

## MAIDEN JORC-COMPLIANT MINERAL RESOURCE ESTIMATE FOR SIVIOUR GRAPHITE DEPOSIT

- Maiden JORC-compliant Mineral Resource estimate for Siviour deposit of **16.8Mt @ 7.4% TGC for 1,243,200t of contained graphite**
- Indicated and Inferred Mineral Resources include high-grade mineralisation of **5.9Mt @ 10.0% TGC for 590,000t of contained graphite**
- Siviour is the **largest reported graphite Mineral Resource in Australia**. It remains open along-strike
- Siviour deposit is shallow, tabular and near flat-lying, with the bulk of graphite mineralisation commencing from 10m to 25m beneath the surface
- Flake quality of Siviour has recently been established. Petrological examination indicates that high-grade samples from drill holes at Siviour return over 80% in the high-value super-jumbo (+500µm), jumbo (+300µm) and large (+180µm) categories
- Declaration of JORC-compliant Mineral Resource at Siviour provides basis for commissioning a scoping study, with results expected in the third quarter of this year

Renascor Resources (ASX: RNU) is pleased to announce the maiden JORC Mineral Resource for its Siviour graphite deposit, the first prospect it has drilled in its Arno Graphite Project in South Australia's Eyre Peninsula. See Figure 1. Independent mining consultancy group Optiro Pty Ltd (Optiro) has estimated Indicated and Inferred Resources measuring 16.8Mt @ 7.4% total graphitic carbon (TGC) for 1,243,200t of contained graphite (reported above a cut-off grade of 3% TGC), including high-grade mineralisation of 5.9Mt @ 10.0% TGC for 590,000t of contained graphite (reported above a cut-off grade of 8% TGC). Siviour is presently the largest reported graphite Mineral Resource in Australia and remains open along-strike.

Commenting on the declaration of the Siviour Resource Statement, Renascor Managing Director David Christensen said:

"The Siviour graphite deposit is large, flat-lying and shallow, with significant high-grade portions and a high proportion of coarse flake graphite. This, coupled with Siviour's location, establishes Siviour as a potential graphite development".

**Figure 1 (right). Arno graphite project, showing location and significant nearby graphite deposits**



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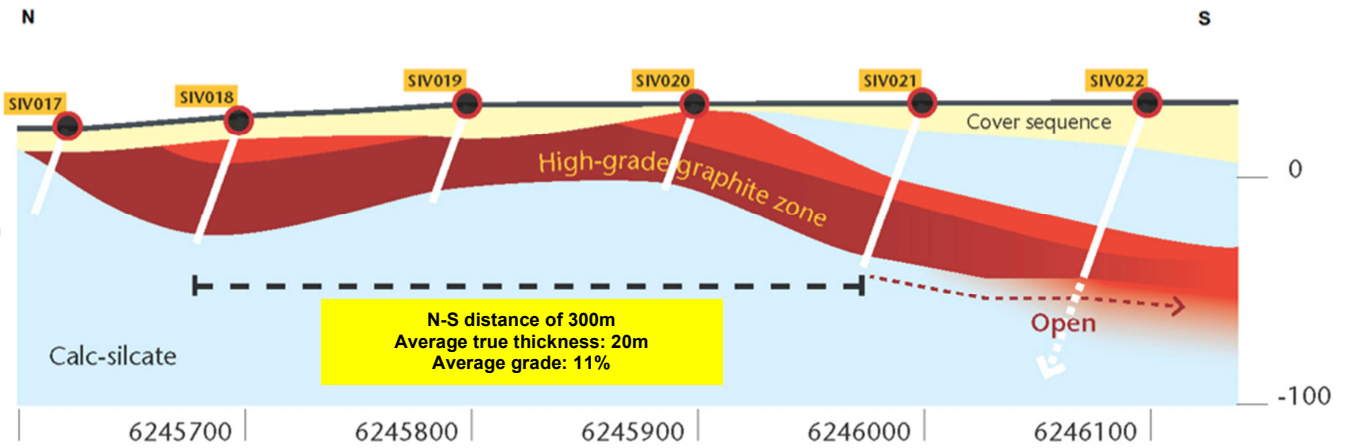


Figure 2. Siviour prospect: Geological cross-section for north-south Section 631800E

The Siviour deposit is shallow, tabular and near flat-lying, with most of the graphite mineralisation occurring beneath only 10m to 25m of surface cover. As shown in Figure 2 above, Section 631800E, the westernmost section drilled of the Indicated Resource, shows a thick, shallow graphite-mineralised zone that is near flat-lying over the southern and central portions of the prospect before dipping gently to the north.

**Exploration Target**

In addition to the Indicated and Inferred Mineral Resources, Optiro has estimated an Exploration Target of an additional 12Mt to 15Mt at an average grade between 7.0% and 7.5% TGC, equating to between 840,000t to 1,125,000t of contained graphite. The potential quantity and grade of the Exploration Target is conceptual in nature and there is insufficient data to establish a mineral resource; it is uncertain if further exploration will result in the estimation of a mineral resource over the area covered by the Exploration Target.

In addition to the area included in the Exploration Target, Siviour remains largely open, in particular to the north of the Inferred Resource and to the south at Paxtons, suggesting additional scope to expand the current resource through follow-up drilling.

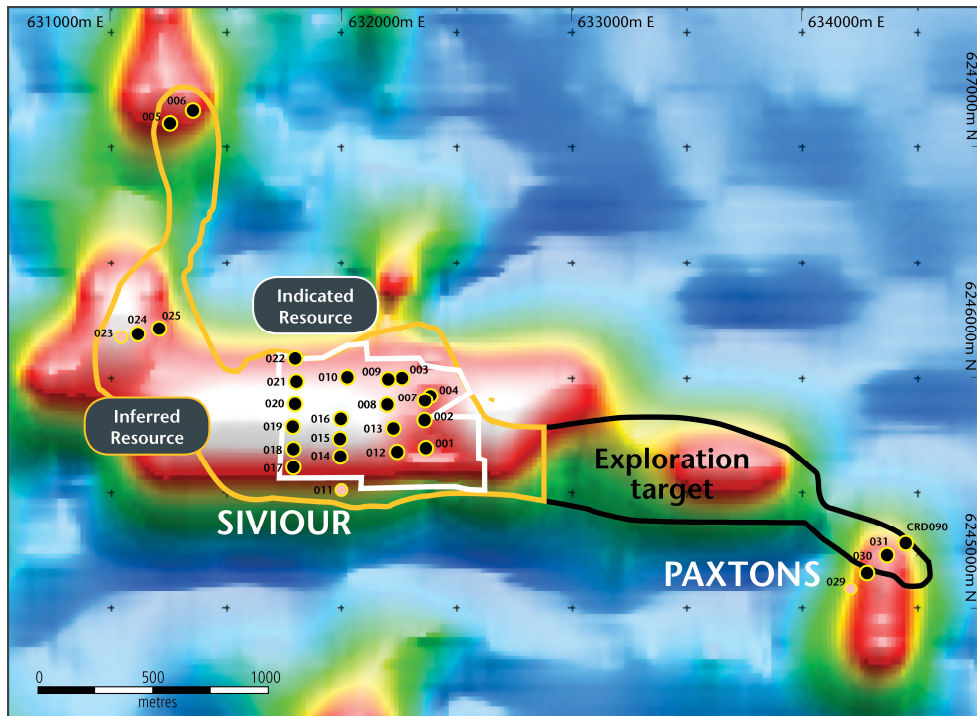


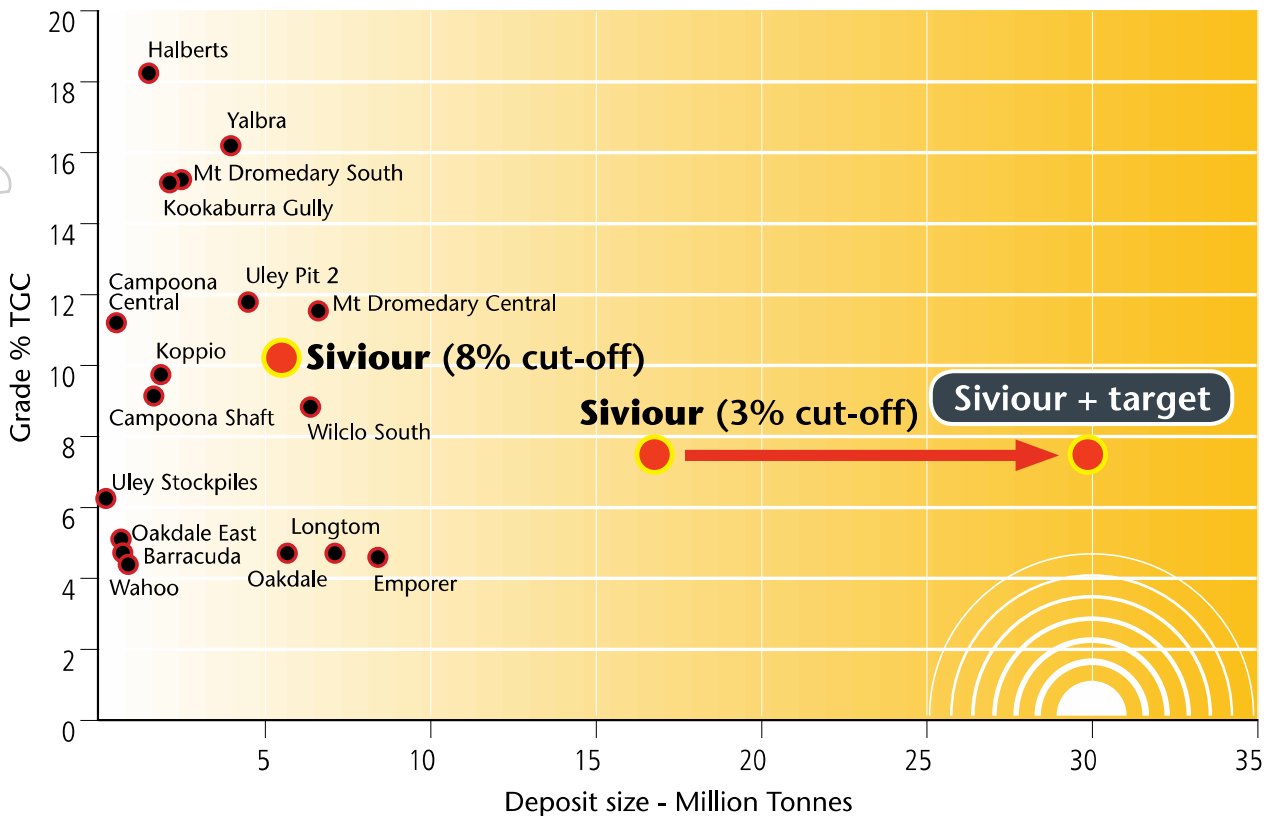
Figure 3. Electromagnetic image showing Indicated and Inferred Resources, Exploration Target and drill hole locations



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## Siviour in comparison to other graphite resources in Australia

As shown below in Figure 4, the Siviour deposit is the largest reported JORC resource in Australia, with ample scope for expansion.



**Figure 4. Scatter plot showing grade (%TGC) and tonnage of Siviour (at 3% and 8% cut-off grades) and reported resources for Australian graphite deposits**

### Graphite flake size and mineral processing test work

In addition to establishing Siviour as a premium graphite resource in terms of its size and grade, initial testing has identified an abundance of coarse flake graphite from petrographic analysis of drill samples. As previously reported, high-grade samples from drill holes at Siviour have returned over 80% in the high-value super-jumbo (+500 $\mu$ m), jumbo (+300 $\mu$ m) and large (+180 $\mu$ m) categories. See RNU ASX release 11 March 2016.

While mineral processing test work has not yet been undertaken on the high-grade graphite zones at Siviour, ALS Metallurgy performed preliminary bench flotation and gravity tests over a core sample from the adjacent Paxtons prospect (see Figure 3), obtaining carbon (graphite) recovery of 87% and producing 93% purity of concentrates, with super-jumbo flake size of up to 600 $\mu$ m.

As part of its next-stage work program, Renascor expects to obtain representative samples from the Siviour high-grade graphite zones and undertake comprehensive mineral processing work.

### Next steps

Renascor plans to commission a scoping study on the viability of establishing commercial production of the Siviour Mineral Resources. In connection with this study, Renascor expects to undertake further exploration drilling to expand the Mineral Resources into the Exploration Target area and the areas immediately north of the Inferred Resource and adjacent to the Paxtons prospect. Additionally, Renascor expects to undertake comprehensive mineral processing test work, commencing with sighter test work to determine the appropriate parameters for flow-sheet determination. Renascor expects to complete the scoping study during the third quarter of this year.



## JORC Table 1 Summary

A summary of attached JORC Table 1 (see Appendix 2) is provided below with respect to the Mineral Resources pursuant to the requirements of ASX listing rule 5.8.1.

- Geology – interpretation was undertaken based on a combination of the observed geology and analyses of graphite mineralisation within Meso-proterozoic sediments of the Hutchison Group.
- Drilling method – the drilling method used is reverse circulation (RC) using 100mm face sampling hammers and one diamond core hole.
- Resource Classification – classified on the basis of confidence in geological and grade continuity using the drilling density, geological model, modelled grade continuity and conditional bias measures (slope of the regression and kriging efficiency) as criteria. As a general rule, drill spacing of 200m by 100m or less resulted in an Indicated classification and areas with broader spacing are classified as Inferred.
- Sample analysis method – all samples were sent to Bureau Veritas laboratory in Adelaide for preparation and for Total Graphitic Carbon (TGC) analyses. A portion of the sample was dissolved in weak acid to liberate carbonate carbon. The residue was then dried at 420°C driving off organic carbon and then analysed by its sulphur-carbon analyser to give TGC. Duplicate analysis and analysis of Certified Reference Material (standards) was completed and no issues identified with sampling reliability.
- Estimation methodology – resources estimation was undertaken using ordinary kriging.
- Cut-off parameters – the Mineral Resource is reported above a 3% TGC cut-off grade.
- Sampling – one-metre drill chip samples were collected throughout the drill programme in sequentially numbered bags.
- Sub-sampling - analysis was undertaken at Bureau Veritas laboratory with the sample split to less than 3kg through linear splitter. Pulverising was completed using LM5, 90% passing 75µm in preparation for analysis.
- Mining modifying parameters - planned extraction is by open pit mining and mining factors such as dilution and ore loss have not been applied.
- Metallurgical methods - no metallurgical assumptions have been built into the resource models. Mineralogical examination of samples 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.

### Competent Person's Statement – Mineral Resource

*The information in this report which 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.*

### Competent Person's Statement – Exploration Results

*The results reported herein, insofar as they relate to exploration activities and exploration results, are based on information provided to and reviewed by Mr G.W. McConachy (Fellow of the Australasian Institute of Mining and Metallurgy) who 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 it appears. 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. A number of factors could cause actual results, or expectations to differ materially from the results expressed or implied in the forward-looking statements.*



## Background information

Renascor Resources is an Australian-based company focused on the discovery and development of economically viable mineral deposits. Renascor has an extensive tenement portfolio, holding interests in projects in key mineral provinces of South Australia, the Northern Territory and Western Australia.

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Company Secretary

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## Appendix 1

### Siviour Mineral Resources Estimate

The Siviour Mineral Resource model was prepared by Optiro Pty Ltd (Optiro), an independent and internationally recognised mining consultancy group.

The summary table below displays the Indicated and Inferred Mineral Resources for Siviour. A nominal cut-off grade of 3% TGC has been established for Siviour based on the potential mining methods and costs of open-cut mining operations that could be undertaken for mineralisation of this type.

Category	Tonnes of mineralisation (millions)	TGC	Contained graphite (tonnes)
Indicated	6.8	8.1%	550,800
Inferred	10.0	6.9%	690,000
Total	16.8	7.4%	1,243,2000

Note: Cut-off grade of 3% total graphitic carbon

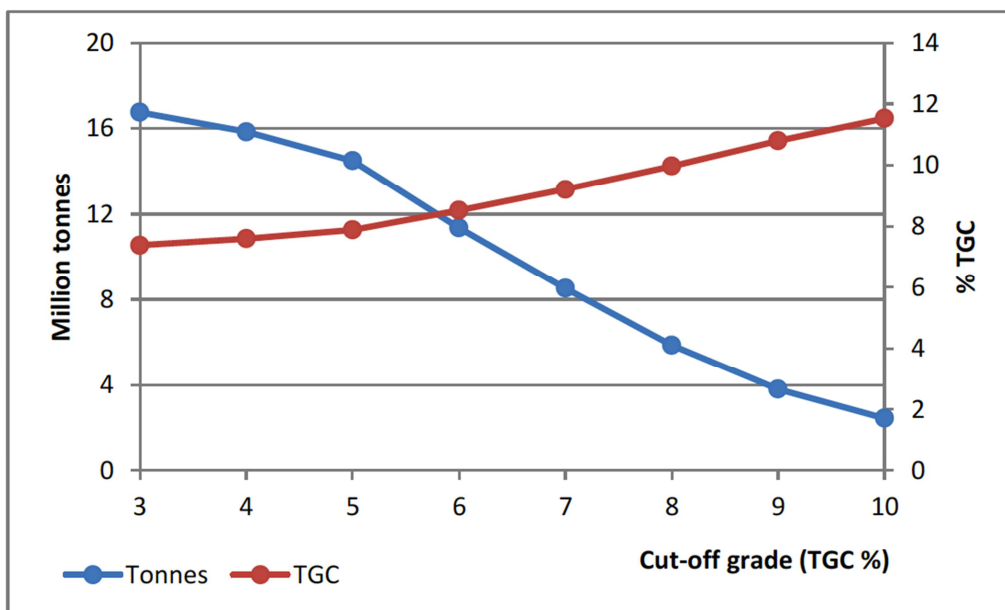
**Table 1. Siviour Mineral Resource estimate as of 16 March 2016**

#### Siviour resource breakdown by cut-off grades

Table 2 and Figure 5 below show the Siviour total Mineral Resource at varying cut-off grades and the corresponding grade tonnage curve. As noted below, Siviour contains a significant high-grade resource at an 8% cut-off: 5.9Mt @ 10.0% TGC for 590,000t of contained graphite.

Cut-off grade (TGC)	Tonnes of mineralisation (millions)	TGC
3%	16.8	7.4%
4%	15.9	7.6%
5%	14.5	7.9%
6%	11.4	8.5%
7%	8.5	9.2%
8%	5.9	10.0%
9%	3.8	10.8%
10%	2.5	11.5%

**Table 2. Siviour Mineral Resource by cut-off grade**



**Figure 5. Siviour resource grade and tonnage curve**



The Siviour Mineral Resources are based on 24 reverse circulation holes for a total of 1,869m and one diamond hole for 74.1m drilled within the Indicated and Inferred Resource zones shown below in Figures 6 and 7.

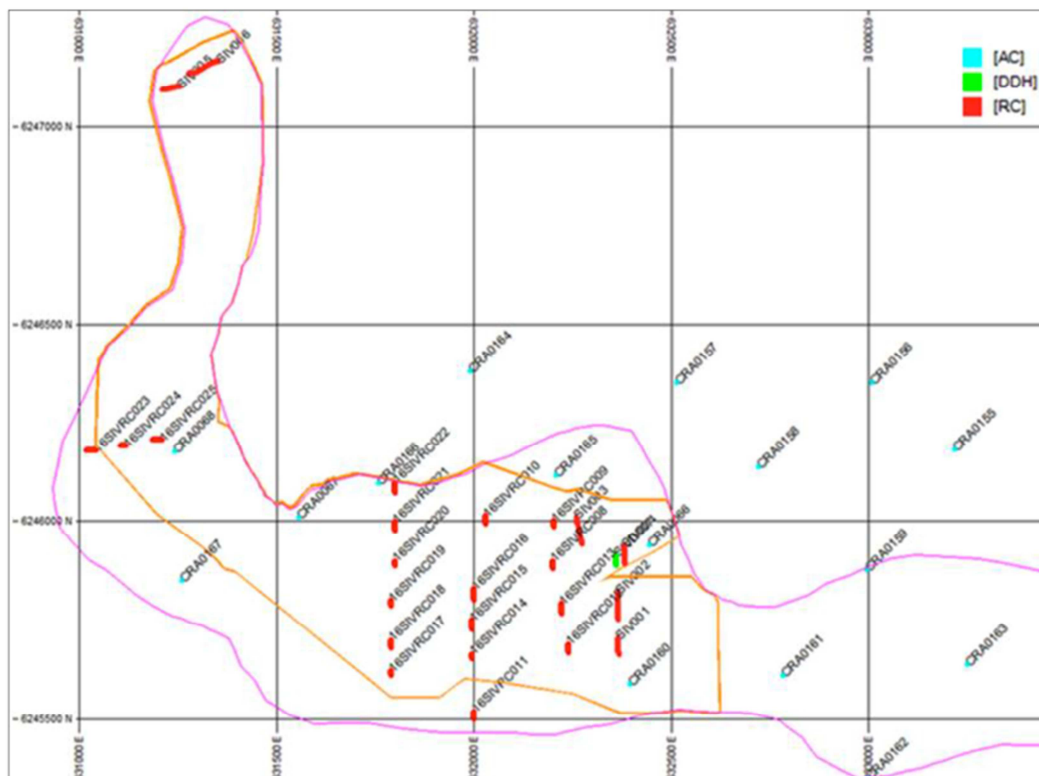


Figure 6. Siviour, showing location of reverse circulation (RC) and diamond (DDH) holes used in Mineral Resource estimate and historical aircore (AC) holes that were not assayed for TGC (orange outline represents resource area, magenta outline represents electromagnetic anomaly)

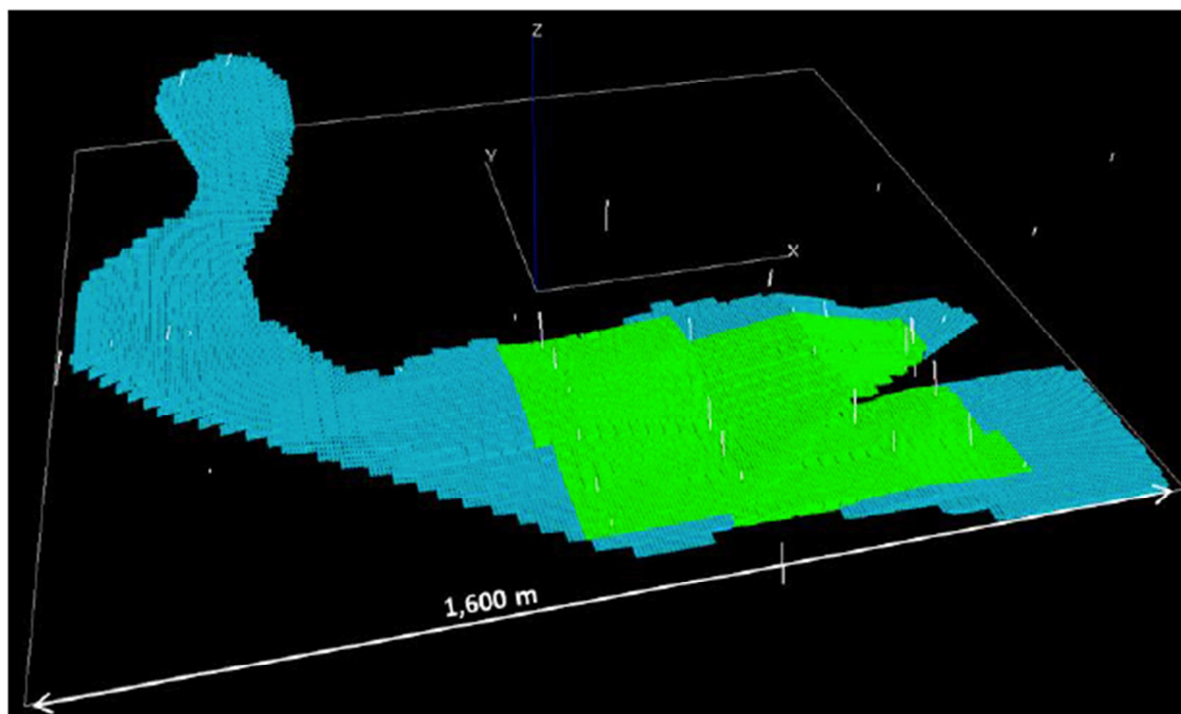


Figure 7. Three dimensional view of Siviour resource, showing distribution of Indicated (green) and Inferred (blue) Mineral Resources



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## Appendix 2

### JORC Table 1

<b>Section 1: Sampling Techniques and Data</b>		
(criteria in this section apply to all succeeding sections)		
<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<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>	<ul style="list-style-type: none"> <li>RC drill samples were collected at one-metre intervals.</li> <li>Approximately 60% of samples were not submitted for assay due to the visual non-mineralised nature of the material collected. All other graphitic intervals were submitted for analyses.</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, 90% passing 75µm.</li> <li>Sampling was guided by Renascor Resources Limited's protocols and QA/QC 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>RC using 100 mm face sampling hammers.</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> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>One-metre drill chip samples were collected throughout the drill programme in sequentially numbered bags.</li> <li>Every interval drilled is represented in an industry standard chip tray that provides a check for sample continuity down hole.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</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>No adjustments have been made to any assay data.</li> </ul>
<b>Sub-sampling techniques and sample</b>	<ul style="list-style-type: none"> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> </ul>	<ul style="list-style-type: none"> <li>All of the samples were marked with unique sequential numbering as a check against sample loss or omission.</li> </ul>



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<b>Section 1: Sampling Techniques and Data</b>		
(criteria in this section apply to all succeeding sections)		
<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>preparation</b>	<ul style="list-style-type: none"> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <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 3kg through linear splitter and excess retained.</li> <li>Pulverising was completed using LM5, 90% passing 75µm 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>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Duplicate analysis was completed and no issues identified with sampling reliability.</li> <li>A portion of the sample is dissolved in weak acid to liberate carbonate carbon.</li> <li>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> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Duplicate analysis was completed and no issues identified with sampling representatively.</li> <li>There were no twinned holes.</li> <li>Field duplicates and standards were collectively inserted at a rate of 4%. Field duplicates results are good and there is excellent correlation of assayed sample results against industry standards.</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>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>All drillhole collars were pegged to the plan collar location using a hand held GPS. These collar coordinates are entered into the drillhole database.</li> <li>The degree of accuracy of drillhole collar location and RL was estimated to be within a 5m error level.</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>• Drilling was initial exploration only, with holes at approximately 100m spacing on four 200m separated sections.</li> <li>• Geological interpretation and mineralisation continuity analysis indicates that data spacing is sufficient for definition of a Mineral Resource.</li> <li>• 99% of the samples were taken over a 1m interval. Samples analysed for interval of less than 1m were composited to 1m intervals.</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 could not be undertaken with RC drilling</li> <li>• No diamond drilling has been carried out within the mineral resource area to confirm the orientation of key mineralised structures.</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 delivered to Bureau Veritas Minerals as they were collected.</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>

<b>SECTION 2: REPORTING OF EXPLORATION RESULTS</b>		
(criteria listed in the preceding section apply also to this section)		
Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>• Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• All drilling was entirely within Exploration Licence EL5618 (formerly EL4430) granted on 29 January 2015 for a two-year term expiring in 2017. EL5618 is 100% owned by Ausmin Development Pty Ltd and in good standing with no known impediments.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>• Acknowledgment and appraisal of exploration by other parties.</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 programme, 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 6 RC holes and 1 diamond core hole reporting graphite intersections in all holes.</li> </ul>



## SECTION 2: REPORTING OF EXPLORATION RESULTS

(criteria listed in the preceding section apply also to this section)

Criteria	JORC Code explanation	Commentary
<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>• Mineralisation within Meso-proterozoic sediments of the Hutchison Group</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> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration results are not being reported for the Mineral Resources area.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<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>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<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>• <i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Exploration results are not being reported for the Mineral Resources area.</li> </ul>



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<b>SECTION 2: REPORTING OF EXPLORATION RESULTS</b>		
(criteria listed in the preceding section apply also to this section)		
<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<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>Follow-up drill RC and diamond core drill testing to further confirm extensions of graphite mineralisation and establish to mineral recovery and graphite product quality characteristics.</li> </ul>

<b>SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES</b>		
(criteria listed in section 1, and where relevant in section 2, also apply to this section)		
<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<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 collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</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>Optiro checked the assay data used for the resource estimate against hard copy data provided by the assay laboratory.</li> <li>Additional data validation included checking for out of range assay data and overlapping or missing intervals.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> </ul>	<ul style="list-style-type: none"> <li>A site visit to the Siviour deposit has not been undertaken by the independent consultant (Competent Person for the Mineral Resource estimate).</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</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 and metasediments.</li> <li>The drilled mineralised zone has a simple tabular geometry that displays strong continuity. The main portion of the deposit is oriented east-west and dips 5° to the southwest; the strike of the mineralisation and is folded sharply north within the north western area of the deposit.</li> <li>Geological interpretation was completed on a sectional basis, from which geological surfaces were interpolated to create 3D solids for mineralisation.</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 mineralised and weakly-mineralised or unmineralised domains.</li> </ul>



### **SECTION 3: ESTIMATION AND REPORTING OF MINERAL RESOURCES**

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

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<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 1.4 km east-west and 1.6 km north-south. The horizontal width ranges from 550m at Siviour to 125m south of Buckies.</li> <li>• The mineralised horizon has an average thickness of 19m and the depth to the top of the mineralised horizon ranges from 6m to 62m.</li> <li>• The deposit remains open to the east and north.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li>• <i>The assumptions made regarding recovery of by-products.</i></li> <li>• <i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</i></li> <li>• <i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li>• <i>Any assumptions behind modelling of selective mining units.</i></li> <li>• <i>Any assumptions about correlation between variables.</i></li> <li>• <i>Description of how the geological interpretation was used to control the resource estimates.</i></li> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drillhole sample data was flagged from three dimensional interpretations of the mineralised domains.</li> <li>• Sample data was composited to a 1m downhole length.</li> <li>• Data has a low coefficient of variation and a top-cut grade was not applied.</li> <li>• Mineral Resources have not been previously estimated.</li> <li>• TGC mineralisation continuity was interpreted from variogram analyses to have a horizontal range of 320m (south-west) by 225m (southeast).</li> <li>• Drillhole spacing ranges is at 200m along strike; on-section spacing ranges is generally 100m. Maximum extrapolation distance is 250m along strike to the east.</li> <li>• Grade estimation was into parent blocks of 25mE by 100mN on 2m benches. Block size was selected based on kriging neighbourhood analysis.</li> <li>• Estimation was carried out using ordinary kriging at the parent block scale.</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 five times the initial search, with reduced sample numbers required for estimation.</li> <li>• Almost 85% of the block grades were estimated in the first pass.</li> <li>• The estimated TGC block model grades were visually validated against the input drillhole data, comparisons were carried out against the drillhole data and by northing, easting and elevation slices.</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 3% TGC cut-off grade to reflect current commodity prices and open pit mining methods.</li> </ul>



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<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>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.</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>
<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>Mineralogical examination of samples 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> </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 will be undertaken if the project progresses to a pre-feasibility level.</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>Bulk density was measured for five core samples from a diamond hole SIVD007. Values ranged from 2.28 t/m<sup>3</sup> to 2.68 t/m<sup>3</sup> with an average of 2.55 t/m<sup>3</sup>.</li> <li>An-situ bulk density of 2.55 t/m<sup>3</sup> was applied to the resource estimate.</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> <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</li> </ul>	<ul style="list-style-type: none"> <li>Mineral Resources have been classified on the basis of confidence in geological and grade continuity using the drilling density, geological model, modelled grade continuity and conditional bias measures (slope of the regression and kriging efficiency) as criteria.</li> <li>In Optiro's opinion there are reasonable prospects for eventual economic extraction.</li> </ul>



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

<b>Criteria</b>	<b>JORC Code explanation</b>	<b>Commentary</b>
	<p><i>distribution of the data).</i></p> <ul style="list-style-type: none"><li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li></ul>	<ul style="list-style-type: none"><li>• Measured Mineral Resources - none defined</li><li>• Indicated Mineral Resources - have been defined in areas where drill spacing is 200m by 100m 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 limited drilling 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>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></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>• <i>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.</i></li><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.</i></li></ul>	<ul style="list-style-type: none"><li>• The assigned classification of 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>



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