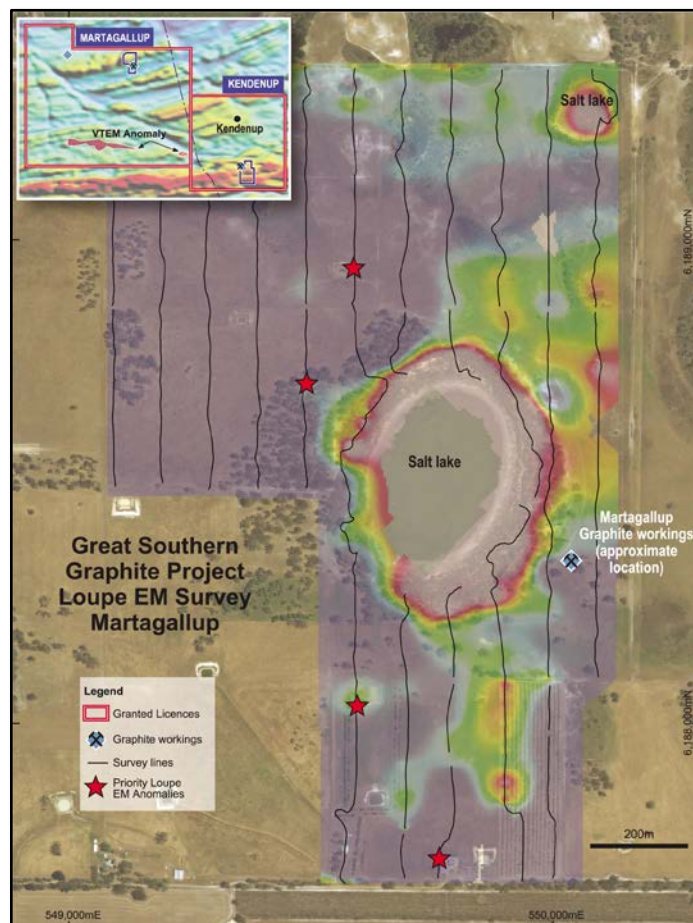
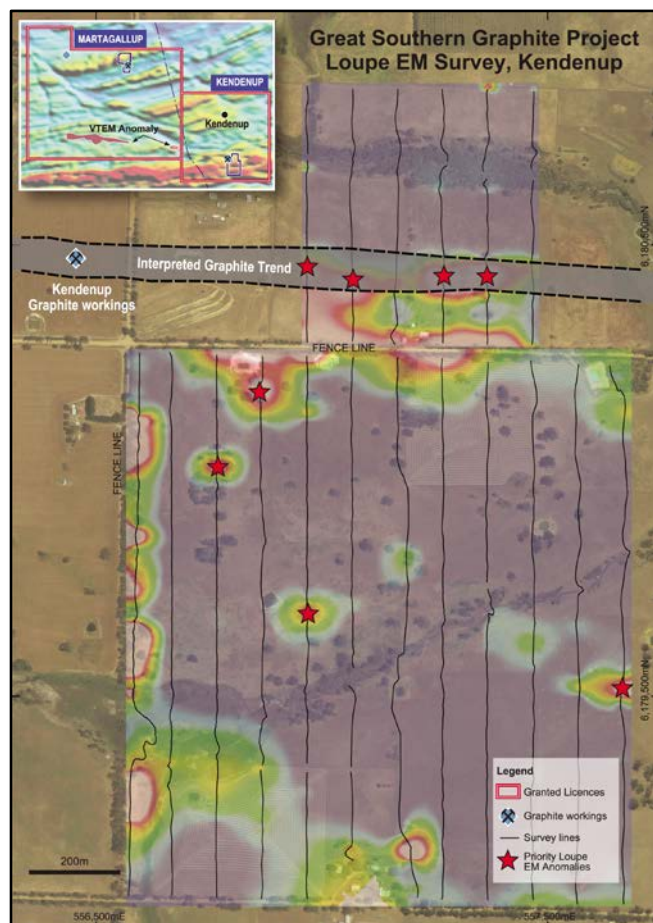


## New EM Anomalies at Great Southern Graphite Project

- Eight high-priority anomalies identified by a low-impact, orientation Loupe ground EM survey on the Great Southern Graphite Project's Kendenup and Martagallup licences.
- Reinforces view that there is considerably more graphite mineralisation to be discovered in the area.
- Intention is to progressively extend the Loupe EM across more areas of interest.
- The commissioning of a low-impact and complementary airborne EM survey is being evaluated following a major expansion of the Project's footprint with the recent application for the Mt. Barrow exploration licence.
- The extended Kendenup graphite project is a key component of Castle's evolving Battery Metals strategy which also includes the **Kambale** graphite project (Ghana) where a major drilling program is underway and the **Wilgee Springs** and **Woodcutters** lithium projects (Western Australia).

### Kendenup and Martagallup priority EM anomalies



Castle Managing Director, Stephen Stone, commented that **“The eight high-priority anomalies identified by a recent Loupe EM survey on Castle’s Great Southern Graphite Project’s Kendenup and Martagallup licences reinforce our view that there is considerably more graphite mineralisation to be discovered in the area.**

**Having proven the effectiveness of the new Loupe technology we plan to extend our work across more areas of interest.**

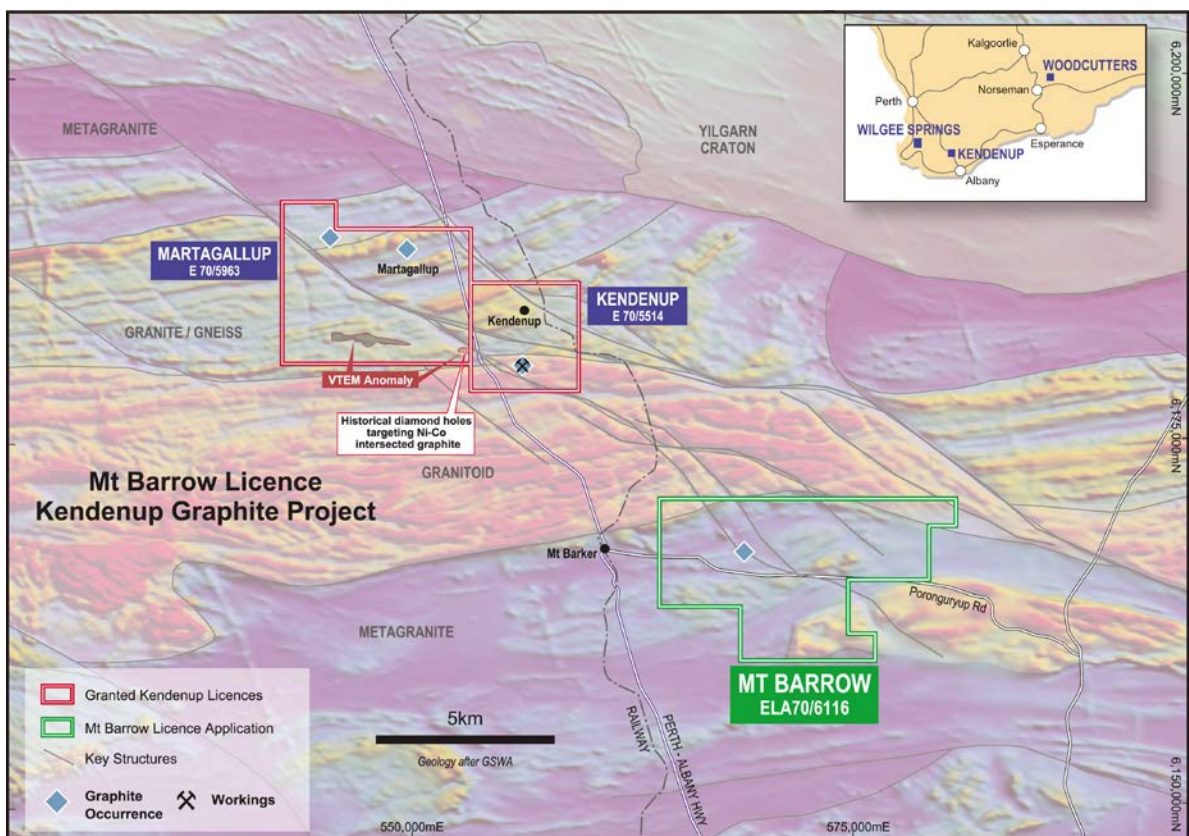
**The recent Mt. Barrow exploration licence application substantially expands our presence in the region and so justifies the commissioning of a low-impact and complementary airborne EM survey to facilitate a rapid determination as to where we should focus our attention.”**

Explorer and project incubator, Castle Minerals Limited (ASX: CDT) (“Castle” or the “Company”), advises that an orientation ground EM survey over selected areas at its Great Southern Graphite Project’s Kendenup and Martagallup licences has identified eight high-priority anomalies for follow-up investigation and improved understanding of the controls on mineralisation (“Project”).

Specifically at **Kendenup**, the EM anomalies generally follow an east-west trend which is coincident with the stratigraphy in the area and is directly on strike with the known occurrence of the historical Kendenup graphite mine, 500m to the west. The anomaly is also aligned with a strong fixed line EM (FLEM) anomaly outlined in 2013 by a previous licence holder. This was drilled for base metals and whilst returning only minor levels did intersect a zone of graphitic schist.

The survey at **Martagallup** was carried out over a reported graphite occurrence close to a conductive small salt lake. This lake somewhat impacted results by obscuring any underlying conductive anomalies associated with graphite mineralisation. However, four single point late-time anomalies gave sufficient encouragement that additional graphite mineralisation is present in the area.

### Castle’s Mt. Barrow EL application and granted Kendenup and Martagallup licences.



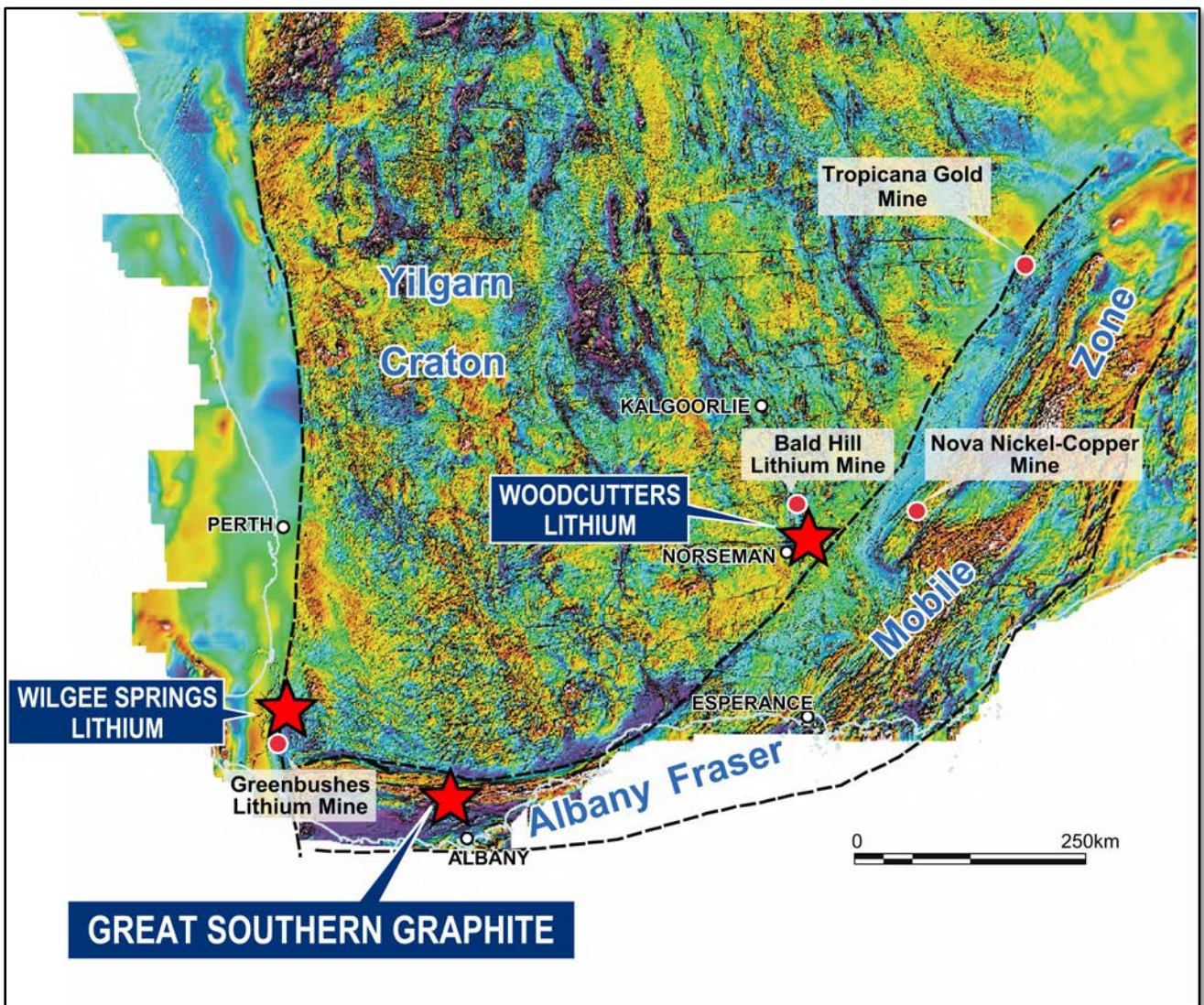


New Western Australia developed Loupe EM survey instrumentation was trialled for its low-impact capability using a lightweight backpack based transmitter and receiver to collect time domain data. It is especially effective in highlighting shallow conductors such as that associated with near-surface graphite mineralisation and works especially well in more open landscape areas. It is also able to quickly and effectively filter out “noise” from fences, pipelines and streams.

Given the success of this survey, Castle now plans to progressively extend coverage across more areas of interest where landholder access can be obtained.

With the recent application for the Mt. Barrow exploration licence, the Company is considering a very low impact, broader-scale airborne EM survey to better and more cost effectively determine where exploration can be specifically directed.

### Castle’s Western Australia ‘Battery Metals’ Projects



### Geological setting

The Project is situated within rocks of the Paleoproterozoic to Mesoproterozoic Fraser-Albany orogen. These rocks are adjacent to the southern margin of the Yilgarn carton, occurring in a broad east - west trending band for a distance of approximately 800km along the southern coast of Western Australia.

The Fraser-Albany rocks contain several graphite occurrences and some historical workings which commonly are found within kaolinitic iron-rich zones as observed at the historical Kendenup and Martagalup workings.

## Licence access and Native Title

The Project is serviced by well-established infrastructure being close to the regional centre of Mt Barker and some 45km north of the international Port of Albany.

The Project's licences are located mainly on freehold farmland. Once granted, the exploration licence relates only to subsurface rights. There is a requirement to enter into land access agreements with individual private landowners before DMIRS will grant surface exploration rights. This is a standard requirement and is being progressed through a specialist contractor.

Regarding Native Title, the licences are subject to the Wagyl Kaip and Southern Noongar People's ILUA and as such no exploration is able to be undertaken until a heritage agreement has been entered into by the parties and heritage surveys (as applicable) are completed. This process is also being progressed through a specialist contractor.

## Growing Battery Metals portfolio

Castle's Battery Metals project holdings include the **Kambale** graphite project, Ghana, where an extensive RC drilling campaign is underway (refer ASX release 11 July 2022 and 14 June 2022) and the **Woodcutters** and **Wilgee Springs** lithium exploration projects.

## References

- (a) *Simpson ES, 1951 Graphite, in Minerals of Western Australia, Government Printer Western Australia, Vol 2: P450-475.*
- (b) *Fetherston J,M 2015 Graphite in Western Australia Geological Survey of Western Australia Mineral Resources Bulletin 26, 84pp*
- (c) *Blanchford, T, 1917 The graphite deposits at Kendenup and surrounding districts, Western Australia Geological Survey, Annual Report 1916, p 12-12.*

Authorised for release to ASX by the Board of Castle Minerals Limited:

### Stephen Stone

Managing Director

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## PREVIOUSLY REPORTED INFORMATION RELATING TO THIS RELEASE

Additional details, where applicable, can be found in the releases referenced in this release and/or in the following releases lodged by the Company with the ASX:

Headline	Date
Kendenup Graphite Project Extended	26 Apr 2022
Kendenup Graphite Project's Martagalup Licence Granted	7 Feb 2022
Kendenup Graphite Project Acquired	24 Nov 2021

## About Castle Minerals Limited

Castle Minerals Limited is an Australian Securities Exchange (ASX: CDT) listed and Perth, Western Australia headquartered company with interests in several projects in Western Australia and Ghana that are prospective for battery metals (lithium and graphite), base metals and gold.



The **Earaheedy Basin** project encompasses terrane prospective for base and precious metals in the Earahedy and Yerrida basins base metals provinces. The project comprises the **Withnell, Terra Rossa** and **Tableland** sub-projects. The Withnell granted licence is adjacent to the evolving Chinook-Magazine zinc-lead project of Rumble Resources Ltd (ASX: RTR) and north of the Strickland Metals Limited (ASX: STK) Iroquois prospect. The four Terra Rossa licences (three granted, one application) are east of the Thaduna copper deposits.

The **Beasley Creek** project lies on the northern flanks of the Rocklea Dome in the southern Pilbara. The strategy is to define orogenic-style, structurally controlled gold targets within the various Archean sequences. Lithium anomalism is also being followed-up.

The **Success Dome** project lies in the Ashburton structural corridor and is located midway between the Paulsen's and Ashburton gold deposits. It is prospective for gold and base metals.

The **Polelle** project (E51/1843, 162.5km<sup>2</sup>), 25km south of Meekatharra and 7km southeast of the operating Bluebird Mine, hosts a mainly obscured and minimally explored greenstone belt. The belt is comprised of a combination of prospective lithological units and major structural features including the Albury Heath shear which hosts the Albury Heath deposit immediately adjacent to the east boundary of Castle's licence.

At the **Wanganui** project (E51/1703, 18.4km<sup>2</sup>), 33km south-west of the active Meekatharra mining centre and 15km south-west of the operating Bluebird gold mine, the opportunity is to test for down-plunge and along strike extensions to the existing Main Lode North and South deposits, as well as for other similar targets.

The **Wilgee Springs** project (ELA70/5880, 120km<sup>2</sup>), along strike from and within the same metamorphic belt as the World-Class Greenbushes lithium mine, 25km to the south in Western Australia's South-Western region, provides an opportunity to explore using the latest geochemical and geophysical techniques for spodumene bearing pegmatites beneath a lateritic cover that has previously hampered exploration.

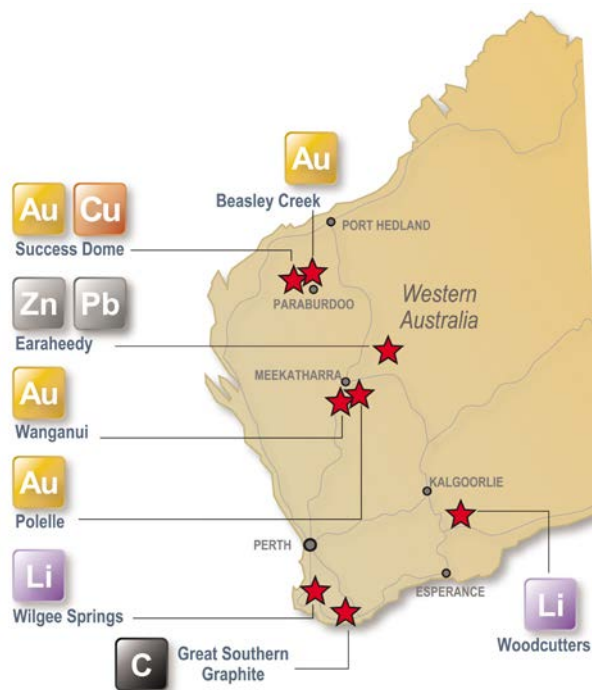
The **Woodcutters** project (ELA15/1847/1847, 242km<sup>2</sup>) is prospective for lithium bearing pegmatites, 25km southeast of the Bald Hill lithium mine in the Bald Hill pegmatite field region and 25km northwest of the Buldania lithium deposit.

The **Great Southern Graphite** project (EL70/5514/5963) comprises two granted licences encompassing the historical **Kendenup** graphite workings and the adjacent **Martagalup** graphite occurrences and one application (ELA70/6116) covering a graphite occurrence at **Mt. Barrow**.

In **Ghana, West Africa**, Castle has a substantial and contiguous tenure position in the country's Upper West region. Ghana has a long history of gold exploration and mining with several world-class gold mining operations owned by Tier 1 mining companies. Castle's Ghana licence holdings encompass large tracts of highly prospective Birimian geological terrane, the host to many of West Africa's and Ghana's multi-million-ounce gold mines. The project area is also host to the open-ended **Kambale** graphite project for which test work on near-surface samples produced a 96.4% total carbon fine flake graphite concentrate.

Castle retains a **4% net smelter precious metal royalty** over the adjacent Julie West licence, a key component of Azumah Resources Limited's Wa Gold Project.

The **Kambale graphite deposit** is at an early stage in its evaluation with little known about how extensive the deposit is or how the graphite quality varies within it. Drilling and preliminary test work has been undertaken on an easily accessible area which may or may not be representative of the broader deposit once that is known. A fine flake size concentrate of a potentially commercially acceptable grade at a reasonably high recovery was produced. Definitive test work on fresh material and material from other parts of the deposit has yet to be undertaken.



**Cautionary Statement**

All of Castle’s projects in Australia are considered to be of grass roots or of relatively early-stage exploration status. There has been insufficient exploration to define a Mineral Resource. No Competent Person has done sufficient work in accordance with JORC Code 2012 to conclusively determine or to estimate in what quantities gold or other minerals are present. It is possible that following further evaluation and/or exploration work that the confidence in the information used to identify areas of interest may be reduced when reported under JORC Code 2012.

**Forward Looking Statement**

Statements regarding Castle’s plans, forecasts and projections with respect to its mineral properties and programs are forward-looking statements. There can be no assurance that Castle’s plans for development of its mineral properties will proceed. There can be no assurance that Castle will be able to confirm the presence of Mineral Resources or Ore Reserves, that any mineralisation will prove to be economic or that a mine will be successfully developed on any of Castle’s mineral properties. The performance of Castle may be influenced by a number of factors which are outside the control of the Company, its Directors, staff or contractors.



**Competent Persons Statement**

The scientific and technical information in this Report that relates to the geology of the deposits and exploration results is based on information compiled by Mr Stephen Stone, who is Managing Director of Castle Minerals Limited. Mr Stone is a Member of the Australian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’. Mr Stone is the Qualified Person overseeing Castle’s exploration projects and has reviewed and approved the disclosure of all scientific or technical information contained in this announcement that relates to the geology of the deposits and exploration.

**Great Southern Graphite Project Ground EM survey - July 2022**

**Appendix: JORC Code 2012 Edition – Table 1**

**Section 1: Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Certified Person 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 down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	Ground electromagnetic surveying is an industry standard technique. The technique is applicable for graphite exploration due to the high electrical conductivity of graphite.
	Include reference to measures taken to ensure sample representivity and the appropriate	Not Applicable

Criteria	JORC Code explanation	Certified Person Commentary
	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 (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3kg was pulverised to produce a 30g 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.	
<b>Drilling techniques</b>	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).	Not Applicable
<b>Drill sample recovery</b>	Method of recording and assessing core and chip sample recoveries and results assessed.	Not Applicable
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Not Applicable
	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.	Not Applicable
<b>Logging</b>	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.	Not Applicable
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Not Applicable
	The total length and percentage of the relevant intersections logged.	Not Applicable
<b>Sub-sampling techniques and sample preparation</b>	If core, whether cut or sawn and whether quarter, half or all core taken.	Not Applicable
	If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	Not Applicable
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Not Applicable
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Not Applicable
	Measures taken to ensure that the sampling is representative of the insitu material collected, including for instance results for field duplicate/second-half sampling.	Not Applicable
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Not Applicable
<b>Quality of assay data and</b>	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Not Applicable

Criteria	JORC Code explanation	Certified Person Commentary
<b>laboratory tests</b>	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.	Used a Loupe EM system, a portable and mobile time domain EM system (TEM) that utilises a transmitter and receiver units housed within backpacks with a small horizontal loop protruding from the back of the transmitter unit. The Loupe receiver comprises a three-component coil sensor with 100khz bandwidth. Positioning is by an in built RPK GPS and real time processing is carried out during the survey to check on errant or anomalous results to assure quality control. The units are tethered by cable and person carrying the transmitter walks approximately 20m ahead of the person with the receiver. The data collected is semi continuous along lines and lines were spaced 100m apart.  During post processing channels 10, 12 and 15 were used to determine near surface conductors.
	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.	Operators noted any anthropomorphic activity that could affect the readings.
<b>Verification of sampling and assaying</b>	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.	Data entry was carried out continuously and digitally by on board processing from the receiver unit.
	Discuss any adjustment to assay data.	No editing has been done to Contractor-supplied data.
<b>Location of data points</b>	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.	Data locations are supplied in GDA94 datum, MGA Zone 50 projection.
	Quality and adequacy of topographic control.	Not Applicable
<b>Data spacing and distribution</b>	Data spacing for reporting of Exploration Results.	Readings were collected continuously along the lines. Line spacing was 100m.
	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.	Not Applicable
<b>Orientation of data in relation to geological structure</b>	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	The EM lines were orientated perpendicular to the strike of the graphite mineralisation at 100m line spacing, which is considered adequate for shear hosted graphite mineralisation.
	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.	The EM lines were orientated perpendicular to the strike of the local stratigraphy
<b>Sample security</b>	The measures taken to ensure sample security.	Data collected in the field was sent electronically to the company's service provider and checked for quality and accuracy. Local company representatives were on site to check on the work
<b>Audits or reviews</b>	The results of any audits or reviews of sampling techniques and data.	



**Section 2: Reporting of Exploration Results**

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Certified Person Commentary</b>
<b>Mineral tenement and land tenure status</b>	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.	<p>The work was completed on exploration tenements E70/5514 and E70/5963, which have been granted and are in good standing with DMIRS</p> <p>Registered tenement holder Castle Minerals Ltd has a 100% interest in both licenses.</p> <p>A large percentage of the tenement area is occupied freehold land. Areas where the EM survey was carried out are under a registered agreement with the relevant land owners.</p>
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	The tenement is in good standing.
<b>Exploration done by other parties</b>	Acknowledgment and appraisal of exploration by other parties.	<p>Graphite deposits were identified in the Kendenup and Martagalup areas since 1875. In 1903 high grade graphite zones were intersected underground at Kendenup and a small mine was developed in 1916 to at least 15m depth. The mine was closed down but had located high grade graphite (up to 80.5% TGC adjacent to a quartzite horizon. No further exploration work for graphite was carried out since the closer of the mine.</p> <p>In 2014 Windward Resources undertook exploration for nickel mineralisation associated with ultramafic rocks. It drilled two holes targeting a strong EM conductor anomaly. Both holes intersected horizons of graphite but no nickel sulphides. The graphite explained the anomaly and the drilling stopped. The graphite horizon was not assayed.</p>
<b>Geology</b>	Deposit type, geological setting and style of mineralisation.	The Kendenup/Martagalup area lies within the northern Biranup Zone of the Paleoproterozoic to Mesoproterozoic Albany - Fraser Orogen. The rocks are mainly quartzo-feldspathic gneiss, granite and layered basic intrusions. Numerous graphite deposits have been recorded throughout the area and the graphite is found within kaolinitic iron rich material thought to have been derived from the weathered metamorphic rocks.
<b>Drill hole Information</b>	<p>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:</p> <ul style="list-style-type: none"> <li>o easting and northing of the drill hole collar</li> <li>o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>o dip and azimuth of the hole</li> <li>o down hole length and interception depth</li> <li>o hole length.</li> </ul>	No drill data released
	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.	Not applicable
<b>Data aggregation methods</b>	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	Not applicable

Criteria	JORC Code explanation	Certified Person Commentary
	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.	Not applicable
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	Not applicable
<b>Relationship between mineralisation widths and intercept lengths</b>	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.	Not applicable
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Not applicable
<b>Diagrams</b>	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.	Appropriate maps are provided in the body of the report
<b>Balanced reporting</b>	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.	Not applicable
<b>Other substantive exploration data</b>	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.	All substantive data has been released
<b>Further work</b>	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	The geophysical survey will be used to plan further on ground and aerial exploration programs. Further ground-based geophysics will be carried out, likely on completion of an aerial EM survey to locate regional mineralised trends.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Suitable plans included in this release