminary conceptual mine planning studies, but is not considered suitable for detailed production planning and mining studies

Appendix A: Drill hole summary table

List of 2021 drillholes (all coordinates in MGA GDA94 Zone 55

Drillhole ID	Easting (m)	Northing (m)	RL (m)	Total Depth (m)	Azimuth (°)	Dip (°)	Type	Wireline Logged
GM01C	480885.94	7334362.62		38.00	0	-90	Partly Cored	Y
GM01R	480823.00	7334164.00		38.00	0	-90	Chip	Y
GM03C	481781.77	7334209.38	466.30	27.00	0	-90	Partly Cored	Y
GM03R	481778.04	7334209.91	466.01	50.00	0	-90	Chip	Y
GM04C	482296.22	7334163.55	463.22	25.00	0	-90	Partly Cored	Y
GM04R	482301.81	7334166.83	463.02	44.00	0	-90	Chip	Y
GM05C	480835.78	7333669.84	456.87	25.00	0	-90	Partly Cored	Y
GM05R	480832.16	7333669.10	456.65	74.00	0	-90	Chip	Y
GM06C	481343.67	7333701.87	455.65	39.00	0	-90	Partly Cored	Y
GM06R	481348.85	7333704.51	455.44	38.00	0	-90	Chip	Y
GM07C	481840.94	7333631.51	467.95	49.00	0	-90	Partly Cored	Y
GM07R	481834.99	7333626.99	467.64	50.00	0	-90	Chip	Y
GM08C	482306.67	7333683.54	456.58	27.00	0	-90	Partly Cored	Y
GM08CR	482306.00	7333683.00	456.58	22.23	0	-90	Partly Cored - Redrill	N
GM08R	482310.41	7333684.86	456.48	44.00	0	-90	Chip	Y
GM09C	482756.75	7333601.73	454.07	19.00	0	-90	Partly Cored	Y
GM09CR	482756.00	7333601.00	454.07	11.42	0	-90	Partly Cored - Redrill	N
GM09R	482759.72	7333598.83	453.95	38.00	0	-90	Chip	Y
GM10C	480816.41	7333086.84	442.92	44.00	0	-90	Partly Cored	Y
GM10R	480810.31	7333082.70	443.46	62.00	0	-90	Chip	Y
GM11C	481332.01	7333199.73	447.40	45.16	0	-90	Partly Cored	Y
GM11R	481334.25	7333201.76	447.37	50.00	0	-90	Chip	Y
GM12C	481867.01	7333225.78	440.02	33.00	0	-90	Partly Cored	Y
GM12R	481872.96	7333224.88	440.10	38.00	0	-90	Chip	Y
GM13C	482325.15	7333171.11	444.72	25.00	0	-90	Partly Cored	Y

Drillhole ID	Easting (m)	Northing (m)	RL (m)	Total Depth (m)	Azimuth (°)	Dip (°)	Type	Wireline Logged
GM13CR	482325.00	7333171.00	444.72	19.51	0	-90	Partly Cored - Redrill	N
GM13R	482330.43	7333169.49	444.68	44.00	0	-90	Chip	Y
GM14C	482871.99	7333231.13	462.53	37.00	0	-90	Partly Cored	Y
GM14CR	482871.00	7333231.00	462.53	28.48	0	-90	Partly Cored - Redrill	N
GM14R	482862.56	7333231.17	462.70	38.00	0	-90	Chip	Y
GM15C	483296.17	7333159.94	460.42	27.00	0	-90	Partly Cored	Y
GM15CR	483296.00	7333159.00	460.42	19.28	0	-90	Partly Cored - Redrill	N
GM15R	483293.29	7333158.12	460.24	38.00	0	-90	Chip	Y
GM16R	480843.36	7332636.26	458.05	74.00	0	-90	Chip	Y
GM17R	481337.93	7332668.33	448.19	62.00	0	-90	Chip	Y
GM18R	481829.26	7332672.21	455.55	56.00	0	-90	Chip	Y
GM19C	482251.26	7332673.61	451.39	47.00	0	-90	Partly Cored	Y
GM19R	482249.75	7332677.39	451.14	44.00	0	-90	Chip	Y
GM20C	482732.96	7332632.18	444.96	31.00	0	-90	Partly Cored	Y
GM20R	482732.05	7332632.00	444.96	56.00	0	-90	Chip	Y
GM21C	483333.93	7332843.14	459.82	50.00	0	-90	Partly Cored	Y
GM21CR	483333.00	7332843.00	459.82	25.45	0	-90	Partly Cored - Redrill	N
GM21R	483337.97	7332843.71	459.78	50.00	0	-90	Chip	Y
GM22R	483758.91	7332736.84	448.34	38.00	0	-90	Chip	Y
GM23R	480839.64	7332190.89	462.78	92.00	0	-90	Chip	Y
GM24R	481816.42	7332171.20	468.72	92.00	0	-90	Chip	Y
GM25R	482467.65	7332150.06	453.30	62.00	0	-90	Chip	Y
GM26C	482815.90	7332155.62	449.40	51.00	0	-90	Partly Cored	Y
GM26R	482815.83	7332150.26	449.29	50.00	0	-90	Chip	Y
GM27C	483337.75	7332159.51	452.11	38.60	0	-90	Partly Cored	Y
GM27CR	483337.00	7332159.00	452.11	31.63	0	-90	Partly Cored - Redrill	N
GM27R	483334.26	7332163.08	451.95	74.00	0	-90	Chip	Y
GM28C	483812.65	7332150.29	459.21	40.00	0	-90	Partly Cored	Y
GM28CR	483812.00	7332150.00	459.21	32.51	0	-90	Partly Cored - Redrill	N

Drillhole ID	Easting (m)	Northing (m)	RL (m)	Total Depth (m)	Azimuth (°)	Dip (°)	Type	Wireline Logged
GM28R	483815.00	7332147.01	458.92	68.00	0	-90	Chip	Y
GM29C	484326.60	7332188.04	469.14	45.00	0	-90	Partly Cored	Y
GM29R	484326.37	7332192.15	469.02	62.00	0	-90	Chip	Y
GM30R	481316.19	7331678.84	463.65	104.00	0	-90	Chip	Y
GM31R	482333.83	7331678.31	458.06	80.00	0	-90	Chip	Y
GM32R	482815.81	7331669.83	449.25	62.00	0	-90	Chip	Y
GM33R	483347.81	7331650.56	451.22	50.00	0	-90	Chip	Y
GM34R	483838.76	7331682.92	463.28	56.00	0	-90	Chip	Y
GM35C	484319.39	7331657.26	471.79	59.00	0	-90	Partly Cored	Y
GM35R	484323.46	7331659.31	472.04	62.00	0	-90	Chip	Y
GM36C	484817.95	7331662.46	463.59	45.00	0	-90	Partly Cored	Y
GM36R	484817.55	7331667.37	463.52	50.00	0	-90	Chip	Y
GM37R	481819.47	7331161.19	473.43	116.00	0	-90	Chip	Y
GM38R	482829.00	7331160.10	457.65	86.00	0	-90	Chip	Y
GM39R	483367.55	7331171.89	447.60	56.00	0	-90	Chip	Y
GM40C	483832.98	7331186.78	456.26	56.00	0	-90	Partly Cored	Y
GM40R	483826.85	7331190.57	455.37	56.00	0	-90	Chip	Y
GM41R	484320.75	7331128.35	464.35	62.00	0	-90	Chip	Y
GM42R	484806.72	7331273.86	470.29	62.00	0	-90	Chip	Y
GM43R	482819.15	7330681.63	471.52	104.00	0	-90	Chip	Y
GM44R	483383.47	7330617.96	449.20	74.00	0	-90	Chip	Y
GM45R	483785.90	7330703.45	448.56	62.00	0	-90	Chip	Y
GM47C	484868.42	7330772.46	466.79	66.00	0	-90	Partly Cored	Y
GM47R	484868.37	7330778.20	466.80	62.00	0	-90	Chip	Y
GM48R	483268.29	7330278.42	452.85	80.00	0	-90	Chip	Y
GM49C	483787.60	7330171.73	451.26	75.00	0	-90	Partly Cored	Y
GM49R	483791.99	7330177.60	451.70	74.00	0	-90	Chip	Y
GM50R	484713.96	7330457.52	460.88	62.00	0	-90	Chip	Y
GM52C	483060.28	7333369.01	467.50	33.20	0	-90	Partly Cored	Y

Drillhole ID	Easting (m)	Northing (m)	RL (m)	Total Depth (m)	Azimuth (°)	Dip (°)	Type	Wireline Logged
GM53C	483261.18	7333407.47	467.59	31.00	0	-90	Partly Cored	Y
GM54C	482556.05	7333137.82	446.40	20.00	0	-90	Partly Cored	Y
GM55C	483085.67	7333163.78	456.92	27.00	0	-90	Partly Cored	Y
GM56C	482082.18	7332906.89	447.57	37.70	0	-90	Partly Cored	Y
GM57C	482346.10	7332917.16	442.81	37.70	0	-90	Partly Cored	Y
GM58C	482578.81	7332841.79	446.96	30.70	0	-90	Partly Cored	Y
GM59C	482814.01	7333018.15	448.78	28.00	0	-90	Partly Cored	Y
GM60C	483054.14	7332941.55	451.16	25.00	0	-90	Partly Cored	Y
GM62C	482545.89	7332668.29	455.76	42.70	0	-90	Partly Cored	Y
GM64C	483115.09	7332611.49	446.93	25.00	0	-90	Partly Cored	Y
GM65C	482587.41	7332414.04	448.68	42.70	0	-90	Partly Cored	Y
GM66C	482816.95	7332353.29	445.89	35.20	0	-90	Partly Cored	Y
GM67C	483145.96	7332423.81	448.59	34.00	0	-90	Partly Cored	Y
GM68C	483324.33	7332424.69	449.01	31.00	0	-90	Partly Cored	Y
GM69C	483570.20	7332393.72	449.25	31.00	0	-90	Partly Cored	Y
GM70C	483586.86	7332150.59	452.89	37.00	0	-90	Partly Cored	Y
GM71C	484091.24	7332131.27	467.52	43.02	0	-90	Partly Cored	Y
GM72C	483102.55	7331905.84	445.63	42.70	0	-90	Partly Cored	Y
GM73C	483604.63	7331921.35	460.55	49.05	0	-90	Partly Cored	Y
GM74C	483834.85	7331913.95	465.39	52.00	0	-90	Partly Cored	Y
GM75C	484079.00	7331922.27	470.85	55.00	0	-90	Partly Cored	Y
GM76C	484328.00	7331906.07	470.42	48.90	0	-90	Partly Cored	Y
GM77C	481790.36	7333348.76	458.24	30.70	0	-90	Partly Cored	Y
GM78C	482040.70	7333417.64	444.79	27.00	0	-90	Partly Cored	Y
GM79C	482244.79	7333447.99	455.34	34.15	0	-90	Partly Cored	Y
GM80C	482545.49	7333400.45	451.70	25.00	0	-90	Partly Cored	Y
GM81C	482839.64	7333389.11	465.43	37.00	0	-90	Partly Cored	Y
T1	483831.02	7333205.72	452.25	81.00	0	-90	Partly Cored	Y
TEST2	483762.26	7332733.77	448.03	20.55	0	-90	Partly Cored	Y