

## KEY MILESTONES ACHIEVED WITH ALPHA PROJECT TEST PROGRAM 7 - BULK SAMPLE PRODUCTION TO COMMENCE

### Highlights

- First two milestones of Test Program 7 (TP7) for the Alpha Torbanite Project successfully completed, confirming optimal operating conditions for the production of bulk samples.
- Milestone 2 has successfully scaled the results of Test Program 6 by a volumetric factor of 40, demonstrating the ability to repeatedly produce an asphaltene-based product from Alpha's torbanite.
- Bulk sample production to commence in December 2025, with TP7 program milestones extended into 2026.
- TP7 has the single objective of producing a bituminous product that can be independently certified to C-170 asphalt specification.

Greenvale Energy Limited **ASX: GRV** ("Greenvale" or "the Company") is pleased to advise that the first two milestones of Test Program 7 (TP7) for its 100%-owned Alpha Torbanite Project in Queensland have been successfully achieved. TP7 is continuing with the next phase of work being the production of a bulk sample.

### **Greenvale CEO Alex Cheeseman said:**

*"Notwithstanding a number of delays, both Greenvale and our service provider, Monash University, are pleased to report on the successful achievement of the first two milestones of Test Program 7. Specialist equipment has been designed, procured, installed, commissioned, operated and, most importantly, has verified the successful scaling of previous test work outcomes.*

*"Scaling is a fundamental technical challenge for any mineral processing program, and the work completed to date has successfully replicated the positive, repeatable results from previous programs but with a 40 times scale factor. This is a very encouraging development that puts us in a strong position as we move ahead with the final key stage of Test Program 7 – which has the single aim of producing a commercial bitumen product to independent C-170 certification.*

*"Bulk sample production has commenced in December and will continue into the New Year, setting the conditions for independent assessment, verification and certification. If we can achieve that, that will represent a major milestone for the Company and the Alpha Torbanite Project, providing us with a clear pathway to unlock its significant value for shareholders."*

Interactive Investor Hub - **Engage directly with the Company** through our Investor hub, you can ask questions, review comments and get direct access to the Company – follow the link [greenvaleenergy.com.au/announcements](https://greenvaleenergy.com.au/announcements)

### Key Lessons from TP6 that shaped TP7

As previously announced<sup>1</sup>, key findings from Greenvale's previous test programs had determined the optimal process controls required to maximise product yields from Alpha's torbanite. Specific controls include temperature ramp profile, reaction pressure, temperature cooling profile, optimal catalysts and optimal carriers.

Test Program 6 identified that the temperature rate must increase from room temperature to a set maximum of 400°C at a rate of approximately 10°C/minute. The target peak temperature of 400°C should then be held for 1 hour to maximum reaction, with zinc identified as the optimum catalyst for conversion. These process controls combine to optimise the yield of an asphaltene-heavy product that is produced from torbanite.

Reactions occur in a pressure vessel (autoclave) with peak pressure of 29 Mpa. Reactions also occur in an oxygen-free environment, achieved through a gas purge followed by hydrogen pressurisation.

### Successful Scaling

The operating conditions are custom requirements, and while aspects of the process are replicated in other industries, the combination of rapid heating in a very-high pressure and oxygen-free environment is unique. Greenvale's service provider (Monash University) was required to procure bespoke, specialist equipment to enable TP7 to progress.

While delays were encountered in the procurement process, all of the required equipment has now been procured, installed and operated as designed, as shown in Figure 1.



**Figure 1 – Custom heating, cooling and control systems procured for TP7.**

TP6 was conducted using pressure vessels capable of containing 100ml of total material. TP7 has replicated the technical controls and operating parameters of TP6 using a pressure vessel of 4 litres, a 40-times volumetric increase in scale from TP6.

<sup>1</sup> Refer to ASX Announcement *TP6 delivers positive results with highest product conversion to date and the introduction of catalysts improving viscosity of the final product* released 8 April 2025

Figure 2 demonstrates the operating profile of the final test run for Milestone 2, setting the conditions for bulk sample production. Temperature ramp, reaction pressure, maximum temperature control and temperature cooling are key process controls that were achieved.

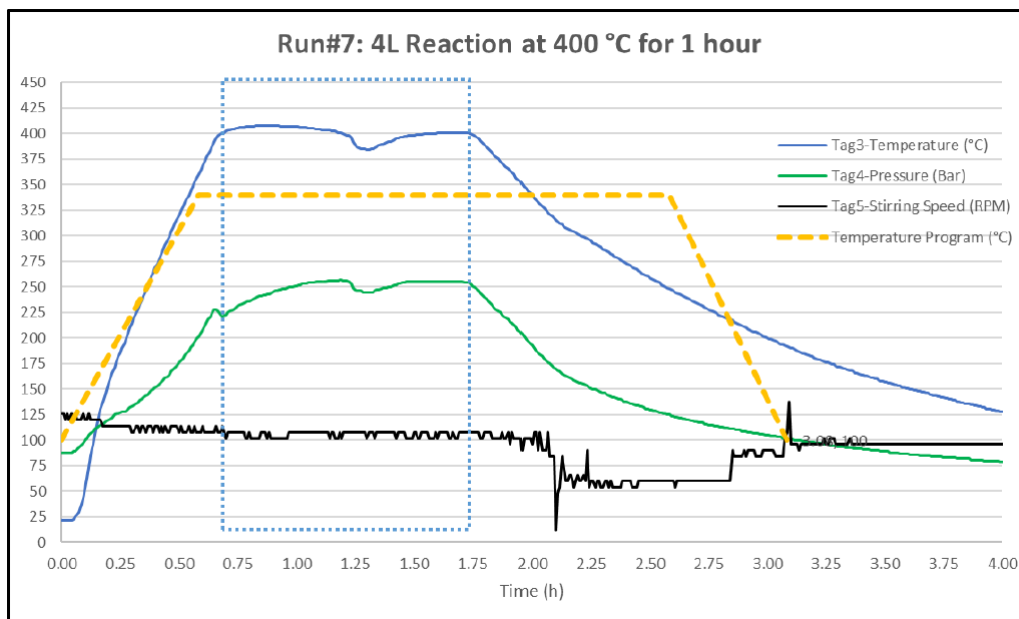


Figure 2 – Temperature ramp profile and 1 hour of reaction time at target rates.

### Current and Future Work

The successful scale-up demonstrated through the first two milestones of TP7 set the conditions to allow the commencement of bulk sample production.

TP7 continues with the production of a bulk sample commencing in December 2025. By mutual agreement, Greenvale and Monash have extended the duration of TP7 at no additional cost to Greenvale. Bulk sample production is currently scheduled for nine working weeks, with a two week pause planned for the Christmas/New Year break.

The current schedule will see bulk production completed in late February 2026, with options to extend the program if additional bulk sample material is required.

The bulk sample will be produced using drill core from the Alpha Torbanite project as the source. Sample intervals were pre-selected and chosen based on their lithologies, bulk densities and seam thickness, in order to be representative of both the target seam and the Resource area. Drill core had, historically, been cut and left in wrapped core trays within a cold storage facility, in order to protect the integrity of the material, preventing oxidation and moisture ingress.

Sample collection involved extracting the pre-selected intervals from the core trays, double-bagging them and packaging them within plastic, 20-litre buckets, which were then transported to ALS Global, Brisbane, for preparatory work before the main test work begins at Monash. Refer to Appendix 1 for sampling details. Further information is given in Appendix 2.

The Alpha Torbanite Project has an Inferred Mineral Resource Estimate of **27.7Mt** (in-situ) refer to Table 1<sup>2</sup>.

<sup>2</sup> Refer to ASX Announcement 51% Increase In Alpha Resource Substantially Expands Project Scale and Potential released 13 November 2023

**Table 1 – MDL 330 Inferred Mineral Resource Estimate by Seam and Ply Unit**

Seam/Ply	Area (m <sup>2</sup> )	Volume (cu m)	Waste Thickness (m)	Waste Volume (bcm)	Tonnes (Air Dried)	Tonnes (Dry)	Tonnes (in-situ)
U	5,199,146	5,409,700	21	181,383,104	6,491,640	6,653,931	6,437,543
L1	9,056,464	10,548,503	16	142,970,480	12,995,530	13,291,114	12,869,174
LT	6,774,137	3,635,190	0	157,694	4,301,324	4,325,876	4,289,524
L2	8,684,433	3,465,159	0	41,993	4,267,732	4,366,100	4,192,842
<b>Total</b>					<b>28,056,227</b>	<b>28,637,021</b>	<b>27,789,083</b>

Following the production of a bulk sample, bitumen processing specialist Technix will conduct final product processing and will support Greenvale in independent product certification process.

Product certification remains focused on achieving the C-170 specification. Other product specifications and/or products may be investigated at a later stage.

#### **Authorised for release**

This announcement has been approved for release by the Board of Directors.

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#### **About Greenvale Energy Limited**

Greenvale is an ASX-listed exploration company with a portfolio of projects that will support a sustainable, low-carbon future. The Company has early-stage uranium exploration projects in the Northern Territory, the Oasis advanced-exploration project in Queensland and the Alpha Torbanite and Millungera Basin geothermal projects in Queensland. The Company believes the best way to create long-term shareholder value is by investing in exploration, to make discoveries and grow its resource-base.

#### **Competent Person Statement**

The information in this announcement, as it relates to exploration results, interpretations and conclusions, is based on information reviewed by Mr Mark Biggs, who is an independent technical adviser to Greenvale Energy Ltd and is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM, #10788). Mr Biggs is a Director of ROM Resources Consultant to the Company, and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration, and to the overseeing of activities being undertaken to qualify as a Competent Person (as defined in the JORC 2012 edition of the “Australasian Code for Reporting of Mineral Resources and Ore Reserves”. Mt Biggs consents to the inclusion of this information in the form and context in which it appears.

#### **Forward Looking Statements**

This announcement may contain certain forward-looking statements and projections. Such forward looking statements/projections are estimates for discussion purposes only and should not be relied upon. Forward looking statements/projections are inherently uncertain and may therefore differ materially from

results ultimately achieved. The Company does not make any representations and provides no warranties concerning the accuracy of the projections and disclaims any obligation to update or revise any forward-looking statements/projects based on new information, future events or otherwise except to the extent required by applicable laws. While the information contained in this report has been prepared in good faith, neither the Company nor any of its directors, officers, agents, employees or advisors give any representation or warranty, express or implied, as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this announcement.

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## Appendix 1 – Sample Details

Note: all coordinates are provided in GDA2020, zone 55

Hole ID	Sample ID	Easting	Northing	RL	Total Depth (m)	Azimuth (°)	Inclination (°)	Depth From (m)	Depth To (m)	Interval (cm)	Seam
GM11C	GM11C3	481332	7333200	447	45	0	-90	37.53	37.73	20	LT
GM12C	GM12C5 + C6	481867	7333226	440	33	0	-90	22.09	22.75	66	LT/L2
GM12C								25.07	25.30	23	
GM13C	GM13C5	482325	7333171	445	25	0	-90	17.47	17.74	27	LT
GM57C	GM57C3	482346	7332917	443	37.7	0	-90	24.72	25.22	50	LT
GM72C	GM72C3	483103	7331906	446	42.7	0	-90	36.00	36.08	8	LT
GM72C	GM72C4							36.08	36.21	13	LT
GM73C	GM73C3	483605	7331921	461	49.05	0	-90	39.40	39.60	20	LT
GM73C	GM73C4							39.60	39.75	15	LT
GM78C	GM78C3	482041	7333418	445	27	0	-90	18.37	18.71	34	LT
GM80C	GM80C4	482545	7333400	452	25	0	-90	16.43	16.49	6	LT
GM80C	GM80C5							16.49	16.93	44	LT
GM81C	GM81C3	482840	7333389	465	37	0	-90	26.92	27.56	64	LT
Total										390	

## Appendix 2 - JORC Code, 2012 Edition – Table 1 Report

### Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li><i>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 down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralisation that are Material to the Public Report.</i></li> <li><i>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 samples 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.</i></li> </ul>	<p>Samples for metallurgical testing (Test Program 7) were selected from 2023 exploration drilling, specifically HQ core as outlined in Appendix 1 (Table A1-1).</p> <p>Details of the drilling program been provided in previous ASX releases in October 2023 and May 2025.</p> <p>Standard drilling and core techniques were employed in generally shallow holes drilled vertically.</p>
Drilling techniques	<ul style="list-style-type: none"> <li><i>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).</i></li> </ul>	<p>Standard RAB and diamond HQ coring rigs were utilised.</p>
Drill sample recovery	<ul style="list-style-type: none"> <li><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li><i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li><i>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.</i></li> </ul>	<p>All core selected from testing was from boreholes with core recovery &gt;90%.</p>
Logging	<ul style="list-style-type: none"> <li><i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral</i></li> </ul>	<p>Detailed logging was not undertaken at the site but later after sample delivery to the</p>



Criteria	JORC Code explanation	Commentary
	<p><i>Resource estimation, mining studies and metallurgical studies.</i></p> <ul style="list-style-type: none"> <li><i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li><i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<p>lab. Logging was to the Coal Log V2 standard.</p> <p>Whereas previously outcrop sampling of material has only been used for sighter testing; with all Mineral Resource estimation, mining, and metallurgical studies to be developed based evaluation of the core sample material.</p> <p>Photographic records have been taken which shows each horizon sampled and the weight of samples taken from each sample location has been recorded.</p>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li><i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li><i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li><i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li><i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li><i>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.</i></li> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>The bulk sample was taken in substantial quantities of about 20 kilograms and of both torbanite and cannel coal portions of the 63mm core. Samples were held by Stratum and Subsampling for this exercise was undertaken by Stratum Laboratories.</p> <p>Splits of approximately 400 grams were cut from subsamples obtained from Stratum splits of the subcrop samples. Smaller samples were used in the program to facilitate subsequent processing in the laboratory.</p> <p>The splits were pulverised to sub 200 microns undertaken immediately prior to the tests being conducted.</p> <p>Subsamples were cut and placed under nitrogen and forwarded to Melbourne for the test program at the Melbourne University.</p>
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<p>The subsamples had been held in refrigeration below zero in sealed bags.</p> <p>Post pulverization the samples held under nitrogen overpressure until used.</p> <p>A range of tests were conducted on the carrier oil and the sample types to ensure the program could be meaningfully executed. Subsequent tests were then undertaken to a standard set of procedures. In all 19 tests were conducted to establish the set of 12 test result sets.</p> <p>Laboratory tests were conducted based on standard analytical techniques such as TGA, Proximate and Ultimate.</p>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> </ul>	<p>The samples derived from the core have been observed by multiple personnel including Engineers, Geologists and Greenvale employees have been involved in the sample acquisition.</p>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Discuss any adjustment to assay data.</li> </ul>	
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	The samples taken are described in Table A1-1 in Appendix 1. Coordinate system MGA55 GDA94 datum is expected to be accurate to +/- 0.30m.
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<p>The boreholes that the test sample was made up from have an average hole-to-hole spacing of 745m, although this set is only a sub-set of the total hole database.</p> <p>The base sample for testing this time was borecore from various depths, whereas the initial, early metallurgical testing was essentially from a surface costean bulk sample (50Kg) which would have had different characteristics to the less-weathered core.</p>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	Not relevant for this discussion of metallurgical testing. The deposit strikes at 300 degrees with gentle dips to the south and southwest. The intersecting boreholes were planned as vertical.
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<p>Samples have been stored in dedicated freezers from the time the sample was acquired and after sample preparation.</p> <p>Chain of custody was managed by ALS, and later, Greenvale Energy.</p> <p>Samples were transported in sealed bags, from ALS Brisbane to Monash University in Melbourne.</p>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	No audits or reviews have been conducted.

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary																																
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"><li><i>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.</i></li><li><i>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.</i></li></ul>	<p>MDL 330 is held by Alpha Resources Pty Ltd, a subsidiary of Greenvale Energy Limited. MDL 330 was first granted on 1 February 2002. An application for a renewal for an additional 5-year term was submitted in July 2021 and approved in July 2022.</p> <p>The current 5-year term expires on 31 January 2027.</p> <p>MDL 330 covers an area of 1,904.5 Ha.</p>																																
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"><li><i>Acknowledgment and appraisal of exploration by other parties.</i></li></ul>	<p>Historically there has been exploration carried out over 85 years since the 1940’s. The various titles have been held by Alpha Resources since 2002.</p> <p>Table A2-1 lists the various explorers:</p> <table><tr><th>Asset name</th><th>Licence 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 &amp; other</td><td>H Anderson &amp; others</td><td>EPM 137</td><td>1940</td></tr><tr><td>Anderson</td><td>H Anderson</td><td>ML 90-95</td><td>1941–42</td></tr><tr><td>IMC Alpha</td><td>International Mining Corporation</td><td>EPM 2240</td><td>1979–82</td></tr><tr><td rowspan="3">Alpha Oil Shale Project</td><td rowspan="3">Greenvale Mining &amp; Esperance Minerals</td><td>EPM 2203</td><td>1978–85</td></tr><tr><td>EPM 4023</td><td>1985–96</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 to present</td></tr></table>	Asset name	Licence holder	License type	Date	Anderson	H Anderson	EPM 134	1939	Anderson & other	H Anderson & others	EPM 137	1940	Anderson	H Anderson	ML 90-95	1941–42	IMC Alpha	International Mining Corporation	EPM 2240	1979–82	Alpha Oil Shale Project	Greenvale Mining & Esperance Minerals	EPM 2203	1978–85	EPM 4023	1985–96	MDL 211	1996–2001	Alpha Torbanite Project	Alpha Resources Limited	MDL 330	2002 to present
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Anderson	H Anderson	EPM 134	1939																															
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		MDL 211	1996–2001																															
Alpha Torbanite Project	Alpha Resources Limited	MDL 330	2002 to present																															
<i>Geology</i>	<ul style="list-style-type: none"><li><i>Deposit type, geological setting and style of mineralisation.</i></li></ul>	<p>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.</p> <p>The deposit is part of the Permian Colinlea Sandstone, which contains 150 m of cross-bedded sandstones with minor conglomerate, coal, siltstones, and</p>																																

Criteria	JORC Code explanation	Commentary
		<p>mudstones.</p> <p>The Geology of the deposit consists of an Upper and Lower seam of cannel coal with a torbanite lens present in the Lower seam.</p> <p>The Colinlea Sandstone is thought to be a lower delta plain deposit with the 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 environment when water entering the system held little sediment or organic material.</p>
Drill hole Information	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<p>See Table A1-1 in Appendix 1, which includes all relevant new drill hole information and seam intercepts.</p> <p>All Greenvale and IMC exploration holes have been either traditional theodolite or DGPS surveyed with stated accuracies of 0.1m in X &amp; Y and 0.2m in Z.</p> <p>Top of coal depths are accurate to 0.1m and interpreted from chip logs / core logging and downhole geophysics, where carried out.</p> <p>Where available verticality was loaded, and the holes were modelled accounting for any inclination. An alternative model was generated treating all holes as vertical.</p>
Data aggregation methods	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<p>Torbanite and cannel coal horizons were modelled separately and not aggregated.</p>
Relationship between mineralisation widths and	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there</li> </ul>	<p>All drill holes were drilled at 90° to the surface and although some verticality logs are available, the deposit was modelled where holes are assumed to be vertical.</p> <p>Downhole verticality survey is available for all drill holes.</p>

Criteria	JORC Code explanation	Commentary
<i>intercept lengths</i>	<i>should be a clear statement to this effect (e.g. 'down hole length, true width not known').</i>	<p>Seam intercepts are recorded on a downhole basis.</p> <p>Downhole geophysical logs were used to confirm the seam intercepts and thicknesses.</p> <p>As the deposit is gently dipping and drill holes are generally shallow, the downhole seam thickness will approximate the true thickness of the coal.</p>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	All appropriate diagrams have been released in preceding ASX Releases in March 2023 and May 2025
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<p>All available data for the Torbanite area has been collated and reported.</p> <p>This release contains all relevant information.</p>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<p><b>GEOLOGY</b></p> <p>The updated interpretation is predominantly based on the 2023 and 2021 drilling results.</p> <p>Limited historical drill hole information was used to supplement the 2021 and 2023 drilling and support the continuity of the Upper and Lower seams outside the bounds of the MDL area.</p> <p><b>METALLURGY</b></p> <p>Supported by a base lube oil free or additives and then jointly subjected to pressure and one temperature under a hydrogen atmosphere with varying amounts of an industry standard catalyst. The program focussed on three sub-samples of cannel coal. The same procedure was applied.</p> <p>The results showed that the cannel coal sample weight loss continues to increase at progressively higher temperatures, 365C, compared with the first test campaign at 348C and with a different catalyst at increasing catalyst concentration.</p> <p>Cannel coal weight loss increased from about 22% (increased from 19% without toluene wash) to about 39% based on tests including an additional wash of the resultant solids in toluene to remove adhered asphaltenes.</p>

Criteria	JORC Code explanation	Commentary
		<p>Weight loss due to gas evolution remains low.</p> <p>The results focused on achieving higher reactor temperatures using the outcrop samples as in previous programs.</p> <p>The results for Cannel Coal and Torbanite and respective blends demonstrate a continued improvement at higher temperature such that the conversions rates of 52%, 63, and 67wt% respectively with no added catalyst on an as received basis, which converted to 67%, 66% and 56wt% on the addition of 2wt% catalyst all at 400oC.</p> <p>All tests showed conversion to Asphaltenes and Pre-Asphaltenes of over 10 wt%.</p> <p>TGA tests have been conducted on the resultant solids post reaction and solvent extraction. Some hydrocarbon volatiles remain, and so future programs will investigate this further.</p>
Further work	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<p><b>GEOLOGY</b></p> <p>The current geological model will be used for any future work. It is currently not known whether any further surface or sub-surface samples will be required for metallurgical testing.</p> <p><b>METALLURGY</b></p> <p>The ongoing test program at Monash University will derive a large sample suitable for downstream processing and ultimately seeking to achieve independent product certification. Optimal conditions to produce such a bulk sample have been identified, successful scaling of those conditions achieved, and the program continues to determine if a bulk sample can be produced in a commercially viable manner.</p>