

## ASX Release

July 21, 2020

 Renascor Resources Ltd  
 ABN 90 135 531 341

## Head Office

 36 North Terrace  
 Kent Town, SA 5067  
 Australia

## CONTACT

T: +61 8 8363 6989

 info@renascor.com.au  
 www.renascor.com.au

## ASX CODE

RNU

 Developing  
 Australia's Largest  
 Graphite Deposit


## Siviour Now the Largest Reported Reserve of Graphite Outside of Africa

### Highlights

- **Updated Mineral Ore Reserve estimate for Renascor's 100%-owned Siviour Graphite Project in South Australia confirms it as the largest reported total Ore Reserve of graphite outside of Africa, and the second largest reported Proven Reserve of graphite in the world<sup>1</sup>**
- **Updated Ore Reserve estimate for the Siviour Project includes:**
  - **Proven Reserves of 15.8Mt at 8.4% total graphitic carbon (TGC) for 1.3Mt of contained graphite**
  - **Probable Reserves of 35.8Mt at 6.9% TGC for 2.5Mt of contained graphite**
  - **Total Reserves of 51.5Mt at 7.4% TGC for 3.8Mt of contained graphite**
- **The upgraded Ore Reserve provides additional confidence in the size and quality of the Siviour deposit as a consistent source of high-quality graphite supporting a mine life of 40+ years**
- **The results further support ongoing offtake and finance discussions for Renascor's integrated mine and battery anode material project**

Renascor Resources (ASX: RNU) is pleased to announce an upgraded JORC Ore Reserve estimate for its 100%-owned Siviour Graphite Project in South Australia.

The expanded Ore Reserve estimate is 51.5Mt at 7.4% TGC for 3.8Mt of contained graphite, including a Proven Reserve of 15.8Mt at 8.4% TGC for 1.3Mt of contained graphite. This makes Siviour the largest reported estimate of total Ore Reserves of graphite outside of Africa, and the second largest reported Proven Reserve estimate of graphite in the world.<sup>2</sup>

Commenting on the Ore Reserve estimate, Managing Director David Christensen stated:

*"These results continue important progress in Siviour's development, including our recently completed Battery Anode Material Study that confirms Siviour can produce Purified Spherical Graphite at amongst the lowest cost of any graphite project in the world. Recent independent purification tests have further advanced Siviour by validating our purification circuit, which relies on an environmentally-friendly caustic roast technique."*

*The upgraded Ore Reserve announced today, and in particular, the significant Proven Reserve, highlights the unique potential of Siviour to become a source of consistent, low cost, high quality graphite to service increasing demand for lithium-ion battery anodes."*

*The upgrade in Ore Reserves adds further confidence that Siviour will be able to consistently achieve the quality necessary to produce Purified Spherical Graphite for efficient use by anode manufacturers."*

*We are progressing well on our objective of securing high quality offtake commitments to support Siviour's financing and development, and we look forward to using today's results to support these efforts."*

## ASX Release

July 21, 2020

 Renascor Resources Ltd  
 ABN 90 135 531 341

## Head Office

 36 North Terrace  
 Kent Town, SA 5067  
 Australia

## CONTACT

T: +61 8 8363 6989

 info@renascor.com.au  
 www.renascor.com.au

## ASX CODE

RNU

 Developing  
 Australia's Largest  
 Graphite Deposit


## Ore Reserve

The Siviour Ore Reserve was prepared by independent mining consultancy Optima Consulting and Contracting Pty Ltd based on a Mineral Resource that was announced in April 2019.<sup>3</sup> The Siviour Definitive Feasibility Study<sup>4</sup> (DFS) has been used as the basis to estimate Ore Reserves for the project in accordance with the JORC Code 2012.

The Ore Reserve estimate for Siviour is summarized below in Table 1.

Reserve Category	Ore (Mt)	TGC (%)	Contained Graphite (Mt)
Proven	15.8	8.4%	1.3
Probable	35.8	6.9%	2.5
<b>Total</b>	<b>51.5</b>	<b>7.4%</b>	<b>3.8</b>

Table 1. Siviour Ore Reserve (July 2020)<sup>5</sup>

The Mineral Resource estimate was prepared by independent mining consultants Optiro Pty Ltd in accordance with the 2012 JORC Code and is summarized below in Table 2.

Resource Category	Ore (Mt)	TGC (%)	Contained Graphite (Mt)
Measured	15.8	8.8%	1.4
Indicated	39.5	7.2%	2.8
Inferred	32.1	7.2%	2.6
<b>Total</b>	<b>87.4</b>	<b>7.5%</b>	<b>6.6</b>

Table 2. Siviour Mineral Resource estimate as of April 2019 reported above a cut-off grade of 2.3% TGC<sup>6</sup>

Additional details of the material assumptions are set out below and in Appendix 1 (JORC Table 1).

The Ore Reserve was estimated from the Mineral Resource after consideration of the level of confidence in the Mineral Resource and taking into account material and relevant modifying factors.

The Ore Reserve is based on Measured and Indicated Resources only. No Inferred Mineral Resources have been included in the Ore Reserve.

## ASX Release

July 21, 2020

 Renascor Resources Ltd  
 ABN 90 135 531 341

## Head Office

 36 North Terrace  
 Kent Town, SA 5067  
 Australia

## CONTACT

T: +61 8 8363 6989

 info@renascor.com.au  
 www.renascor.com.au

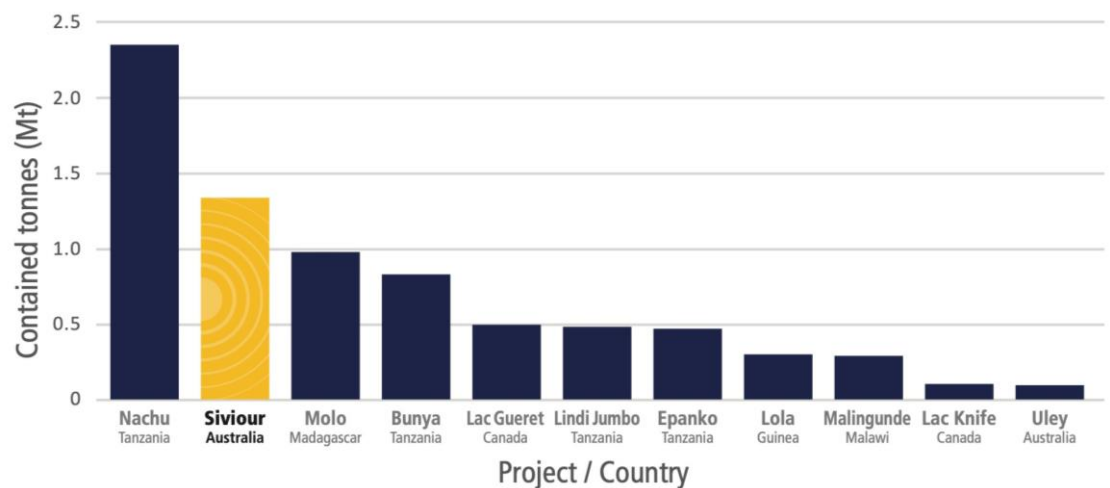
## ASX CODE

RNU

 Developing  
 Australia's Largest  
 Graphite Deposit

## Siviour in comparison to other graphite Ore Reserves

As shown below in Figure 1 and Table 3 (Proven Reserve estimates) and Table 4 (Total Ore Reserve estimates), Siviour has a reported Ore Reserve estimate that is the largest outside of Africa, with a reported Proven Ore Reserve estimate that is the second largest globally.

Figure 1. Globally Reported Proven Ore Reserve estimates (July 2020)<sup>7</sup>

Proven Reserve estimates				
Project	Country	Ore (Mt)	TGC <sup>8</sup> Grade (%)	Contained Tonnes (Mt)
Nachu	Tanzania	50.5	4.6	2.32
<b>Siviour</b>	<b>Australia</b>	<b>15.8</b>	<b>8.4</b>	<b>1.33</b>
Molo	Madagascar	14.2	7.0	0.99
Bunyu	Tanzania	19.3	4.3	0.83
Lac Gueret	Canada	2.0	25.1	0.50
Lindi Jumbo	Tanzania	2.5	19.3	0.49
Epanko	Tanzania	5.7	8.4	0.48
Lola	Guinea	6.7	4.1	0.30
Malingunde	Malawi	3.1	9.5	0.29
Lac Knife	Canada	0.4	23.6	0.10
Uley	Australia	0.8	11.7	0.09

Table 3. Globally Reported Proven Graphite Reserve estimates (July 2020)<sup>9</sup>



## ASX Release

July 21, 2020

 Renascor Resources Ltd  
 ABN 90 135 531 341

## Head Office

 36 North Terrace  
 Kent Town, SA 5067  
 Australia

## CONTACT

T: +61 8 8363 6989

 info@renascor.com.au  
 www.renascor.com.au

## ASX CODE

RNU

 Developing  
 Australia's Largest  
 Graphite Deposit


Total Ore Reserve estimates				
Project	Country	Tonnes (Mt)	TGC <sup>10</sup> Grade (%)	Contained Tonnes (Mt)
Balama	Mozambique	107.5	15.7	16.9
Mahenge	Tanzania	69.6	8.5	6.0
Bunyu	Tanzania	127.4	4.4	5.6
Montepuez	Mozambique	42.2	9.3	3.9
<b>Siviour</b>	<b>Australia</b>	<b>51.5</b>	<b>7.4</b>	<b>3.8</b>
Nachu	Tanzania	76.3	4.8	3.6
Metawinie	Canada	59.8	4.4	2.6
Lola	Guinea	42.0	4.2	1.8
Molo	Madagascar	22.4	7.0	1.6
Ancuabe	Mozambique	24.9	6.2	1.5
Lac Gueret	Canada	4.7	27.8	1.3
Lac Knife	Canada	7.9	15.1	1.2
Lindi Jumbo	Tanzania	5.5	17.9	1.0

Table 4. Globally Reported total Ore Reserve estimates (July 2020)<sup>11</sup>

## ASX Listing Rule 5.9.1

Pursuant to ASX Listing Rule 5.9.1, and in addition to the information contained elsewhere in this release and in Appendix 1, Renascor provides the following summary:

**Material assumptions.** The Ore Reserves are based on key modifying factors that include analysis, designs, schedules and cost estimates of a DFS that describes the development of the Siviour Graphite Project over a 40-year mine life. Material assumptions of the DFS include:

- Metallurgical testwork has been completed by reputable and experienced laboratories. This testwork is described in this document and supports modifying factors applied in the Ore Reserve estimate.
- The mining process has been based on Measured and Indicated Mineral Resources reported in accordance with the JORC code, detailed mine designs, specifications from a geotechnical study and mining equipment determined from experienced engineers.
- The processing plant design has been developed by experienced design engineers to support the flowsheet and the predicted recovery, throughput and production estimates.
- The infrastructure requirements have been defined by specialist engineers.
- The detailed designs discussed above have been used as the basis for capital and operating costs estimates derived from first principles, estimates and vendor quotes.

**ASX Release**

July 21, 2020

Renascor Resources Ltd  
ABN 90 135 531 341**Head Office**36 North Terrace  
Kent Town, SA 5067  
Australia**CONTACT**

T: +61 8 8363 6989

info@renascor.com.au  
www.renascor.com.au**ASX CODE**

RNU

**Developing  
Australia's Largest  
Graphite Deposit**


**Classification criteria.** The Ore Reserves estimate comprises Measured and Indicated Mineral Resources only. The DFS is based upon some Inferred Resources<sup>12</sup> which are mined incidentally with the Measured and Indicated Resources. Over the 26-year mining period, approximately 25% of the material mined is within the Measured Resource category, approximately 58% is within the Indicated Resource category, and approximately 17% is within the Inferred Resources category.

**Mining method.** The mining method used is conventional truck and excavator mining with drill and blast for fresh, partially weathered rock and all ore. Alluvium and weathered rock is assumed to be free dig with some minor ripping expected in weathered rock. This is supported by drill core samples and the geotechnical rock strength analysis in the DFS. This mining method suits the thick flat lying shallow nature of mineralization and results in a low stripping ratio of around 1.9 over the life of mine. Other bulk mining methods were assessed, with truck and excavator conventional mining determined to be the most suitable mining method. Overall ore loss is approximately 2% and mining dilution is approximately 6%.

**Processing method.** The metallurgical process is to crush, grind, float, regrind and refloat, which is common for this style of mineralization. Test work on composite samples and ore variability samples indicate acceptable grade and recovery of graphite in final concentrate with no deleterious elements.

**Quality parameters.** Cut-off grades were estimated for each Metcode (quality of ore) with a marginal cut-off grade applied to determine ore or waste. Ore was classified as either low grade (**LG**) or run-of-mine (**ROM**) with the cut-off grade for ROM set at 7.3% TGC for all Metcodes. Cut-off grade values are summarised in Table 5.

Metcode	1 (high quality)	2 (average quality)	3 and 0 (low quality)
ROM cut-off grade	7.3% TGC	7.3% TGC	7.3% TGC
Low Grade cut-off grade	2.7% TGC	2.8% TGC	3.2% TGC
Breakeven cut-off grade	1.8% TGC	2.0% TGC	2.2% TGC

Table 5. Cut-off grades

**Estimation methodology.** Graphite price is based on flake size and purity. The flake size ranges for the Siviour project are based on metallurgical test work to calculate the amount of recovered graphite by flake size range. This enables the calculation of revenue over a basket price in US\$ dollars. Renascor sourced the basket price from Benchmark Mineral Intelligence.

**Material modifying factors.** The Siviour Graphite Project is located within mining licenses granted by the South Australian Department of Energy and Mining. Background studies are in progress at and around the project site, and no significant environmental impacts are expected. The vast majority of acid rock drainage tests so far are non-acid forming. Waste rock from mining operations will be placed into the pit and in a combined tailings and waste rock facility. There are currently three other graphite projects with approved mining leases in the region.

#### ASX Release

July 21, 2020

Renascor Resources Ltd  
ABN 90 135 531 341

#### Head Office

36 North Terrace  
Kent Town, SA 5067  
Australia

#### CONTACT

T: +61 8 8363 6989

info@renascor.com.au  
www.renascor.com.au

#### ASX CODE

RNU

#### Developing Australia's Largest Graphite Deposit



### Next Steps

Renascor intends to continue the development of Siviour, with a focus on the integrated mine and battery anode material operation. Planned upcoming work programs include:

- Ongoing offtake and finance discussions with potential end-users of Siviour graphite products;
- Production of additional customer samples of Siviour Purified Spherical Graphite (PSG);
- Advanced mineral processing tests, including optimisation of Renascor's purification circuit for producing PSG and production of other high value-added products;
- Advanced battery testing using Siviour PSG samples; and
- Completion of permitting and approvals required to commence production at Siviour.

### Bibliography

Renascor ASX announcement dated 30 April 2019, "*High-Grade Measured Resource in Upgraded JORC Resource*".

Renascor ASX announcement dated 11 November 2019, "*Siviour Definitive Feasibility Study*".

Renascor confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. Renascor confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

This report may contain forward-looking statements. Any forward-looking statements reflect management's current beliefs based on information currently available to management and are based on what management believes to be reasonable assumptions. It should be noted that a number of factors could cause actual results, or expectations to differ materially from the results expressed or implied in the forward-looking statements.

This ASX announcement has been approved by Renascor's Board of Directors and authorised for release by Renascor's Managing Director, David Christensen.

### Competent Person Statements

The information in this document that relates to exploration activities and exploration results is based on information compiled and reviewed by Mr G.W. McConachy who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr McConachy is a director of the Company. Mr McConachy has sufficient experience relevant to the style of mineralisation and type of deposits being considered to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012 Edition). Mr McConachy consents to the inclusion in the report of the matters based on the reviewed information in the form and context in which



**ASX Release**

July 21, 2020

Renascor Resources Ltd  
ABN 90 135 531 341**Head Office**36 North Terrace  
Kent Town, SA 5067  
Australia**CONTACT**

T: +61 8 8363 6989

info@renascor.com.au  
www.renascor.com.au**ASX CODE**

RNU

**Developing  
Australia's Largest  
Graphite Deposit**


it appears.

The information in this document that relates to Mineral Resources is based upon information compiled by Mrs Christine Standing who is a Member of the Australasian Institute of Mining and a Member of the Australian Institute of Geoscientists. Mrs Standing is an employee of Optiro Pty Ltd and has sufficient experience relevant to the style of mineralisation, the type of deposit under consideration and to the activity 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. Mrs Standing consents to the inclusion in the report of a summary based upon her information in the form and context in which it appears.

The information in this document that relates to Ore Reserves is based on information compiled and reviewed by Mr Ben Brown, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Brown is an employee of Optima Consulting and Contracting Pty Ltd and a consultant to the Company. Mr Brown has sufficient experience relevant to the type of deposit under consideration to qualify as a Competent Person as defined by the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012 Edition). Mr Brown consents to the inclusion in the report of the matters based on the reviewed information in the form and context in which it appears.

**For further information, please contact:**
**David Christensen**

Managing Director

+61 8 8363 6989

[info@renascor.com.au](mailto:info@renascor.com.au)

<sup>1</sup> See Figure 1 and Tables 3 and 4.

<sup>2</sup> See Figure 1 and Tables 3 and 4.

<sup>3</sup> See Renascor ASX announcement dated on 30 April 2019.

<sup>4</sup> See Renascor ASX announcement dated on 11 November 2019.

<sup>5</sup> Columns may not total exactly due to rounding.

<sup>6</sup> Columns may not total exactly due to rounding.

<sup>7</sup> Source: public company reports. Does not include graphite deposits that do not publicly report data on main stock exchanges in Australia, Canada, the United Kingdom and the United States.

<sup>8</sup> Grades are reported as TGC, except for Nachu, Molo, Lac Gueret, Lola and Lac Knife, which report carbon.

<sup>9</sup> Source: public company reports. Does not include graphite deposits that do not publicly report data on main stock exchanges in Australia, Canada, the United Kingdom and the United States.

<sup>10</sup> Grades are reported as TGC, except for Nachu, Metawinie, Molo, Lola, Lac Gueret and Lac Knife, which report carbon.

<sup>11</sup> Source: public company reports. Does not include graphite deposits that do not publicly report data on main stock exchanges in Australia, Canada, the United Kingdom and the United States.

<sup>12</sup> There is a low level of geological confidence associated with Inferred Mineral Resources, and there is no certainty that further exploration work will result in the upgrading of an Inferred Resource to an Indicated Resource or that a portion of the production target that includes Inferred Resources will be realised.

## Appendix 1

### JORC Table 1

#### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> </ul>	<p><b>1. Reverse circulation drilling</b></p> <ul style="list-style-type: none"> <li>RC drill samples were collected at one-metre intervals.</li> <li>All visually graphitic intervals were submitted for analysis. Approximately 50% of samples were not submitted for assay due to the visual non-mineralised nature of the material collected.</li> <li>Duplicate and standards analysis were completed.</li> <li>All samples were sent to Bureau Veritas laboratory in Adelaide for preparation and for total graphitic carbon (TGC) analyses.</li> <li>All samples were pulverised using an LM5 mill, with nominally 90% passing 75µm.</li> <li>Sampling was guided by Renascor Resources Limited's protocols and QAQC procedures.</li> </ul> <p><b>2. Diamond drilling</b></p> <ul style="list-style-type: none"> <li>Drill samples were collected based on geology, varying in thickness from 0.05 m to 3.6 m intervals.</li> <li>Core samples were quarter split Triple Tube HQ3 core and sent for laboratory geochemical analysis at Bureau Veritas, South Australia.</li> <li>Duplicate samples in the 2018 programme were collected after each 25 samples and standards were inserted into the sample stream at the end of every hole.</li> <li>Sampling was guided by Renascor Resources Limited's protocols and QAQC procedures.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>For 2014 to 2017, RC drilling by Coughlan Drilling used 140 mm face sampling hammers, except for 24 holes drilled by McLeod Drilling using 85mm diameter hammer. For 2018, RC drilling used 4 3/4" (120mm) RC hammer and was undertaken by Bullion Drilling. Some holes were started with aircore and switched to RC at the top of the mineralised horizon.</li> <li>Diamond drilling was undertaken by a drilling contractor (Coughlan Drilling in 2016 and MJ Drilling in 2018) with a using triple tube with a HQ3 drill bit (61mm core diameter). Core was orientated down hole using a Reflex digital orientation system.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> </ul>	<ul style="list-style-type: none"> <li>One-metre drill chip samples, weighing approximately 3 kg were collected throughout the RC drill programmes in sequentially numbered bags. Samples were generally collected from the 12.5% riffle splitter attached to the drill rig however in some instances samples were collected by spear technique.</li> <li>Recovery was assessed by the site geologist and deemed</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <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>acceptable for resource estimation, given the friable nature of the mineralisation.</p> <ul style="list-style-type: none"> <li>Every interval drilled is represented in an industry standard chip tray that provides a check for sample continuity down hole.</li> <li>Diamond core recovery was routinely recorded and within the reported mineralised zones. The core recovery averaged 88% for entire holes.</li> </ul>
<b>Logging</b>	<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 Resource estimation, mining studies and metallurgical studies.</i></li> <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>	<ul style="list-style-type: none"> <li>All drill samples (100%) were geologically logged by experienced geologists at the drill rig. The geological logs were checked by re-logging of the chip trays and drill core in Adelaide.</li> <li>Primary data was captured into spreadsheet format by the supervising geologist, and subsequently loaded into the Renascor Resources Limited's database.</li> <li>No adjustments have been made to any assay data.</li> <li>The density data collected by Renascor used the Archimedes Principle water displacement device of core samples on metre intervals down the hole. Check analysis were made by Bureau Veritas, South Australia.</li> <li>Core was orientated using the Reflex orientation tool, marked into 1 m intervals, core recovery and geotechnical data – Rock Quality Designation were recorded.</li> <li>Core was photographed, both dry and wet.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <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><b>1. RC drillholes</b></p> <ul style="list-style-type: none"> <li>All samples were marked with unique sequential numbering as a check against sample loss or omission.</li> <li>At the Bureau Veritas laboratory sample preparation involved the original sample being dried at 105° for up to 24 hours on submission to laboratory.</li> <li>Sample is split to less than 3 kg through linear splitter and excess retained.</li> <li>Pulverising was completed using LM5, with nominally 90% passing 75 µm in preparation for analysis using the Bureau Veritas network.</li> </ul> <p><b>2. Diamond drillholes</b></p> <ul style="list-style-type: none"> <li>HQ3 diameter core is cut in half to preserve the orientation mark.</li> <li>Graphite intervals are sampled using ¼ HQ3 diameter core.</li> <li>Every twenty-five samples a duplicate sample is collected using ¼ HQ3 diameter core and submitted for check analysis.</li> <li>All the samples are marked with unique sequential numbering as a check against sample loss or omission.</li> <li>Samples were crushed and pulverised using LM5, with nominally 90% passing 75 µm in preparation for analysis using the Bureau Veritas network.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying</i></li> </ul>	<ul style="list-style-type: none"> <li>All samples were sent to Bureau Veritas laboratory in Adelaide for preparation and for Total Graphitic Carbon</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>and laboratory procedures used and whether the technique is considered partial or total.</i></p> <ul style="list-style-type: none"> <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>(TGC) analyses and the DDH core for additional multi element analysis using a mixed acid digest.</p> <ul style="list-style-type: none"> <li>For TGC analysis a portion of the sample is dissolved in weak acid to liberate carbonate carbon. The residue is then dried at 420°C driving off organic carbon and then analysed by its sulphur-carbon analyser to give Total Graphitic Carbon (TGC).</li> <li>Bureau Veritas Minerals has adopted the ISO 9001 Quality Management Systems. All Bureau Veritas laboratories work to documented procedures in accordance with this standard.</li> <li>QAQC procedures for Renascor's 2017 and 2018 drilling programmes included the insertion of standard (certified reference material) samples and field duplicates at the drill site.</li> <li>No QAQC data was included with the 2014 drilling programme (4% of the total assay data). For the 2016 drilling programme (30% of the total assay data) standards were submitted</li> <li>QAQC procedures for Renascor's 2017 and 2018 drilling programmes included the insertion of standard (certified reference material) samples and field duplicates at the drill site.</li> <li>For the 2018 drilling programme blank samples were inserted at the drill site and pulp duplicates were re-submitted to the primary laboratory (Bureau Veritas).</li> <li>52 samples that were analysed by Bureau Veritas were also analysed by ALS.</li> <li>Analysis of the standard samples indicates an acceptable level of accuracy. Analysis of the blank samples indicates low levels of contamination and/or sample mix-ups. The 2017 and 2018 data is considered to have acceptable accuracy and precision for the Mineral Resource estimate. Measured Resources were defined only within areas that were infill drilled during 2018.</li> </ul>
<b>Verification of sampling and assaying</b>	<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> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>Primary data was captured into spreadsheet format by the supervising geologist, and subsequently loaded into the Renascor Resources Limited's database.</li> <li>There are four diamond drillholes that twinned earlier RC holes. One set (where the samples are less than 1 m apart) were used for duplicate sample analysis. Analysis of the drilling methods indicates that there is no consistent bias between the grade and thickness of mineralisation.</li> <li>No adjustments have been applied to the results.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li><i>Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys),</i></li> </ul>	<ul style="list-style-type: none"> <li>All drillholes were pegged using a hand-held GPS. Upon completion, all 2014, 2016 and 2017 RC and DD hole collar locations were picked up using a Trimble DGPS.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>trenches, mine workings and other locations used in Mineral Resource estimation.</i> <ul style="list-style-type: none"> <li>• Specification of the grid system used.</li> <li>• Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>• The 2018 drillholes were surveyed by a licenced surveyor.</li> <li>• The collar coordinates were entered into the drillhole database.</li> <li>• The degree of accuracy of drillhole collar location and RL is estimated to be within 0.1 m for DGPS and 5 m error level for the hand-held GPS.</li> <li>• The grid system for the project was Geocentric Datum of Australia (GDA) 94, Zone 53.</li> </ul>
<b>Data spacing and distribution</b>	<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>	<ul style="list-style-type: none"> <li>• The drillholes are on a nominal spacing of approximately 50 m by 50 m within the central and southern area of the deposit. Elsewhere the drillholes are on a spacing of 200 to 500 m east-west and are generally 200 m to 400 m north-south with the drillholes at Buckies located 900 m north of the main area of drilling.</li> <li>• Geological interpretation and mineralisation continuity analysis indicates that data spacing is sufficient for definition of a Mineral Resource.</li> <li>• 87% of the samples were taken over a 1 m interval of 1 m.</li> <li>• Diamond drill core sampling was based on geological boundaries with a general maximum limit of 1 m thickness and a minimum of 0.05 m thickness for assay samples.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<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>	<ul style="list-style-type: none"> <li>• Interpretation of the relationship between the drilling orientation and the orientation of key mineralised structures indicates that mineralisation is likely to be perpendicular to strike continuity.</li> <li>• The orientation of drilling is not expected to introduce sampling bias.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>• Unique sample number was retained during the whole process.</li> <li>• Samples were transported by a reputable transport company and sample bags and dispatch notice checked upon receipt at the laboratory.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>• All data collected was subject to internal review.</li> </ul>

#### Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and</b>	<ul style="list-style-type: none"> <li>• Type, reference name/number, location and ownership including</li> </ul>	<ul style="list-style-type: none"> <li>• The Siviour deposit is located within Mineral Lease (ML) 6495 and Exploration Licence (EL5618), held by Ausmin</li> </ul>



Criteria	JORC Code explanation	Commentary
<b>land tenure status</b>	<p><i>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></p> <ul style="list-style-type: none"> <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>Development Pty Ltd (Ausmin). Renascor, through its wholly-owned subsidiary Eyre Peninsula Minerals Pty Ltd (EPM), acquired 100% of Ausmin Development Pty Ltd (Ausmin) and its tenements in 2018.</p> <ul style="list-style-type: none"> <li>The tenements are in good standing.</li> <li>The drilling was carried out on agricultural freehold land.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Several companies have carried out historic exploration over many years, but without any focus on graphite prospectivity. Cameco Ltd, as part of a uranium exploration program, acquired EM data across the tenement in 2006 and 2007. Cameco drilled hole CRD0090, without testing for graphite.</li> <li>During 2014, Eyre Peninsula Minerals Pty Ltd carried graphite-focused exploration and drilled a further six RC holes and one diamond core hole reporting graphite intersections in all holes.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The graphite mineralisation at Siviour is hosted within Meso-Proterozoic metasedimentary rocks sediments of the Hutchison Group.</li> <li>The graphite mineralisation is within a nominally 30 m-thick band of pelitic schist that occurs within a thick calc-silicate sequence.</li> </ul>
<b>Drillhole Information</b>	<ul style="list-style-type: none"> <li><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:</i> <ul style="list-style-type: none"> <li>easting and northing of the drillhole collar</li> <li>elevation or RL (elevation above sea level in metres) of the drillhole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported for the Mineral Resources area.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported for the Mineral Resources area.</li> <li>Metal equivalent values have not been used.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect.</li> </ul>	<ul style="list-style-type: none"> <li>Renascor considered the undulating nature of the mineralisation and all drillholes intersected mineralisation at near perpendicular to the dip orientation of the host lithologies and mineralisation.</li> <li>Exploration results are not being reported for the Mineral Resources area.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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 drillhole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported for the Mineral Resources area.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported for the Mineral Resources area.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration results are not being reported for the Mineral Resources area.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>	<ul style="list-style-type: none"> <li>Additional drilling may be undertaken to follow-up EM anomalies within areas adjacent to the Siviour deposit.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial</li> </ul>	<ul style="list-style-type: none"> <li>Primary data was captured into spreadsheet format by the supervising geologist, and subsequently loaded into the Renascor Resources Limited's database.</li> <li>Additional data validation, by Optiro, included checking for</li> </ul>

Criteria	JORC Code explanation	Commentary
	<i>collection and its use for Mineral Resource estimation purposes.</i> <ul style="list-style-type: none"> <li>• <i>Data validation procedures used.</i></li> </ul>	out of range assay data and overlapping or missing intervals.
<b>Site visits</b>	<ul style="list-style-type: none"> <li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A site visit to the Siviour deposit was undertaken by Optiro (Mr J Froud) during November 2016 to inspect the diamond drilling, sampling and logging and to inspect the drill core.</li> <li>• Mrs C Standing visited the drill sample storage facility in Adelaide in November 2018 to inspect the diamond core and RC chip samples, and to review this with respect to the assay data, geological logging and cross-section interpretations. RC chips and diamond core from three cross-sections was examined.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>• <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i></li> <li>• <i>Nature of the data used and of any assumptions made.</i></li> <li>• <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i></li> <li>• <i>The use of geology in guiding and controlling Mineral Resource estimation.</i></li> <li>• <i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Confidence in the geological interpretation of the deposit is moderate. The spatial extent and geometry of the graphitic horizon is supported by geophysical interpretation (electromagnetic). The geological confidence has been considered for classification of the resource.</li> <li>• Mineralisation hosted within a sequence of micro-gneiss, metasedimentary rocks and schists.</li> <li>• The mineralisation is generally tabular, oriented east-west and forms an undulating surface that dips shallowly to the southwest, in the southern area, and more steeply to the north in the northern area. In the west the strike of the mineralisation has been interpreted, from geophysical data, to swing sharply towards the north and in the east is partially dislocated by a fault zone although, again from geophysical data, is anticipated to extend further to the east to Siviour East and Paxtons.</li> <li>• Geological interpretation was completed on a sectional basis, from which geological surfaces were interpolated for the dominant lithologies and the top and base of the mineralised horizons. These interpretations were used to constrain the grade estimation.</li> <li>• There are no alternative detailed interpretations of geology.</li> <li>• The main mineralisation domains were defined using grade constraints in conjunction with geophysical data. A nominal cut-off grade of 3% TGC was used to define boundaries between the higher-grade mineralised horizons and the and weakly-mineralised or un-mineralised horizons.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The main zone of mineralisation extends over 2.6 km east-west and 1.6 km north-south. The horizontal width ranges from 550 m within the central area, at the Siviour Prospect, to 125 m south of Buckies.</li> <li>• The Mineral Resource has an average thickness of 22 m (range of 0.45 m to 55 m) and the depth to the top of the mineralised horizon ranges from 4 m to 122 m with an average depth of 43 m.</li> <li>• Drilling has closed the deposit to the south: it remains open</li> </ul>



Criteria	JORC Code explanation	Commentary
		to the east, west and north.
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>• The assumptions made regarding recovery of by-products.</li> <li>• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>• Any assumptions behind modelling of selective mining units.</li> <li>• Any assumptions about correlation between variables.</li> <li>• Description of how the geological interpretation was used to control the resource estimates.</li> <li>• Discussion of basis for using or not using grade cutting or capping.</li> <li>• The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.</li> </ul>	<ul style="list-style-type: none"> <li>• Data analysis and estimation was undertaken using Snowden Supervisor and Datamine software.</li> <li>• Drillhole sample data was flagged from interpretations of the top and base of the mineralised horizons and the sequence of micro-gneiss, metasedimentary rocks and schists that contains the graphitic mineralisation.</li> <li>• The main mineralisation domains were defined using grade constraints in conjunction with geological data. A nominal cut-off grade of 3% TGC was used to define boundaries between the higher-grade mineralised horizons and the and weakly-mineralised or un-mineralised horizons.</li> <li>• Sample data was composited to a 1 m downhole length.</li> <li>• Data has a low coefficient of variation. A few high-grade outliers are present and a top-cut grade of 28% TGC was applied to the data within the main mineralised horizon. The top-cut grade was selected by examining histograms, log probability plots, population disintegration.</li> <li>• No assumptions have been made regarding recovery of by-products.</li> <li>• The Mineral Resource was estimated in March 2016, in October 2016 and in March 2017. Classification and validation of the current model against this is consistent with the 2018 infill drilling.</li> <li>• Grade estimation was into parent blocks of 25 mE by 25 mN on 2 m benches. Block size was selected based on kriging neighbourhood analysis.</li> <li>• TGC mineralisation continuity was interpreted from variogram analyses to have a horizontal range of 160 m (north-south) by 115 m to 130 m (east-west).</li> <li>• Drillhole spacing at Siviour where Measured Resources have been defined is at a nominal spacing of 50 m by 50 m.</li> <li>• Inferred mineralisation has been interpreted from an EM anomaly and a line of drilling at Buckies, 900 m along strike to the north.</li> <li>• The maximum extrapolation distance is 50 m along strike and 70 m across strike.</li> <li>• Estimation for TGC was carried out using ordinary kriging at the parent block scale. The search ellipses were oriented within the plane of the mineralisation.</li> <li>• Three estimation passes were used; the first search was based upon the variogram ranges in the three principal directions; the second search was two times the initial search and the third search was four to six times the second search, with reduced sample numbers required for estimation.</li> <li>• Within the main mineralised horizon, approximately 82% of the blocks were estimated in the first search pass, approximately 12% in the second pass and the remaining blocks (6%) were estimated in the third search pass. In total,</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>approximately 53% of the blocks within the Mineral Resource were estimated in the first search pass, approximately 22% in the second pass and the remaining blocks (25%) were estimated in the third search pass.</p> <ul style="list-style-type: none"> <li>Post-processing using localised uniform conditioning was applied to investigate potential selectivity based on a selective mining unit of 5 mE by 5 mN on 1 m benches. This is assumed to represent the greatest selectivity that could be achieved from the anticipated mining unit of 10 m by 10 m on 2 m benches.</li> <li>Inverse distance squared was used to estimate S, Ca, Al, Mg, Na, K, and Fe. The variables were estimated independently. The correlation coefficients for all variables (except Ca and Mg) are poor. The estimation process was controlled by the lithology and for S a hard boundary was used at the base of the oxidation</li> <li>The estimated block model grades were visually validated against the input drillhole data, global statistics on the top-cut and declustered data were compared to the block model estimates and comparisons were carried out against the drillhole data and by northing, easting and elevation slices.</li> <li>No reconciliation data is available.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li><i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>Tonnes have been estimated on a dry basis.</li> <li>Moisture content has not been tested.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li><i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource is reported above a 2.3% TGC cut-off grade to reflect current commodity prices and open pit mining methods.</li> <li>This cut-off grade was determined from technical and economic assessment of the mineralisation by Optima Consulting Pty Ltd.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Planned extraction is by open pit mining.</li> <li>Mining factors such as dilution and ore loss have not been applied.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No metallurgical assumptions have been built into the resource models.</li> <li>The results from metallurgical testwork have been considered for Mineral Resource classification.</li> <li>Mineralogical examination of samples from Siviour indicates that the majority (~85%) of the graphite is interstitial and is expected to be relatively easily liberated during processing to create a graphite concentrate.</li> <li>Metallurgical testwork results demonstrate the ability to produce concentrates with conventional metallurgy techniques that result in a marketable graphite product.</li> <li>Testwork demonstrates low variability of recovery and concentrate grades within the Measured Resource for over a strike length of 1.2 km and an across strike length of 180 m.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No assumptions have been made regarding waste and process residue.</li> <li>Environmental studies have been undertaken for the Project's environmental approval process with Mineral Lease (ML) 6495 granted by South Australian Minister for Energy and Mining April 2019.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Core samples from diamond holes were used to obtain 1,344 bulk density. The measurements are from nine different methodologies (including waxed, wrapped and unwrapped core samples) and/or laboratories and some core samples were measured by several different methods.</li> <li>Some core samples were measured by several different methods. Renascor measured the density of 28 of the core samples, using both waxed and un-waxed methods, and these samples were then sent to Bureau Veritas to check the density data.</li> <li>The final database used for density estimation included results from 1,233 samples. Analysis of this data indicated that there is no relationship with TGC grade or depth.</li> <li>A combination of lithology, mineralisation and oxidation were used to assign the density to each block within the resource model. Within the highly weathered material, density was assigned based on the mineralisation domains and dominant rock types. Within the less weathered material density was assigned by lithology as estimated for each block using a nearest neighbour methodology.</li> <li>Density values assigned to the resource model range from 1.80 t/m<sup>3</sup> to 2.46 t/m<sup>3</sup>, with an average density of 2.16 t/m<sup>3</sup> within the defined resource.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resources have been classified on the basis of confidence in geological and grade continuity and taking into account data quality (including QAQC data and sampling</li> </ul>



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>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).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<p>methods), data density, confidence in estimation of the TGC content (using the modelled grade continuity and conditional bias measures, slope of the regression and kriging efficiency, as criteria) and the continuity of quality from the results and location of mineralogy and metallurgical testwork samples.</p> <ul style="list-style-type: none"> <li>In Optiro's opinion there are reasonable prospects for eventual economic extraction.</li> <li>Measured Resources have been defined only within the main mineralised horizon where it has been tested with the 2018 infill drilling (50 m by 50 m spacing) and has high confidence in the geological interpretation and higher estimation quality.</li> <li>Indicated Mineral Resources have been defined in areas where drill spacing is 200 m by 100 m or less and where grade variance is moderate.</li> <li>Inferred Mineral Resources have been defined in areas where extension of mineralisation is supported by drilling, geology and interpretation of geophysical data.</li> <li>The classification considers all available data and quality of the estimate and reflects the Competent Person's view of the deposit.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>The resource estimate has been peer reviewed by Optiro staff.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The assigned classification of Measured, Indicated and Inferred reflects the Competent Person's assessment of the accuracy and confidence levels in the Mineral Resource estimate.</li> <li>The confidence levels reflect production volumes on an annual basis.</li> </ul>

#### Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)


Criteria	JORC Code explanation	Commentary
<b>Mineral Resource estimate for conversion to Ore Reserves</b>	<ul style="list-style-type: none"> <li>Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.</li> <li>Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore</li> </ul>	<ul style="list-style-type: none"> <li>Measured and Indicated Mineral Resources from the resource model contained in mine designs and scheduled in the Siviour Definitive Feasibility Study (DFS) were converted to Proven and Probable Reserves respectively.</li> <li>Mineral Resources are reported inclusive of the Ore Reserves.</li> </ul>

Criteria	JORC Code explanation	Commentary																
	<i>Reserves.</i>																	
<b>Site visits</b>	<ul style="list-style-type: none"><li>• <i>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</i></li><li>• <i>If no site visits have been undertaken indicate why this is the case.</i></li></ul>	<ul style="list-style-type: none"><li>• The Competent Person, Ben Brown, visited site in December 2018, and has viewed drilling core.</li></ul>																
<b>Study status</b>	<ul style="list-style-type: none"><li>• <i>The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.</i></li><li>• <i>The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.</i></li></ul>	<ul style="list-style-type: none"><li>• Renascor produced a feasibility study as the basis to convert Mineral Resources to Ore Reserves and to provide the basis and confidence to advance the project to execution phase based on the mine plan contained in the feasibility study.</li><li>• The mine plan includes modifying factors and only economically viable mining blocks with a cut-off grade applied are to be processed as ore and included in the Ore Reserves estimate.</li></ul>																
<b>Cut-off parameters</b>	<ul style="list-style-type: none"><li>• <i>The basis of the cut-off grade(s) or quality parameters applied.</i></li></ul>	<ul style="list-style-type: none"><li>• Cut-off grades were estimated for each Metcode (quality of ore) with a marginal cut-off grade applied to determine ore or waste with the input parameters given in the second table below. Two bins were created: low-grade (LG) and run of mine (ROM) with the cut-off grade for ROM set at 7.3% total graphitic carbon (TGC) for all Metcodes based on an iterative approach. Cut-off grade values are summarised in the table below:<table><tr><th>Metcode</th><th>1 (high quality)</th><th>2 (average quality)</th><th>3 and 0 (low quality)</th></tr><tr><td>ROM Cut-off (% TGC)</td><td>7.3%</td><td>7.3%</td><td>7.3%</td></tr><tr><td>LG Cut-off (% TGC)</td><td>2.7%</td><td>2.8%</td><td>3.2%</td></tr><tr><td>Breakeven Cut-off (% TGC)</td><td>1.8%</td><td>2.0%</td><td>2.2%</td></tr></table></li></ul>	Metcode	1 (high quality)	2 (average quality)	3 and 0 (low quality)	ROM Cut-off (% TGC)	7.3%	7.3%	7.3%	LG Cut-off (% TGC)	2.7%	2.8%	3.2%	Breakeven Cut-off (% TGC)	1.8%	2.0%	2.2%
Metcode	1 (high quality)	2 (average quality)	3 and 0 (low quality)															
ROM Cut-off (% TGC)	7.3%	7.3%	7.3%															
LG Cut-off (% TGC)	2.7%	2.8%	3.2%															
Breakeven Cut-off (% TGC)	1.8%	2.0%	2.2%															

Criteria	JORC Code explanation	Commentary																																
		<table><tr><th>Parameter</th><th>Value</th></tr><tr><td>Mill Processing Rate</td><td>1650ktpa</td></tr><tr><td>PCAF</td><td>G&amp;A Cost (\$/t ore) + Maintenance Cost (\$/t ore) + Employees (\$/t ore) + Processing Cost (\$/t ore) + Power Cost (\$/t ore) + (Product Logistics Cost)*TGC*Recovery/ConGrade</td></tr><tr><td>Processing Recovery</td><td>91.00%</td></tr><tr><td>Processing Cost</td><td>\$7.68</td></tr><tr><td>Power Cost</td><td>\$3.47</td></tr><tr><td>Product Logistics</td><td>\$105.90</td></tr><tr><td>G&amp;A Cost</td><td>\$1.12</td></tr><tr><td>Maintenance</td><td>\$1.21</td></tr><tr><td>Employees</td><td>\$3.64</td></tr><tr><td>ConGrade</td><td>95%</td></tr><tr><td>BasketPrice Metcode 1</td><td>\$882</td></tr><tr><td>BasketPrice Metcode 2</td><td>\$802</td></tr><tr><td>BasketPrice Metcode 3</td><td>\$722</td></tr><tr><td>Royalty</td><td>4.50%</td></tr><tr><td>Revenue</td><td>PayableLessRoyalties * BasketPrice * TGC * Recovery/ ConGrade/ ExchangeRate</td></tr></table>	Parameter	Value	Mill Processing Rate	1650ktpa	PCAF	G&A Cost (\$/t ore) + Maintenance Cost (\$/t ore) + Employees (\$/t ore) + Processing Cost (\$/t ore) + Power Cost (\$/t ore) + (Product Logistics Cost)*TGC*Recovery/ConGrade	Processing Recovery	91.00%	Processing Cost	\$7.68	Power Cost	\$3.47	Product Logistics	\$105.90	G&A Cost	\$1.12	Maintenance	\$1.21	Employees	\$3.64	ConGrade	95%	BasketPrice Metcode 1	\$882	BasketPrice Metcode 2	\$802	BasketPrice Metcode 3	\$722	Royalty	4.50%	Revenue	PayableLessRoyalties * BasketPrice * TGC * Recovery/ ConGrade/ ExchangeRate
Parameter	Value																																	
Mill Processing Rate	1650ktpa																																	
PCAF	G&A Cost (\$/t ore) + Maintenance Cost (\$/t ore) + Employees (\$/t ore) + Processing Cost (\$/t ore) + Power Cost (\$/t ore) + (Product Logistics Cost)*TGC*Recovery/ConGrade																																	
Processing Recovery	91.00%																																	
Processing Cost	\$7.68																																	
Power Cost	\$3.47																																	
Product Logistics	\$105.90																																	
G&A Cost	\$1.12																																	
Maintenance	\$1.21																																	
Employees	\$3.64																																	
ConGrade	95%																																	
BasketPrice Metcode 1	\$882																																	
BasketPrice Metcode 2	\$802																																	
BasketPrice Metcode 3	\$722																																	
Royalty	4.50%																																	
Revenue	PayableLessRoyalties * BasketPrice * TGC * Recovery/ ConGrade/ ExchangeRate																																	
Mining factors or assumptions	<ul style="list-style-type: none"><li>The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).</li><li>The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.</li><li>The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling.</li><li>The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).</li><li>The mining dilution factors used.</li><li>The mining recovery factors used.</li><li>Any minimum mining widths used.</li></ul>	<ul style="list-style-type: none"><li>Detailed mine design was used to convert Mineral Resources to Ore Reserves contained in the mine designs.</li><li>Conventional truck and shovel mining is the selected mining method with drill and blast in all lithologies except for alluvial material which is free dig. This method was selected as the result of a materials handling study which was part of the previously completed pre-feasibility study.</li><li>Pit walls were constrained to recommended values based on a Geotechnical assessment by AMC Consultants. Mining assumes that the ground water level is pumped below the bottom level of mining and that pit wall conditions are dry. UCS and metallurgical test data was used to establish drill and blast requirements</li><li>Mining dilution was applied as a dilution skin of 1m below and above the blocks flagged as processing plant feed and blended into these blocks. Dilution on average using this method is 6%</li><li>As part of the dilution process mentioned above recovery is around 97%</li><li>No minimum mining widths was necessary since the footwall contact is that of a tabular generally flat lying orebody that does not “pinch out” into narrow peaks and troughs.</li><li>Inferred Mineral Resources are included in the mining study and make up less than 1% of the processing plant feed in the</li></ul>																																



Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><i>The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.</i></li> <li><i>The infrastructure requirements of the selected mining methods.</i></li> </ul>	<p>first 10 years and do not make up greater than 10% of processing plant feed until year 17 of processing and over average 17% (16% inferred + 1% unclassified waste). With a discount rate of 10%, any economic influence is factored away and does not influence the net present value (NPV) of the project. In order to create practical mine designs, inferred material is incidentally mined. This inferred material in the professional opinion of Optima Consulting could be updated to indicated with as little as 3 reverse circulation (RC) drill holes to confirm grade and the thickness of mineralisation</p> <ul style="list-style-type: none"> <li>The selected mining methods requires the construction of a workshop, wash down bay, crib rooms and offices. Current utilities at the lease boundary are sufficient to support mining associated infrastructure.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.</i></li> <li><i>Whether the metallurgical process is well-tested technology or novel in nature.</i></li> <li><i>The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.</i></li> <li><i>Any assumptions or allowances made for deleterious elements.</i></li> <li><i>The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.</i></li> <li><i>For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</i></li> </ul>	<ul style="list-style-type: none"> <li>The metallurgical process is to crush, grind and float which is common for this style of mineralisation</li> <li>This metallurgical process is commonly used in mine sites the world over.</li> <li>A wide range of metallurgical testwork has been conducted on the Siviour Graphite Deposit over the past three years to establish the processing plant design parameters from crushing all the way through to tailings deposition. Test work has taken place on diamond core samples to bulk sampling on RC holes with the location of drill hole collars with respect to the final pit design given in the diagram below. The diagram below shows test work is representative of the deposit with concentrated test work in zones of the first 10 years of mining. This allowed domaining (Metcode field) of metallurgical properties to be established based on the flake size distribution which is linked to lithology and applied to the resource model. Overall recovery of graphite is flat at around 91% with a concentrate grade of 95% graphitic carbon from laboratory simulation of the processing plant configuration conducted in Australia and the pilot plant test results that were conduction in China. This enabled a flat recovery of 91% graphite to be used with constant concentrate grade of 95% graphite regardless of head grade.</li> </ul>

Criteria	JORC Code explanation	Commentary
		 <p>White = RC hole used for test work Red = Diamond drill hole used for test work</p> <ul style="list-style-type: none"> <li>• No deleterious elements are present in the graphite concentrate.</li> <li>• Pilot test work was conducted in China on 18.5 tonnes of RC chips in hole locations shown in white in the diagram above. These holes cover most of the mineralisation and hence are representative of the orebody, in particular, in the orebody mined in the definitive feasibility study.</li> <li>• Specification test work by ProGraphite GmbH in Germany concluded the graphite concentrate produced was of good quality and suitable for a wide range of graphite applications and value added products and has no characteristics which would exclude its use from current applications of graphite.</li> </ul>
<b>Environmental</b>	<ul style="list-style-type: none"> <li>• <i>The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Environmental assessment for the Siviour DFS was conducted as part of the compliance and permitting process to establish baseline characteristics and the project's impact on the environment supporting the grant of a mineral lease (Mineral Lease 6495). In addition, details of the existing cultural, social, economic and natural environment were provided, with all information designed to assist government agencies and other stakeholders to make an informed assessment about the risks and benefits associated with the project. The Company has adopted an integrated planning approach, feeding results from stakeholder engagement and environmental studies into the project's development to minimise impact on the surrounding environment and community, as well as reducing the regulatory risk.</li> <li>• Studies to date have not indicated any material impediments</li> </ul>

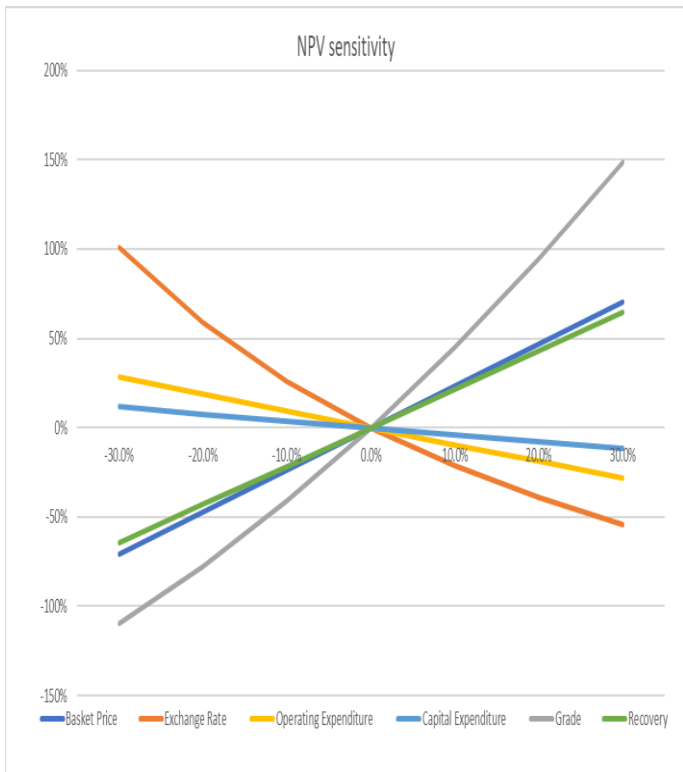


Criteria	JORC Code explanation	Commentary
		<p>to the proposed development of the project.</p> <ul style="list-style-type: none"> <li>The second stage of the project's permitting process is the approval of a Program for Environment Protection and Rehabilitation (PEPR) which is required after mineral lease approval to enable operations to commence. This is currently in final draft.</li> <li>Proposed in the PEPR and designed in the Siviour DFS is an integrated waste landform (IWL) which contains mined overburden and tailings.</li> <li>Waste rock waste is characterised firstly by lithology and then geochemically tested for acid forming potential. Metcode 0 material was found to have an acid neutralising potential 900 times greater than Metcode 1-3's acid forming potential (estimated and currently being tested) or negative 900kg H<sub>2</sub>SO<sub>4</sub>/tonne versus positive 1kg H<sub>2</sub>SO<sub>4</sub>/tonne respectively. Overall the assumption is that with the abundance of calcsilicate overburden will neutralise any acid forming potential sulphides associated with mineralisation placed in stockpiles and the IWL.</li> </ul>
<b>Infrastructure</b>	<ul style="list-style-type: none"> <li><i>The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.</i></li> </ul>	<ul style="list-style-type: none"> <li>While the project has power and water supplied to the current mining lease boundary, the capacity of these services is insufficient to sustain the mining operations but are suitable to sustain construction and commissioning activities.</li> <li>Not being a remote project site, there are many existing accommodation options with no accommodation facilities required to be constructed for the project.</li> <li>Eyre Peninsula's main north-south highway, the Lincoln Highway, passes 8 km to the east of the project area which means that the project is easily accessed and provides a logistics gateway to Adelaide, major regional centres and international ports for exporting graphite concentrate.</li> <li>The project site is close to the coastline with only a 12km pipeline required to connect the minesite to the proposed desalination plant.</li> </ul>
<b>Costs</b>	<ul style="list-style-type: none"> <li><i>The derivation of, or assumptions made, regarding projected capital costs in the study.</i></li> <li><i>The methodology used to estimate operating costs.</i></li> <li><i>Allowances made for the content of deleterious elements.</i></li> <li><i>The source of exchange rates used in the study.</i></li> <li><i>Derivation of transportation charges.</i></li> <li><i>The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.</i></li> <li><i>The allowances made for royalties</i></li> </ul>	<ul style="list-style-type: none"> <li>Experienced contractors and consultants provided capital costs from vendor quotes, actual costs from similar projects and cost databases.</li> <li>Operating costs were built up from first principles, from service providers and benchmarked where possible for validation. These services were provided in-house, by experienced contractors and consultants.</li> <li>There are no deleterious elements expected to be carried into the graphite product.</li> <li>The exchange rates were based on the average of current forecasts from the four major Australian banks. Major capital items have short lead times limiting exposure to exchange rate fluctuations for components sourced internationally.</li> <li>Transportation charges were derived by freight logistics services and port services provider quotes.</li> </ul>



Criteria	JORC Code explanation	Commentary														
	<i>payable, both Government and private.</i>	<ul style="list-style-type: none"><li>Forecasted prices are used for graphite prices with treatment and refining charges not applicable.</li><li>A state government mine gate sales revenue royalty of 2% for the first five years and 3.5% then after has been applied in financial modelling. A mine gate sales revenue royalty of 1% royalty payable to Milton Park Pty Ltd has also been applied in financial modelling.</li></ul>														
<b>Revenue factors</b>	<ul style="list-style-type: none"><li><i>The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.</i></li><li><i>The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.</i></li></ul>	<ul style="list-style-type: none"><li>Revenue is calculated as product price less royalties less fixed and variable costs to produce and transport the product to the point of sale. Process plant feed from the mining schedule provided a head grade that was modelled through the processing and used to model costs and revenue over the life of the project.</li><li>Flake size was modelled as a single distribution for all ore types and sources based on test work and given in the table below.<table><tr><th>Flake Size</th><th>Concentrate Distribution</th></tr><tr><td>+500um, 97%-98% carbon</td><td>0%</td></tr><tr><td>-500um+300um, 94%-97% carbon</td><td>4%</td></tr><tr><td>-300um+180um, 94%-97% carbon</td><td>17%</td></tr><tr><td>-180um+150um, 94%-97% carbon</td><td>7%</td></tr><tr><td>-150um+75um, 90%-94% carbon</td><td>37%</td></tr><tr><td>-75um, 90%-94% carbon</td><td>35%</td></tr></table></li><li>Forecast prices for each flake size were provided by Benchmark Mineral Intelligence.</li></ul>	Flake Size	Concentrate Distribution	+500um, 97%-98% carbon	0%	-500um+300um, 94%-97% carbon	4%	-300um+180um, 94%-97% carbon	17%	-180um+150um, 94%-97% carbon	7%	-150um+75um, 90%-94% carbon	37%	-75um, 90%-94% carbon	35%
Flake Size	Concentrate Distribution															
+500um, 97%-98% carbon	0%															
-500um+300um, 94%-97% carbon	4%															
-300um+180um, 94%-97% carbon	17%															
-180um+150um, 94%-97% carbon	7%															
-150um+75um, 90%-94% carbon	37%															
-75um, 90%-94% carbon	35%															
<b>Market assessment</b>	<ul style="list-style-type: none"><li><i>The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.</i></li><li><i>A customer and competitor analysis along with the identification of likely market windows for the product.</i></li><li><i>Price and volume forecasts and the basis for these forecasts.</i></li><li><i>For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.</i></li></ul>	<ul style="list-style-type: none"><li>Benchmark Mineral Intelligence carried out a report on the graphite industry with forecasting.</li><li>Current demand for natural flake graphite is estimated at approximately 750,000 tonnes per annum with approximately 26% of total graphite demand attributed to the lithium-ion battery market. Independent market research forecasts that the lithium-ion battery market will grow at an annual rate of 16% to 2023 for approximately 696,000 tonnes of lithium-ion batteries (or 51% of the total annual demand). By 2030, the annual demand for graphite for lithium-ion batteries is projected at 2.9M tonnes, or 80% of the total projected annual demand of 3.6M tonnes. Natural flake graphite demand from 2015 to 2040 for all end uses is forecast to grow at an average of over 12% per year, though this is dominated by lithium-ion battery demand. Primarily as a result of projected increases in demand for natural flake graphite in lithium-ion batteries, the graphite market is projected to be in undersupply from 2020, with the supply deficit growing as projected lithium-ion battery demand ramps up. Graphite stocks are projected to increase through</li></ul>														

Criteria	JORC Code explanation	Commentary																																																																																																
		<p>2019, before decreasing in 2020 and reaching a negative balance without significant new supply by 2024. The projected supply/demand imbalance is projected to fall exclusively within the -100 mesh (-150 μm) flake size category, which is the product specification required for lithium-ion batteries, with other product specifications in surplus through 2027.</p> <table><tr><th rowspan="2">Flake category</th><th colspan="2">Particle size</th><th rowspan="2">Distribution</th><th rowspan="2">Purity (C)</th><th colspan="10">Price (US\$ per tonne)</th></tr><tr><th>Microns (μm)</th><th>Mesh (#)</th><th>2021</th><th>2022</th><th>2023</th><th>2024</th><th>2025</th><th>2026</th><th>2027</th><th>2028</th><th>2029+</th></tr><tr><td>Jumbo</td><td>+300</td><td>+50</td><td>3.5%</td><td>94%</td><td>\$1,450</td><td>\$1,354</td><td>\$1,309</td><td>\$1,232</td><td>\$1,254</td><td>\$1,258</td><td>\$1,262</td><td>\$1,266</td><td>\$1,270</td></tr><tr><td>Large</td><td>-300 to +180</td><td>-50 to +80</td><td>17.2%</td><td>94%</td><td>\$1,017</td><td>\$930</td><td>\$893</td><td>\$879</td><td>\$877</td><td>\$922</td><td>\$1,065</td><td>\$1,056</td><td>\$1,047</td></tr><tr><td>Medium</td><td>-180 to +150</td><td>-80 to +100</td><td>6.9%</td><td>96%</td><td>\$897</td><td>\$836</td><td>\$800</td><td>\$780</td><td>\$844</td><td>\$846</td><td>\$846</td><td>\$895</td><td>\$942</td></tr><tr><td>Small</td><td>-150</td><td>-100</td><td>72.4%</td><td>94%</td><td>\$830</td><td>\$770</td><td>\$736</td><td>\$716</td><td>\$751</td><td>\$789</td><td>\$827</td><td>\$863</td><td>\$898</td></tr><tr><td colspan="5">Composite average</td><td>\$888</td><td>\$789</td><td>\$787</td><td>\$767</td><td>\$797</td><td>\$832</td><td>\$884</td><td>\$913</td><td>\$940</td></tr></table> <ul style="list-style-type: none"><li>Natural flake graphite pricing is generally determined based on negotiated sales agreements between and among suppliers, end-users and intermediaries, rather than by reference to a recognised benchmark price. While these transactions are not generally publicly available, price reporting services issue graphite price reports based on their independent market research. Renascor commissioned Benchmark Mineral Intelligence to prepare an FOB China price forecast. For purposes of the Sivoir DFS, Renascor has used the price forecast prepared by Benchmark for the first ten years, after which it assumed pricing is fixed at 2029 levels, see below.</li><li>Specification testwork by ProGraphite GmbH in Germany concluded the graphite concentrate produced was of good quality and suitable for a wide range of graphite applications and value-added products and has no characteristics which would exclude its use from current applications of graphite.</li></ul>	Flake category	Particle size		Distribution	Purity (C)	Price (US\$ per tonne)										Microns (μm)	Mesh (#)	2021	2022	2023	2024	2025	2026	2027	2028	2029+	Jumbo	+300	+50	3.5%	94%	\$1,450	\$1,354	\$1,309	\$1,232	\$1,254	\$1,258	\$1,262	\$1,266	\$1,270	Large	-300 to +180	-50 to +80	17.2%	94%	\$1,017	\$930	\$893	\$879	\$877	\$922	\$1,065	\$1,056	\$1,047	Medium	-180 to +150	-80 to +100	6.9%	96%	\$897	\$836	\$800	\$780	\$844	\$846	\$846	\$895	\$942	Small	-150	-100	72.4%	94%	\$830	\$770	\$736	\$716	\$751	\$789	\$827	\$863	\$898	Composite average					\$888	\$789	\$787	\$767	\$797	\$832	\$884	\$913	\$940
Flake category	Particle size			Distribution	Purity (C)			Price (US\$ per tonne)																																																																																										
	Microns (μm)	Mesh (#)	2021			2022	2023	2024	2025	2026	2027	2028	2029+																																																																																					
Jumbo	+300	+50	3.5%	94%	\$1,450	\$1,354	\$1,309	\$1,232	\$1,254	\$1,258	\$1,262	\$1,266	\$1,270																																																																																					
Large	-300 to +180	-50 to +80	17.2%	94%	\$1,017	\$930	\$893	\$879	\$877	\$922	\$1,065	\$1,056	\$1,047																																																																																					
Medium	-180 to +150	-80 to +100	6.9%	96%	\$897	\$836	\$800	\$780	\$844	\$846	\$846	\$895	\$942																																																																																					
Small	-150	-100	72.4%	94%	\$830	\$770	\$736	\$716	\$751	\$789	\$827	\$863	\$898																																																																																					
Composite average					\$888	\$789	\$787	\$767	\$797	\$832	\$884	\$913	\$940																																																																																					
Economic	<ul style="list-style-type: none"><li>The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.</li><li>NPV ranges and sensitivity to variations in the significant assumptions and inputs.</li></ul>	<ul style="list-style-type: none"><li>The project was economically evaluated (NPV) under the following price, exchange rate and inflation assumptions which are derived from general market consensus on long term prices:<ul style="list-style-type: none"><li>10% discount rate.</li><li>Graphite basket price as supplied by Benchmark Mineral Intelligence.</li><li>Exchange rate of \$0.70 AUD:USD exchange rate from Burnvoir Corporate Finance.</li><li>A diesel price of \$A0.72 per litre.</li><li>Inflation rate of 0%.</li></ul></li></ul>																																																																																																

Criteria	JORC Code explanation	Commentary																												
		<div><div><ul style="list-style-type: none"><li>○ Tax rate of 30%.</li><li>• A sensitivity analysis was completed to assess the impact of a range of key parameters to the project NPV using a 10% discount rate, ±10% sensitivity, after-tax, and expressed in Australian Dollars. These parameters include operating expenditure, capital expenditure, Australian/US exchange rate and product basket price. The results are provided in the graphs below:</li></ul></div><div><div><div><div>Sensitivities to Base Case</div><div><table><thead><tr><th></th><th>Base Case</th><th>Low</th><th>High</th></tr></thead><tbody><tr><td>Exchange Rate</td><td></td><td>\$(82.9)</td><td>\$101.4</td></tr><tr><td>Basket Price</td><td></td><td>\$(91.2)</td><td>\$91.2</td></tr><tr><td>Recovery</td><td></td><td>\$(83.5)</td><td>\$83.4</td></tr><tr><td>Grade</td><td></td><td>\$(158.7)</td><td>\$175.2</td></tr><tr><td>Opex</td><td></td><td>\$(36.7)</td><td>\$36.7</td></tr><tr><td>Capex</td><td></td><td>\$(15.0)</td><td>\$15.0</td></tr></tbody></table></div></div></div><div><div>NPV sensitivity</div></div></div></div>		Base Case	Low	High	Exchange Rate		\$(82.9)	\$101.4	Basket Price		\$(91.2)	\$91.2	Recovery		\$(83.5)	\$83.4	Grade		\$(158.7)	\$175.2	Opex		\$(36.7)	\$36.7	Capex		\$(15.0)	\$15.0
	Base Case	Low	High																											
Exchange Rate		\$(82.9)	\$101.4																											
Basket Price		\$(91.2)	\$91.2																											
Recovery		\$(83.5)	\$83.4																											
Grade		\$(158.7)	\$175.2																											
Opex		\$(36.7)	\$36.7																											
Capex		\$(15.0)	\$15.0																											
Social	<ul style="list-style-type: none"><li>• The status of agreements with key stakeholders and matters leading to social licence to operate.</li></ul>	<ul style="list-style-type: none"><li>• A Landowner compensation and access agreements have been completed with the key landowners. Social licence to operate is part of the PEPR process that is currently in draft form. Renascor Resource has a Community and Stakeholder Policy for the engagement and continuing engagement of</li></ul>																												



Criteria	JORC Code explanation	Commentary
		project stakeholders.
<b>Other</b>	<ul style="list-style-type: none"> <li><i>To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:</i></li> <li><i>Any identified material naturally occurring risks.</i></li> <li><i>The status of material legal agreements and marketing arrangements.</i></li> <li><i>The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.</i></li> </ul>	<ul style="list-style-type: none"> <li>No significant material naturally occurring risks have been identified either physically or chemically.</li> <li>To date, Renascor has concluded one non-binding memorandum of understanding with China's Qingdao Chenyang Graphite.</li> <li>Ausmin Development Pty Ltd is the authorised holder of ML 6495 on which the Ore Reserves are located. Ausmin Development Pty Ltd is a wholly owned subsidiary of Renascor Resources Ltd. Currently the PEPR is in draft submission and not yet submitted to the department of energy and mines (DEM) South Australia which is required to be approved before mining and processing operations can start.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li><i>The basis for the classification of the Ore Reserves into varying confidence categories.</i></li> <li><i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> <li><i>The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).</i></li> </ul>	<ul style="list-style-type: none"> <li>Measured Resources inside the mine plan were converted to Proven Ore Reserves while Indicated Resources inside the mine plan were converted to Probable Ore Reserves. Direct conversion was applied due to the feasibility study level of confidence of <math>\pm 15\%</math> with no technical reason to disqualify the contained Mineral Resources from conversion to Ore Reserves.</li> <li>The result appropriately reflects the Competent Person's view of the deposit, which is a flat lying, tabular, gently folding, thick deposit suitable for small to medium scale mining.</li> <li>No Probable Ore Reserves have been derived from Measured Mineral Resources.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of Ore Reserve estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>An independent mining consultant conducted a review of the Ore Reserve estimates between July and November 2019.</li> </ul>
<b>Discussion of relative accuracy/ confidence</b>	<ul style="list-style-type: none"> <li><i>Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve</i></li> </ul>	<ul style="list-style-type: none"> <li>Following the completion of the definitive feasibility study, the competent person considers that there is a high degree of confidence in the Ore Reserves with a relative accuracy of <math>\pm 15\%</math>.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.</i></p> <ul style="list-style-type: none"><li>• <i>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.</i></li><li>• <i>Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.</i></li><li>• <i>It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li></ul>	