RENASCOR RESOURCES

ASX Release

March 14, 2018

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Developing Australia's Largest Graphite Deposit

Siviour Prefeasibility Study and Maiden Ore Reserve

- **Prefeasibility Study (PFS) completed for the Siviour Graphite Project in South Australia. Results for immediate large-scale production include:**
  - **Post-tax unleveraged NPV_{10} of US$500m**
  - **Post-tax unleveraged IRR of 62%**
  - **30 year mine life, with average production of 142,000t per annum over first ten years (117,000t per annum over life-of-mine)**
  - **Operating cost of US$335 per tonne**
- **PFS also considers low-start-up capital, staged development. Results of this option include:**
  - **Pre-production capital of US$29m**
  - **Post-tax unleveraged IRR of 47%**
  - **Average production of 22,800t per annum over first three years before transitioning to larger scale production in year four**
  - **Operating cost of US$576 per tonne of product over first three years, reducing to US$333 from years 4 to 30**
- **Maiden JORC-compliant Ore Reserve of 45.2Mt @ 7.9% TGC for 3.6 million tonnes of contained graphite**
- **Renascor to move immediately to Definitive Feasibility Study**
- **PFS results will now be used to advance off-take and funding discussions**

Renascor Resources (ASX: RNU) is pleased to announce the maiden Ore Reserve and results of the Prefeasibility Study (PFS) for the Siviour Graphite Project. The project economics are compelling and highlight Renascor's potential to become a highly profitable, long-term graphite producer in Australia.

Commenting on the results, Managing Director David Christensen stated:

> *"The PFS confirms Siviour's potential as a high margin graphite operation, with the ability to provide much needed globally competitive diversity of supply from the low sovereign risk jurisdiction of South Australia.*
>
> *Siviour offers high-quality, low cost production that is competitive with any graphite development globally. Siviour also offers a high margin, low-start-up capital option. As we now move to more advanced offtake and finance discussions, we believe these factors will be important in securing the funding necessary to advance into construction and operation."*

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This Siviour Prefeasibility Study (PFS) considers two development options:

- immediate large-scale production, and
- a low start-up capital, two-staged development approach, with a small-scale operation for three years, before transitioning to larger-scale production.

A summary of key results is described below. Additional information, including material assumptions, are included elsewhere in this announcement.

Parameter	Immediate large-scale development		Two-stage development			
			Stage-one (years 1 to 3)		Stage-two (year 4 to 30)[1]	
Currency	US$	AU$	US$	AU$	US$	AU$
Annual production	142,000t (first ten years) 117,000 (LOM)		22,800t		156,000t (years 4 to 13) 129,000 (LOM)	
Plant throughput	1,650,000tpa		200,000tpa		1,850,000tpa	
Average feed grade	9.1% TGC (first ten years) 7.5% TGC (LOM)		12.4% TGC		9.0% TGC (years 4 to 13) 7.6% (LOM)	
Cash cost per tonne	US$335	AU$446	US$576	AU$768	US$333 (LOM)	AU$444 (LOM)
Basket price per tonne	US$1,056 or AU$1,408					
Life of mine	30 years					
Development capital	US$99m	AU$132m	US$29m	AU$39m	US$91m	AU$121m
Payback period (years)[2]	1.8		3.1		1.5	
NPV_{10} (after tax)	US$500m	AU$666m	US$407m or AU$542m[3]			
IRR (after tax)	62%		47%			

Table 1. Summary of key results

[1] Life of mine (LOM) figures for stage-two refer to life of stage-two operation (years 4 to 30).
[2] Reflects period of time to payback development capital as calculated from first production for applicable period.
[3] NPV_{10} for two-stage reflects lower net present value based on additional three years of discounting due to deferred large-scale start-up.

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Potential benefits of staged approach

Potential benefits of a staged development approach include:

- *Reduced start-up capital.* The staged approach significantly reduces the capital required to commence production by commissioning a smaller-scale stage-one plant and sizing it to existing potable water capacity, thereby avoiding additional capital requirements for water and associated infrastructure.

- *Competitive stage-one production.* By commencing mining operations in a near-surface, high-grade zone, pre-strip requirements are reduced and average feed grade increases to 12.4% TGC during the first three years of staged production (versus 9.1% TGC in immediate large-scale case).

- *Develop customer base.* A further potential advantage is that the successful execution of stage-one will assist in developing a customer base and supporting the larger capital requirement needed to fund the larger scale, stage-two operation.

Renascor expects to consider both the immediate large-scale and staged development scenarios as part of its Definitive Feasibility Study planning, with the ultimate decision on scale of development parameters to be made after informed discussion with potential offtake and funding partners.

Overview of Prefeasibility Study

The Siviour PFS was prepared by Renascor and a range of specialist consultants who have consented to the information used in the context in which it appears in this announcement.

Details of consultants who contributed to material components of this study are provided below in Table 2.

Consultant	Scope of Work
Optiro Pty Ltd.	Mineral Resource estimate
Goudie Hall Services Pty Ltd.	Metallurgical test work
Minnovo Pty Ltd.	Process plant and associated infrastructure
Optima Consulting and Contracting Pty Ltd.	Mining and mine design
Groundwater Science Pty Ltd.	Hydrogeology
JBS&G	Environmental permitting
George Wilby	Logistics

Table 2. Consultants contributing to Prefeasibility Study

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Ore Reserve

The Siviour PFS is based upon developing a single graphite deposit, the Siviour Graphite Deposit, to produce up to 156,000t per annum of graphite concentrates. The Siviour PFS 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 summarised below is Table 3.

Reserve Category	Tonnes of ore (Mt)	TGC	Tonnes of contained graphite (Mt)
Proven	0	0	0
Probable	45.2	7.9%	3.6
Reserves total	**45.2**	**7.9%**	**3.6**

Table 3. Siviour Ore Reserve

The key information supporting the Ore Reserve in noted below. A summary of information relating to the Siviour PFS, including material information for the Ore Reserve is included elsewhere in the body of this release. Additional details of the material assumptions are set out in Appendices 1, 2 and 3 (JORC Table 1).

The Probable 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 Probable Ore Reserve is based on Indicated Resources only. No Inferred Mineral Resources have been included in the Ore Reserve. See Table 1 in Appendix 1 for Indicated and Inferred estimates of the Siviour Mineral Resource.

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 3, 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 PFS that describes the development of the Siviour Graphite Project over a 30 year mine life. Material assumptions of the PFS include:
    - Metallurgical test work 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 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.

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- 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.

- ***Classification criteria***. The Ore Reserves estimate comprises Indicated Mineral Resources only. The PFS is based upon some Inferred Resources which are mined incidentally with the Indicated Resources. Inferred Resources comprise less than 6% of the total PFS throughput and are not considered material to the viability of the project.

- ***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 PFS. This mining method suits the thick flat lying shallow nature of mineralisation and results in a low stripping ratio of around 1.7 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 resource recovery is approximately 98% with dilution of approximately 3%.

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

- ***Quality parameters.*** The cut-off grade was based on the processing plant feed grade that produced the breakeven point of product revenue less all associated costs except mining costs on a block by block basis in the resource model. Cut-off grade for a 1.65Mtpa processing plant was calculated at 1.41% TGC, however the lowest grade Indicated Resource block has a value of 2.68% TGC which is significantly higher than the calculated cut-off grade. Processing test work suggests that recovery is linear regardless of TGC grade.

- ***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 reputable sources and existing projects.

- ***Material modifying factors.*** The Siviour Graphite Project is located within exploration licenses granted by the South Australian Department of Premier and Cabinet. 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

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tailings and waste rock facility. A mining lease application under the *Mining Act, 1971* (SA) is being prepared. There are currently three other graphite projects with approved mining leases in the region.

Next Steps

Renascor intends to continue the accelerated development of Siviour, with planned upcoming work programs expected to include:

- Commencement of the Definitive Feasibility Study for Siviour Graphite Deposit (with completion expected later this year) and advanced feasibility studies concerning the viability of producing spherical graphite from Siviour graphite concentrates.
- Advanced offtake discussions with potential end-users of Siviour graphite products, including a planned Asia trip next month with Mastermines, Renascor's Asia marketing advisor.
- The completion of the Siviour mining lease application.
- Advanced discussions regarding potential financing arrangements.

Bibliography

1. Renascor ASX announcement dated 17 March 2017, "Siviour Now Among Ten Largest Graphite Deposits in the World"
2. Renascor ASX announcement dated 23 May 2017, "Siviour Graphite Scoping Study Demonstrates Robust Economics"
3. Renascor ASX announcement dated 27 October 2017, "Development Options for Siviour Graphite Project"
4. Renascor ASX announcement dated 13 December 2017, "Siviour Project Update"
5. Renascor ASX announcement dated 25 January 2018, "Battery Grade Spherical Graphite Produced from Siviour"
6. Renascor ASX announcement dated 8 February 2018, "Siviour Scoping Study Further Improves Siviour Economics"
7. Renascor ASX announcement dated 15 February 2018, "99.99% Spherical Graphite Produced from Siviour"
8. Renascor ASX announcement dated 21 February 2018, "Positive Metallurgical Tests for Expandable Graphite"

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.

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Competent Person Statements

Mineral Resource

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.

Exploration Results

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 it appears.

Ore Reserve

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.

Metallurgical Results

The information in this document that relates to metallurgical test work results is based on information compiled and reviewed by Mr Simon Hall, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Hall is a consultant to the Company. Mr Hall has sufficient experience relevant to the mineralogy and type of deposit under consideration and the typical beneficiation thereof 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 Hall consents to the inclusion in the report of the matters based on the reviewed information in the form and context in which it appears.

Process Plant

The information in this document that relates to the process plant for a Prefeasibility Study level assessment is based on information compiled and reviewed by Matthew Langridge, *who is a Fellow of the Australasian Institute of Mining and Metallurgy. Mr Langridge is an employee of Minnovo Pty Ltd. Mr Langridge has sufficient experience relevant to process plant design thereof to qualify as a Competent Person as defined by*

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the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code, 2012 Edition). Mr Langridge 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. 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.

For further information, please contact:

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Appendix 1

Key Components of Siviour Prefeasibility Study

1. Overview of Study

The Siviour Prefeasibility Study (the Siviour PFS) considers the viability of mining and producing natural flake graphite from Renascor's Siviour Graphite Deposit.

The Siviour PFS builds upon the results of the Siviour Scoping Study, completed in May 2017 (see Renascor ASX release dated 23 May 2017), and the Siviour Options Study, completed in October 2017 (see Renascor ASX release dated 27 October 2017). The Siviour Scoping Study considered a graphite mining and processing operation at the Siviour project site based on a 1.65Mt per annum plant. The Siviour Options Study considered a staged development of Siviour, whereby an initial operation would be based on a 100,000t per annum plant, before a subsequent expansion to the 1.65Mt per annum plant contemplated in the Siviour Scoping Study. Both the Siviour Scoping Study and the Siviour Options Study concluded that the project is technically viable and has the potential to deliver robust financial returns[4].

The Siviour PFS investigated multiple approaches to developing the Siviour Graphite Deposit, from which two were selected as the most viable:

- ***Immediate large-scale production.*** The Siviour PFS considers a 1.65Mt per annum processing plant to produce 142,000t per annum of graphite concentrates for the first ten years and an average of 117,000t per annum over a 30 year mine life.

- ***Staged production.*** The Siviour PFS also considers a reduced start-up capital, staged production approach, with production from a 200,000t per annum plant in the first three years (to produce approximately 22,800t per annum of graphite concentrates)[5]. In a second stage, commencing in year four, the larger scale 1.65Mt per annum plant would commence operations. In this scenario, Siviour would produce an average of 156,000t per annum for the first ten years of stage-two and an average of 129,000t per annum over the entire stage-two period (years 4 to 30).

The cost estimates for the Siviour PFS have been prepared to an accuracy level of +/- 25% in accordance with the Australian Institute of Mining and Metallurgy (the AusIMM) guidelines)[6].

[4] The Siviour PFS also follows the completion of the Siviour Spherical Graphite Scoping Study in February 2018 (see Renascor ASX release dated 8 February 2018), which considered the viability of a downstream spherical graphite plant in Australia using graphite from the Siviour Graphite Deposit.

[5] The 200,000t per annum stage-one plant doubles the size of the stage-one plant considered in the Siviour Options Study. The increased size of the PFS stage-one plant, which is the result of the increased availability of water on site, increases both the annual production rate and capital expenditure for the PFS stage-one plant. See Renascor ASX release dated 27 October 2017 for a discussion of the 100,000t per annum plant considered in the Siviour Options Study.

[6] AusIMM 2012. Cost Estimation Handbook. 2nd Edition, Monograph 27. The Australian Institute of Mining and Metallurgy.

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2. Location and ownership

The Siviour Graphite Project is part of Renascor's Arno Graphite Project. The project is located on South Australia's Eyre Peninsula, approximately 15km west of the coastal township Arno Bay, 120km northeast of Port Lincoln and 150km southwest of Whyalla. See Figure 1.

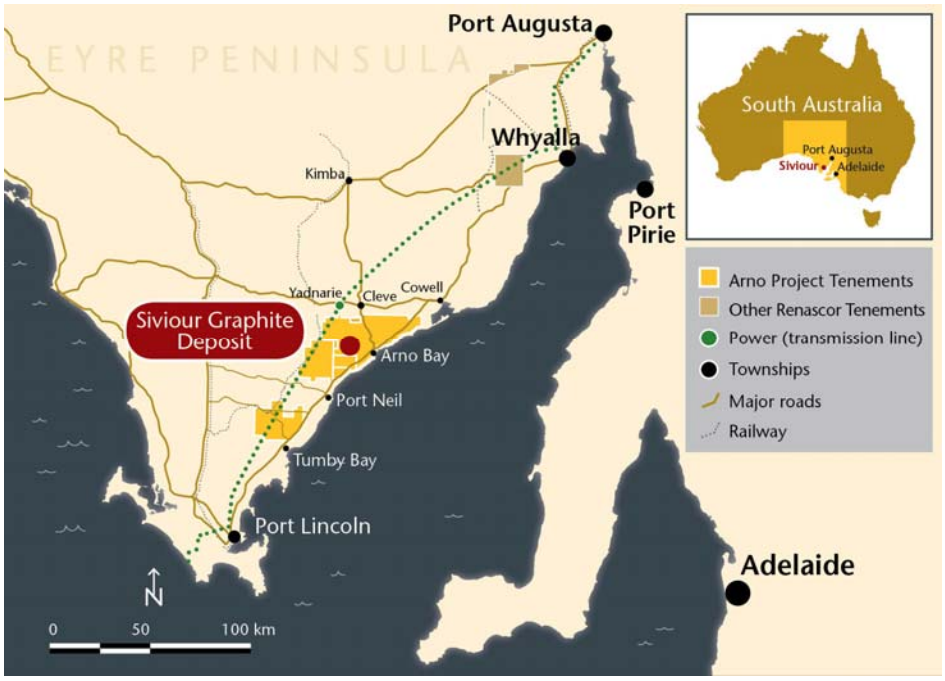

Figure 1. Project location

Renascor has the right to acquire the project through an option agreement between Renascor's wholly-owned subsidiary Eyre Peninsula Minerals Pty Ltd (EPM) and Ausmin Development Pty Ltd (Ausmin). EPM's option to acquire the project entitles EPM to 100% of Ausmin in exchange for a 22% equity interest in a listed vehicle holding the project and a 1% gross royalty. The option is exercisable upon incurring $2.5m in expenditure on the project from 1 July 2017. Renascor expects to have incurred this expenditure in the first half of 2018, after which it plans to exercise the option to acquire 100% of Ausmin.

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3. Mineral Resource and Ore Reserve

The Siviour PFS is based upon developing a single graphite deposit, the Siviour Graphite Deposit, to produce up to 156,000t per annum of graphite concentrates.

The Mineral Resource estimate, prepared by a Competent Person in accordance with the 2012 JORC Code, was first reported to the ASX in March 2017 (see Renascor ASX release dated 17 March 2017) and is presented below in Table 1.

Resource Category	Tonnes of mineralisation (Mt)	TGC	Tonnes of contained graphite (Mt)
Indicated	51.8	8.1%	4.2
Inferred	28.8	7.6%	2.2
Total	**80.6**	**7.9%**	**6.4**

Table 1. Siviour Mineral Resource estimate as of 15 March 2017

Ore Reserve

The Siviour PFS 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 summarised below is Table 2.

Reserve Category	Tonnes of ore (Mt)	TGC%	Tonnes of contained graphite (Mt)
Proven	0	0	0
Probable	45.2	7.9%	3.6
Total	**45.2**	**7.9%**	**3.6**

Table 2. Siviour Ore Reserve

A summary of information relating to the Siviour PFS, including material information for the Ore Reserve is included elsewhere in this release. Additional details of the material assumptions are set out in Appendix 3 (JORC Table 1).

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

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4. Mining and Mine Design

The geometry of the Siviour Graphite Deposit is generally flat-lying, with thick, flat, gently folding graphite mineralisation sitting from within 5 to 15 metres of the surface. This orientation facilitates a single shallow mining design that can be mined by conventional open pit mining.

Pit optimizations were completed by mining engineer consultant Optima based on production scenarios for both the large-scale (1.65Mt per annum) and small-scale (200,000t per annum) plants. Twenty pit shells were identified for mine planning purposes.

A schedule was developed that progressively mines in stages commencing in the south-eastern portion of the orebody of the large-scale production case to permit mining of a higher-grade corridor in the southern portion of the orebody in the mine's first year. See Figure 2. In the small-scale case, mining commences in a separate high-grade zone located in the southern portion of the ore-body.

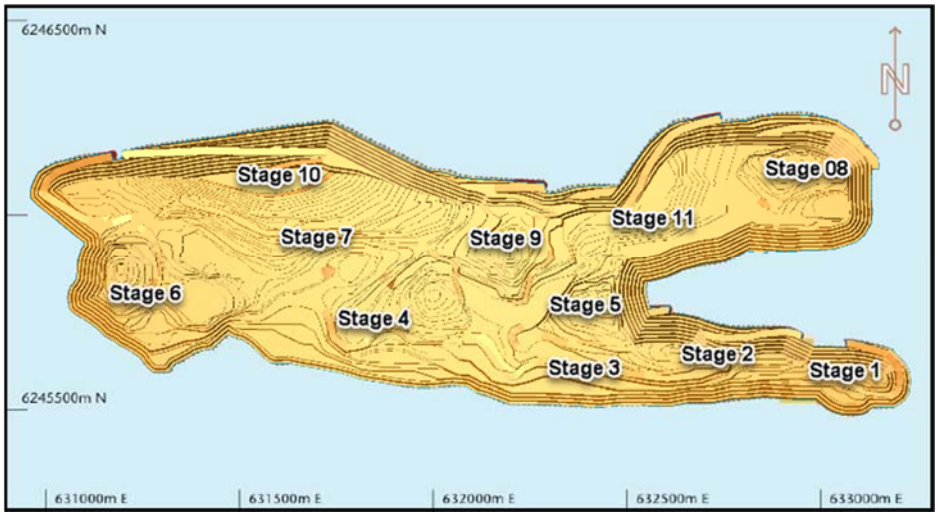

Figure 2. Plan view of mining stages (large-scale case)

Over the thirty-year life of mine, approximately 94% of the ore processed is within the Probable Ore Reserve category.

There is significant opportunity to further optimize the mine plan by extending the pit boundary to include near-surface high-grade zones. In particular, the resource remains open along-strike in the eastern portion of the orebody, including the area between the north-eastern and south-eastern limbs. See Figure 2.

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5. Metallurgy

The Siviour PFS relies primarily on metallurgical test work undertaken at ALS Metallurgy (Adelaide) in 2017. This program builds upon earlier testing undertaken in 2016 and 2017 at ALS Metallurgy (Adelaide) and Bureau Veritas (Adelaide), as reported in March 2017. See Renascor ASX release dated 31 March 2017.

For the Siviour PFS, mineral processing parameters are based on composite samples from 16 diamond-core holes drilled within the Siviour Probable Reserve. The core samples were selected on the basis of being representative of the typical mineralised zone within each core hole and different lithologies. Examination of these samples has demonstrated continuity of the quality of the graphite.

Metallurgical investigations were undertaken to assess the ore's amenability to different grind sizes, beneficiation by froth flotation and regrind and to identify the nature, flake size and occurrence of the graphite at various stages of the flowsheet. Investigations included variability testing based on grade and lithology.

A final flowsheet was adopted to optimize purity, flake size and recoveries, and included a financial investigation that confirmed the estimated operating and capital cost impact. See Section 6 (Process Plant) for a discussion of the PFS flowsheet parameters used for the process plant design.

The flake size distribution selected for the PFS is summarizsd in Table 3. These results were achieved at a weighted average graphite concentrate grade of 95% C and a recovery rate of 91% C.

Flake category	Particle size		Purity (C)	Distribution
	Microns (µm)	Mesh (#)		
Jumbo	>300	+48	94%	6%
Large	180 to 300	-48 to +80	96%	20%
Medium	150 to 180	-80 to +100	96%	10%
Small	75 to 150	-100 to +200	96%	43%
Fine	<75	-200	94%	21%

Table 3. Summary of Siviour concentrate size distribution

Additional metallurgical tests undertaken by Renascor include an assessment of Siviour graphite concentrates for use in several downstream markets for graphite, with potential to significantly enhance the financial returns from the project. These additional tests, which were first reported in January and February 2018, support the suitability of Siviour concentrates for expandable graphite, spherical graphite and a range of high-value and traditional markets, with all results meeting or surpassing industry standards. See Renascor ASX announcements dated 25 January 2018, 15 February 2018 and 21 February 2018.

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March 14, 2018

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6. Process Plant

The Siviour PFS considers the construction of a 1.65Mt per annum processing plant. In the optional staged approach, a smaller-scale 200,000t per annum processing plant is initially constructed, and in year four, a larger-scale 1.65Mt per annum plant commences operation along-side the 200,000t per annum plant, for a total processing capacity of 1.85Mt per annum.

Flowsheet

The flowsheet parameters for both the small-scale and large-scale plants are based on metallurgical test work undertaken from composite samples taking into account grade and lithology. The flowsheet adopted for the PFS is based on the metallurgical parameters discussed in Section 5 (Metallurgy), with the exception that the product specifications include an additional stream to differentiate between small and fine size fractions.

The process plants for both the 1.65Mt and 200,000t per annum plant are designed to recover graphite concentrate by froth flotation. Ore from the mine will be crushed in stages, followed by grinding, flotation, filtering, sizing and drying, before being bagged and containerised for shipment

Both the small-scale and large-scale plant follow the same flow sheet, with the exception of the crushing circuit, in which the small-scale plant uses a smaller mobile crusher until a larger crushing circuit is commissioned in stage two (see "Crushing" , next page).

A simplified flow sheet showing the larger 1.65Mt plant is shown in Figure 3.

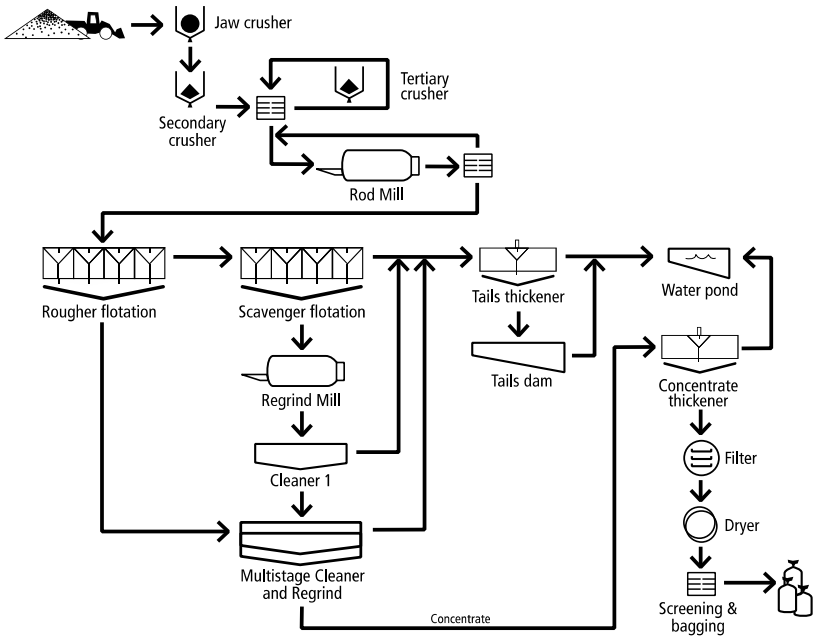

Figure 3. Process plant flowsheet (1.65Mt per annum plant)

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Crushing

For the large-scale plant, crushing will occur in three stages. In the first stage, a feeder breaker will permit optimal blending of ore from the ROM pad prior to primary and secondary crushing from approximately 600mm to 20mm. Ore will then be conveyed to a crushed ore stockpile before being sent to a scrubber to remove excess clays and assist with tertiary crushing/size reduction. For the small-scale plant, a mobile crusher will convey to a washing screen before milling; upon the completion of the larger plant in year four, the small-scale crushing circuit will be replaced by the large-scale crushing circuit, which is designed to accommodate 1.85Mt per annum.

Grinding

Crushed ore, containing both scrubber discharge and undersize material from a pebble crushing circuit screen, will be conveyed to a primary rod mill to achieve flotation feed of P_{80} 500µm. The mill discharge will be collected in a hopper before being pumped to a cyclone cluster, with oversized material recycled back to the rod mill.

Flotation and Regrind

Flotation and regrind circuits contain roughing, scavenging, six stages of cleaning and five stages of regrind. The cleaning circuit includes screening of concentrate to 150µm after the second cleaning, with the coarser flake material undergoing a light regrind, before a final stage of cleaning and filtration and drying, the finer material will pass through additional regrind and cleaning to increase purity. The circuit is designed to optimize coarse flake graphite retention at a minimum purity of 94% C, with purities of a minimum of 96% C targeted for finer flake fractions.

Dewatering

The final concentrates will be pumped into a thickener and then filtered, dried and screened into five size fractions (+300µm, +180µm, +150µm, +75µm and -75µm). Concentrates will then be directed to a hopper and bagged into one tonne bulka bags by product specification.

Tailings

Tailings, including slimes and flotation circuit tailings, will be directed to a tailings thickener for dewatering prior to being pumped to the tailings storage facility. Tailings thickener overflow will report to a process water tank for water recovery and reuse.

7. Infrastructure and Logistics

Infrastructure will include:

- A mining services area
- A tailing storage facility
- Office and workshop facilities
- Analytical and metallurgical laboratories
- Communications infrastructure
- Raw water and process dams
- Access roads to the plant and project site

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Electricity. Electricity for the first three years of production of the 200,000tpa plant will be sourced from diesel fuelled generators. Upon construction of the 1.65Mtpa plant, electricity will be supplied from the existing 11-33kV grid system owned and operated by SA Power Networks. An allocation has been made to augment and extend the existing power transmission line by approximately 14km.

Water supply and management. Water for the 200,000tpa plant will be supplied from the existing water pipeline system owned and operated by SA Water. Water supply for the 1.65Mtpa plant will be sourced from a reverse osmosis plant and associated infrastructure at the coast approximately 12km from the Siviour site. The position on the Spencer Gulf (subject to planning and approvals) will be approximately 11km south of Arno Bay township and will be remote from local residential, tourism and aquaculture.

Transport. Concentrates will be bagged and loaded for road transport from the project site to Port Adelaide, where they will be loaded into standard shipping containers. The transport route from the project site to Port Adelaide is generally approved for use by restricted access vehicles, such as road trains, with the exception of approximately 8km of road covering the distance from the project site that connects to the Port Lincoln Highway. An allocation has been made to upgrade these roads to ensure the maintenance of safe traffic conditions.

Workforce. Renascor expects to employ the majority of personnel from local communities within the vicinity of the project site, with personnel not based in the district having access to air service from Adelaide to either Port Lincoln or Whyalla. Accommodation will not be provided on site, with personnel residing in existing facilities in Arno Bay and other nearby townships. Medical support facilities, including hospitals and doctors, are located in the region in Cleve, Tumby Bay, Whyalla and Port Lincoln, with emergency services available locally. Allocation has been made for emergency response and first aid facilities at the project site to complement these local services.

8. Environment and Permitting

Renascor's environmental approvals and stakeholder engagement process is well underway, with and baseline studies completed in respect of hydrogeology, groundwater, air quality, noise and socio-economics.

As part of the approvals process, Renascor has commenced the preparation of an application for a mining lease under Section 35 of the *Mining Act, 1971* (SA) and engagement with stakeholders will continue during this time. Subject to approval of the mining lease, Renascor will prepare and submit a Program for Environment Protection and Rehabilitation to the Department of the Premier and Cabinet for assessment and approval.

The current land use of the area proposed to be subject to the mining lease is primarily agricultural and has been extensively cleared of native vegetation for cropping purposes. Renascor's intention is to negotiate with the landowners to purchase land that may be used in the proposed mining operations.

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9. Capital Costs

The capital cost estimate for the processing plant and related plant infrastructure has been compiled by consulting engineers Minnovo. The capital cost estimate for capital items relating to mining costs has been compiled by consulting mining engineer Optima. Renascor has compiled the cost estimates for the remaining capital items, with input from Minnovo, Optima, and other consultants.

Estimated pre-production capital costs are provided below in Table 4.

Category	Immediate large-scale		Staged development			
			Stage-one		Stage-two	
	US$ (m)	AU$ (m)	US$ (m)	AU$ (m)	US$ (m)	AU$ (m)
Total process plant	59.0	78.6	16.2	21.6	58.4	77.9
Infrastructure and owners' costs	25.4	33.9	9.2	12.3	18.2	24.2
EPC	5.9	7.8	1.6	2.1	5.9	7.8
Contingency	8.5	11.3	2.4	3.2	8.5	11.3
Total	**US$98.8**	**AU$131.6**	**US$29.4**	**AU$39.2**	**US$90.9**	**AU$121.2**

Table 4. Pre-production capital cost estimate summary

Process Plant

The capital cost estimate for the process plant includes all capital costs for the establishment of a functioning process plant plus plant specific infrastructure. The battery limits for the processing plant for the PFS are:

- ROM bin feed to the processing plant (for 1.65Mt per annum plant, this will be prior to the crushing circuit; for 200,000tpa plant, the mobile crushing plant will feed the primary mill)
- Incoming transmission line, main site circuit breaker output terminal where grid supply is utilised and output terminal of diesel gensets for genset options
- Discharge spigot of the tailings pipeline at the tailings storage facility
- Final product bagging station and concentrate load
- A pipe connection and pipeline outlet of the raw water feed pipeline.

Infrastructure and Owners' Costs

Capital costs for infrastructure and owners costs include:

- Establishment of mining infrastructure (major mining fleet equipment will be leased with ancillary and support equipment purchased)
- Tailings storage facility
- Administrative and non-mining equipment
- Supply of generators (for stage-one of staged development)
- Power supply augmentation and transmission line (for 1.65 Mt per annum plant)
- Potable water connection
- Reverse osmosis plant and raw water supply system (for 1.65Mt per annum plant)

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- Land purchase
- Rehabilitation bond as required by the State Government
- Groundwater disposal
- Site buildings and facilities
- Site access and road upgrades
- Earthworks, fencing and landscaping
- Ecological offsets

EPC (Engineering , Procurement and Construction)

EPC costs for the capital cost estimate were developed by Minnovo on the basis of the process plant being delivered by a single EPC contractor.

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10. Operating Costs

Operating costs have been estimated by Minnovo, Optima and Renascor based on the following sources:

- Estimates built from first principles referencing data bases and information from similar projects.
- Budget quotations and supplier recommendations
- Reagent consumptions based on metallurgical test work derived consumptions and reagent supply costs
- Power demand developed by Minnovo from the equipment list installed power (with service factors applied)
- Power costs from South Australia energy market supplier quotes (inclusive of transmission charges) and from genset suppliers (for genset power costs)
- Product logistics costs derived from logistic and port service providers
- Water costs are estimated from SA Water supply charges for the small-scale plant and from costs provided by reverse osmosis plant suppliers in the large-scale case.

Estimated annual cash operating costs per tonne of graphite concentrate produced are provided below in Table 5.

Category	Immediate large-scale		Staged development			
			Stage-one		Stage-two	
	US$ per tonne	AU$ per tonne	US$ per tonne	AU$ per tonne	US$ per tonne	AU$ per tonne
Mining	83	111	212	283	72	96
Processing	159	212	249	332	169	226
General and administration[7]	13	17	35	47	12	16
Product logistics	80	106	79	106	79	106
Total	**US$335**	**AU$446**	**US$576**	**AU$768**	**US$333**	**AU$444**

Table 5. Operating cost estimate summary (per tonne of concentrate produced)

[7] Cost of personnel for mining, processing and product logistics are separately accounted for within operating cost in respective categories in Table 5.

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11. Marketing

Product Specifications

Renascor has adopted five product specifications on the basis that this will generate a product offering likely to attract interest across a variety of graphite applications, including both traditional industrial uses and emerging growth markets such as lithium ion batteries and expandable graphite.

In establishing product specifications, Renascor has adopted the following general parameters:

- ***Purity.*** Renascor has received market feedback that graphite concentrates produced to a minimum purity of approximately 94% C will be attractive to potential customers at premium pricing levels, provided the concentrates do not otherwise contain any potentially disqualifying contaminants. Further market feedback suggests that increases in purity levels above 94% C will attract additional premiums.
- ***Flake size.*** As coarser flake graphite generally sells at a premium to fine flake, Renascor has adopted a process flow sheet designed to maximize the recovery of coarser flake graphite subject to meeting a minimum purity of 94% C and other product specifications.

Pricing

Natural flake graphite concentrates are generally sold on a directly negotiated basis between suppliers, end-users and intermediaries without regard to a recognised reference price. Renascor has had extensive engagement with end-users, intermediaries, speciality price reporting consultants and other graphite market participants regarding the potential sale of Siviour graphite concentrates, and these discussions provide the basis for the pricing model adopted as shown in Table 6 below.

Flake category	Particle size		Price (US$/tonne) FOB (Port Adelaide)
	Microns (µm)	Mesh (#)	
Jumbo	>300	+48	1,750
Large	180 to 300	-48 to +80	1,350
Medium	150 to 180	-80 to +100	1,050
Small	75 to 150	-100 to +200	950
Fine	<75	-200	800

Table 6. Graphite product specifications and pricing

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12. Financial Evaluation

A summary of the key results of the Siviour PFS is described below in Table 7.

Parameter	Immediate large-scale		Two-stage option			
			Stage-one (years 1 to 3)		Stage-two (year 4 to 30)[8]	
Currency	US$	AU$	US$	AU$	US$	AU$
Annual production	142,000t (first ten years) 117,000 (LOM)		22,800		156,000t (years 4 to 13) 129,000 (LOM)	
Plant throughput	1,650,000tpa		200,000tpa		1,850,000tpa	
Average feed grade	9.1% TGC (first ten years) 7.5% TGC (LOM)		12.4% TGC		9.0% TGC (years 4 to 13) 7.6% (LOM)	
Cash cost per tonne	US$335	AU$446	US$576	AU$768	US$333 (LOM)	AU$444 (LOM)
Basket price per tonne	US$1,056 or AU$1,408					
Life of mine	30 years					
Development capital	US$99m	AU$132m	US$29m	AU$39m	US$91m	AU$121m
Payback period (years)[9]	1.8		3.1		1.5	
NPV_{10} (after tax)	US$500m	AU$666m	US$407m or AU$542m[10]			
IRR (after tax)	62%		47%			

Table 7. Summary of key financial results

[8] LOM figures for stage-two refer to life of stage-two operation (years 4 to 30).
[9] Reflects period of time to payback development capital as calculated from first production for applicable period.
[10] NPV_{10} for stage-two reflects lower net present value based on additional three years of discounting due to deferred start-up.

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Financial Sensitivities

A sensitivity analysis was completed to assess the impact of the following parameters to the net present value (10% discount rate, after-tax) as expressed in Australian Dollars: operating expenditure, capital expenditure, Australian-US exchange rate and product price.

Results of the sensitivity analysis are shown in Figures 4 and 5 below:

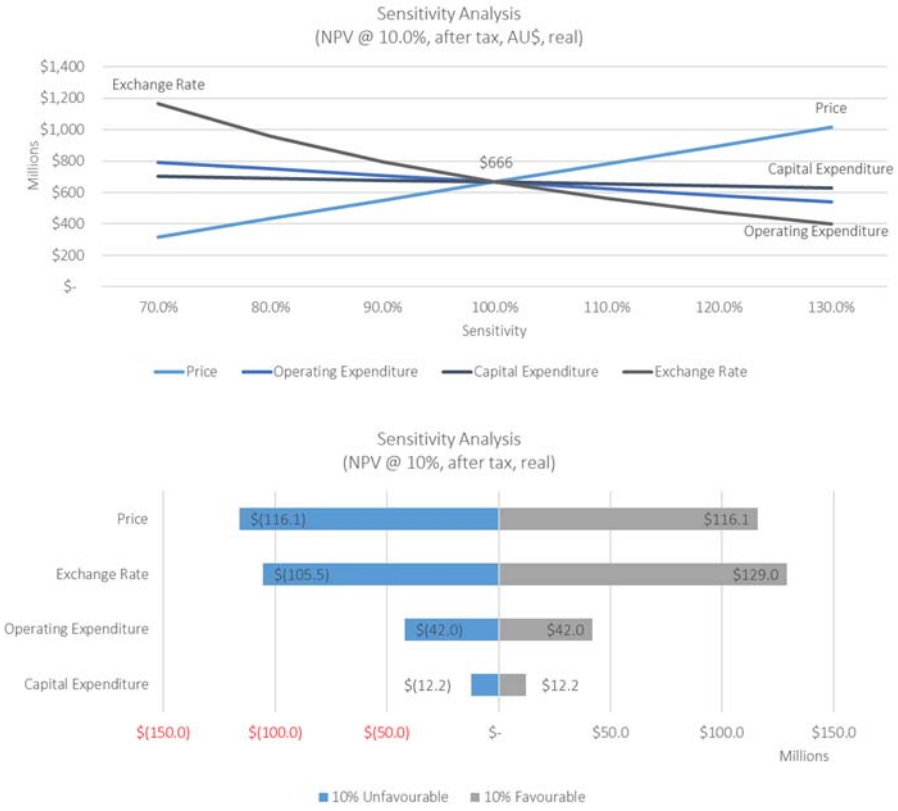

Figure 4. Immediate large-scale – sensitivity analysis

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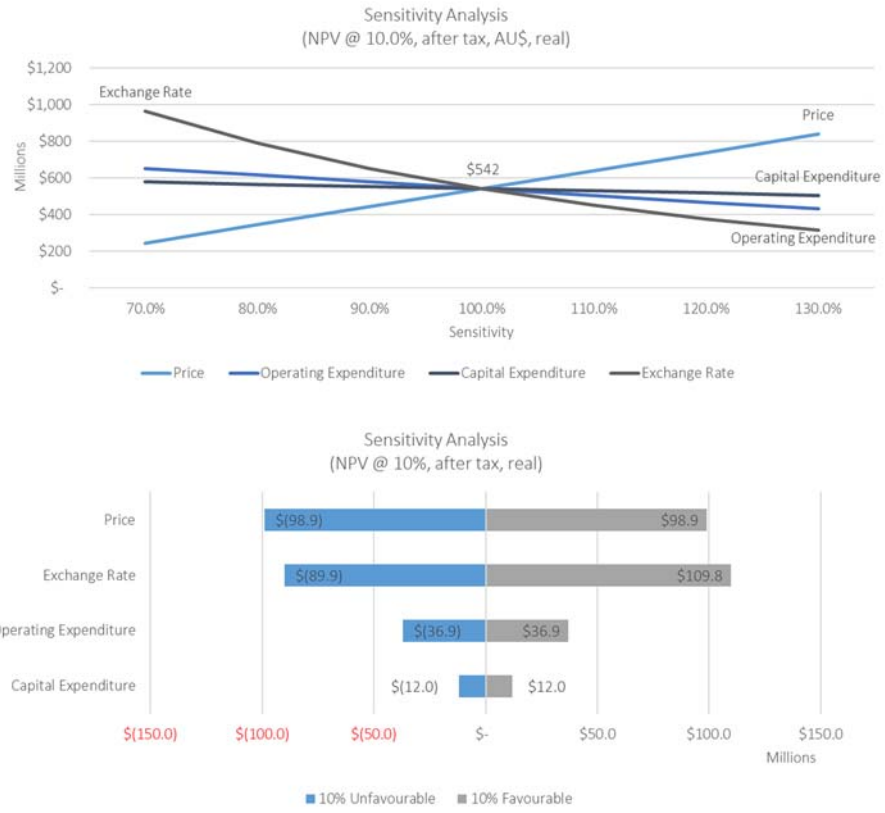

Figure 5. Staged development – sensitivity analysis

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13. Funding

The Siviour PFS is designed to allow flexibility in funding. The immediate large-scale option offers a higher net present value by achieving an economy of scale with a large-scale plant from the first year of production. The staged-option offers a lower pre-production capital expenditure to commence production activities, before transitioning to the larger-scale production in year four.

In addition to a lower up-front capital requirement, a potential benefit of the staged approach is the opportunity to develop a customer base during the first years of small-scale production to support the larger capital requirement needed to fund the larger scale, stage-two operation.

Renascor believes it is well placed to secure necessary funding for either the immediate large-scale or the staged option. Options being actively pursued include:

- Equity and debt instruments from existing shareholders
- Project finance
- Partner finance
- Offtake-related finance
- Equipment and contractor finance
- Access to government grants.

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14. Implementation Schedule

The project development schedule contemplates completing a definitive feasibility study in 2018, before funding and, subject to obtaining regulatory approvals, commencing construction in 2019. A decision as to whether to proceed with an immediate large-scale approach or a staged approach is expected to be made later this year, after discussions with potential offtake and funding partners. Mining is scheduled to commence in fourth quarter 2019, with first production in 2020.

A summary schedule is shown in Figure 6 below.

Year	2017		2018				2019				2020			
Calendar Quarter	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PFS	■	■	■											
Environmental Assessment	■	■	■											
Mining Licence		■	■	■										
Marketing and Offtake			■	■	■	■								
Mining Licence Approval					■	■								
DFS				■	■	■								
Financing			■	■	■	■								
Final Investment Decision						■								
Final Mining Approval (PEPR)						■	■	■						
Detailed Design and Procurement							■	■	■					
Construction of Processing Plant									■	■	■			
Commissioning and Operations											■	■	■	■

Figure 6. Summary project schedule

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15. Risk Assessment

Risk management is a critical part of the development and operating strategy used in assessing the viability of a mineral deposit and proceeding to a decision to mine a mineral deposit. Risk management will be ongoing and subject to regular review.

In connection with the preparation of the Siviour PFS, Renascor undertook a project risk assessment to identify and assess key risks to the commercial and operational success of the Siviour Graphite Project, whilst abiding with Renascor's commitments to the environment, safety and the project's stakeholders.

The Siviour PFS risk assessment included a workshop attended by Renascor's management and operating team, as well key consultants contributing to the Siviour PFS. Following the workshop, a risk register was prepared with project risks identified, together with mitigation strategies. Ratings were assigned to each risk based on the probability of occurrence and the impact to the project. The PFS risk assessment did not identify any material risks that were likely to prevent the development and operation of the project in accordance with the Siviour PFS.

The risk register will be updated throughout the continued development of the project to reflect the scope of work being pursued at any point in time and how the risk may impact various stages of development.

Appendix 2

Material Assumptions

Material assumptions used in the estimation of the production targets and associated financial information relating to the study discussed in this announcement are set out in the following table.

Criteria	Commentary
Study status	The production targets and financial information in this study are based on a Prefeasibility Study (PFS) level assessment, with cost estimates prepared to an accuracy level of +/-25% in accordance with the Australian Institute of Mining and Metallurgy (the AusIMM) guidelines (*AusIMM 2012. Cost Estimation Handbook. 2nd Edition, Monograph 27. The Australian Institute of Mining and Metallurgy*).
Cut-off factors	Cut-off grade was based on the processing plant feed grade that produced the breakeven point of product revenue less all associated costs except mining costs on a block by block basis in the resource model. Cut-off grade for a 1.65Mtpa processing plant was calculated at 1.41%TGC.
Mining factors or assumptions	This study is based on mining and processing of graphite ore that is obtained from the Siviour Graphite Deposit, as contemplated in the Siviour PFS. The Siviour PFS contemplates mining based on an open cut operation utilizing conventional drill and blast, load and haul and crusher feed. Whittle LG shell optimization was carried out on Indicated Resources only to identify the mining sequence and location of economic shells. The optimization was constrained by the Driver River in the west and south and constrained by public unsealed roads to the north and east. The optimized selected shells were then used to base detailed mine designs as provided in the PFS. The mine designs were then scheduled with the results placed in a cost model to evaluate the feasibility of mining these designs at a PFS level. Indicated Resource material considered economic to place through the processing plant was converted to a Probable Ore Reserve. The mining method to be 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 PFS. This mining method suits the thick flat lying shallow nature of mineralisation and results in a low stripping ratio of around 1.7 over the life of mine. Other bulk mining methods were assessed with truck and excavator conventional mining clearly found to be the most suitable mining method. Pit wall slope angles used an overall slope wall angle of 45 degrees which is at least 5 degrees less than the advised values, from geotechnical parameters provided by Mining One Pty Ltd. The cut-off grade was applied to the resource model to flag possibly economic blocks. A 1m skin was placed around these blocks and flagged to represent dilution from mining on each bench and projected up 2m to represent bench recovery. The resource model was then transferred into a 10x10x2m mining model to create a diluted mining model. Overall resource recovery is around 98% with around 3% dilution. Minimum mining width is 20m but due to the flat lying nature of

	mineralisation is not a constraint on mining. Mine designs include Inferred material which makes up just less than 6% of total inventory while 3% is unclassified waste rock with the remaining 91% being Indicated material. Removing Inferred material makes no material difference to project economics. Inferred material is generally at the indicated boundary and part of the Indicated only Whittle shell and mine design volumes and is mined incidental to Indicated material. Infrastructure requirements are modest for the selected mining method with no upgrade of nearby services and infrastructure required.
Metallurgical factors or assumptions	The metallurgical process is to crush, grind and float which is common for this style of mineralisation and is commonly used in mine sites globally. Metallurgical test work was conducted on composite samples which included lithological variations with a range of head grades; acceptable grade and recovery was achieved. The understanding of recovery in completely weathered material requires further test work but represents a small amount of the mineralisation. No deleterious elements have been identified. Further test work is in progress and not considered required at the PFS level. Product specifications are dependent on the end use and customer. The concentrate produced from test work is at the benchmarked 95% C purity.
Environmental	Ongoing environmental assessment is based upon studies initiated as part of the compliance and approvals process to establish baseline characteristics, including geology, water, air, noise, flora, fauna, socio-economic, traffic and transport, cultural heritage and visual amenity, including historical data. These studies will support an application for a mining lease under Section 35 of the *Mining Act, 1971* (SA). An approved PEPR will be required after a mining lease has been granted to enable operations to commence. Preliminary studies have not indicated material environmental impediments to the proposed development of the Project. The company has adopted an integrated planning approach, feeding results from stakeholder engagement and environmental studies, into the PFS to minimize impact on the surrounding environment and community, whilst reducing regulatory risk.
Infrastructure and logistics	The infrastructure required to support the mining and processing operation including a tailings storage facility, water supply pipeline, Reverse Osmosis Plant, access roads within the plant and the project site, diesel generators, office and employees' facilities, and upgraded roads as required for site access.
Capital costs	The capital cost estimate for the Siviour PFS has been compiled by Minnovo, Optima and Renascor as noted below: • Process plant and related infrastructure costs were provided by Minnovo based on flowsheets and mass balances developed from Renascor managed test work, a derived equipment list, and site layouts from which costs were developed. The PFS capital cost estimate allowed for screening and bagging of four concentrate product sizes. Five concentrate product lines have been selected in the final PFS which will require more capital for additional fine screening and bagging. The additional fine screening and bagging will be added in the DFS and does not materially affect the PFS capital cost estimate above given the stated accuracy and the expected cost of such additional fine screening and bagging. • Mining costs were developed by Optima on the basis of a mine optimisation and design and the development of a mining schedule and equipment selected.

	• Owners costs and others were provided by Renascor with input from consultants and suppliers. Owners costs were built up from estimates based on first principles, supplier quotes and costs from similar projects. Bulk earthworks, roads, drainage and fencing costs were estimated by Renascor. • A project contingency allowance of 13% and 10% has been applied to the process plant and mining costs, respectively. The cost estimate was compiled in AU$ with a base date of Q4 2017 with no allowance for escalation to an accuracy of +/-25%. EPC refers to engineering, procurement and construction management costs and is applied at a rate of 10% of the process plant costs.
Operating costs	The operating cost estimate for this study includes all costs associated with mining, processing, infrastructure, and site-based general and administration costs. Mining costs were developed by Optima Consulting. Processing costs were developed by Minnovo. General and administration costs were developed by Renascor supported by its consultants and suppliers. The operating cost estimate is presented on an annualised basis in Q4 2017 AU$ to an accuracy of +/- 25%. There has been no contingency applied to operating costs. Labour force estimates were developed by Renascor, Optima and Minnovo based on industry standards from similar operations. The estimate for product logistics was updated for the PFS by Renascor and is based of quotes from logistic service providers and port costs. In all cases, the operating cost estimates exclude exchange rate variations, price escalation and interest charges. Operating costs reported have been based on design criteria adjusted to reflect PFS ore grade and mining schedule.
Revenue factors	Revenue from the project is derived from the sale of graphite flake products. Renascor has established the characteristics of expected final products through test programs undertaken on composite samples from Siviour core. Renascor has received market feedback that graphite concentrates produced to a minimum purity of approximately 94% will be attractive to potential customers. Product prices are based on discussions with end-users and market professionals and examination of other studies. Risks associated with these assumptions used in product pricing include that the product split is not achieved and that the price assumptions are not met by the prevailing markets. Revenue factors relating to the production of graphite concentrates are based on estimates included in the Siviour PFS. Sensitivity analysis has been completed with key parameters assessed, with the project maintaining a positive net present value in all cases.
Schedule and timeframe	The project development schedule is based on the Siviour PFS without material modification and having funding and approvals in place to commence construction in 2019. The schedule was developed by Renascor with input from its consultants. The schedule assumes a likely EPC implementation strategy. The project implementation schedule estimates a timeline of approximately 18 months from funding approval to commissioning. The schedule assumes that permitting progresses concurrently with the schedule.
Market assessment	Natural flake graphite is generally sold on a directly negotiated basis between suppliers, end-users and intermediaries. While there is not a recognised benchmark for pricing and qualifying graphite for sale, purity and flake size are the most frequently adopted parameters use. Generally, increased prices are available to

	graphite with higher purity and coarser flake size. In addition, other parameters, including the levels of impurities or contaminants, can impact the desirability of natural flake graphite. Renascor has adopted five product specifications based on flake size and purity on the basis of market feedback that suggests this will give Renascor a product offering likely to attract interest across a variety of graphite applications using a relatively simple process flowsheet facilitating low cost production and consistent product quality.
Funding	To achieve the range of outcomes indicated in the PFS, funding in the range of AU$145m or US$109m will likely be required for capital works, pre-production working capital and contingency required to construct the Siviour Graphite Project. It is anticipated that the finance will be sourced through a combination of equity and debt instruments from existing shareholders, new equity investment and debt providers from Australia and overseas. The Company has sufficient cash on hand at the date of this announcement to undertake the next stage of planned work programs, including continued metallurgical testing and completion of a mineral lease application. Renascor's Board believes that there is a reasonable basis to assume that funding will be available to complete all feasibility studies and finance the pre-production activities necessary to commence production on the following basis: • Renascor's Board and executive team have a strong financing track record in developing resources projects; • Renascor has a proven ability to attract new capital; • Renascor's Board believes this study demonstrates the project's strong potential to deliver favourable economic return; and • Other companies at a similar stage in development have been able to raise similar amounts of capital in recent capital raisings.
Economic	A discount rate of 10% has been used for financial modelling. This number was selected as a generic cost of capital and considered a prudent and suitable discount rate for project funding and economic forecasts. The model has been run as a life of mine model and includes sustaining capital and closure costs. The study outcome was tested for key financial inputs including: basket price, capital and operating costs and US/AU exchange rate. All of these inputs were tested for variations of +/- 10%.
Exchange rate	The exchange rate for the reporting of the results from this study is AU$1.00 = US$0.75.
Social	This study contemplates siting the mine and processing plant in a greenfield location. There are no known community issues that Renascor has identified as being a likely material impediment to developing the project.
Other	There are several other material risks to this project including product price, competition, regulatory approval, social license, scheduling and other risks typical of projects of similar scale.
Classification	Mineral Resources converted to Ore Reserves as per JORC 2012 guidelines.
Audits or reviews	This study was internally reviewed by Renascor. No material issues were identified by the reviewers. All study inputs were prepared by Competent Persons identified in this announcement.

Appendix 3

JORC Table 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• Nature and quality of sampling. • Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	**1. Reverse Circulation** • RC drill samples were collected at one-metre intervals. • Approximately 60% of samples were not submitted for assay due to the visual non-mineralised nature of the material collected. All graphitic intervals were submitted for analyses. • Duplicate and standards analysis were completed and no issues identified with sampling reliability. • All samples were sent to Bureau Veritas laboratory in Adelaide for preparation and for Total Graphitic Carbon (TGC) analyses. • All samples were pulverised using an LM5 mill, 90% passing 75µm. • Sampling was guided by Renascor Resources Limited's protocols and QA/QC procedures. **2. Diamond Drilling** • Drill samples in this program were collected based on geology, varying in thickness from 0.2 m to 1.2 m intervals. • Core samples were quarter split Triple Tube HQ3 core and sent for laboratory geochemical analysis at Bureau Veritas, South Australia. • Duplicate samples in this program were collected after each 25 samples and standards were inserted into the sample stream at the end of every hole. • Sampling was guided by Renascor Resources Limited's protocols and QA/QC procedures.
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core	• RC using 100 mm face sampling hammers. • Diamond drilling was undertaken by a drilling contractor (Coughlan Drilling) with a McCulloch DR800 drill rig, using

Criteria	JORC Code explanation	Commentary
	is oriented and if so, by what method, etc).	triple tube with a HQ3 drill bit (61mm core diameter). Core was orientated down hole using a Reflex digital orientation system.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	• One-metre drill chip samples, weighing approximately 3 kg were collected throughout the RC drill programme in sequentially numbered bags. Samples were generally collected from the 12.5% rifle splitter attached to the drill rig however in some instances samples were collected by spear technique. • Every interval drilled is represented in an industry standard chip tray that provides a check for sample continuity down hole. • Diamond core recovery was routinely recorded and within the reported mineralised zones from the four DD holes core recovery averaged 96%.
Logging	• Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. • The total length and percentage of the relevant intersections logged.	• Primary data was captured into spreadsheet format by the supervising geologist, and subsequently loaded into the Renascor Resources Limited's database. • No adjustments have been made to any assay data. • The Specific Gravity data was collected using Archimedes Principle water displacement device of core samples on metre intervals down the hole. Check analysis were made by Bureau Veritas, South Australia. • Core was orientated using the Reflex orientation tool, marked into 1 m intervals, core recovery and geotechnical data – Rock Quality Designation were recorded. • Core was photographed, both dry and wet.
Sub-sampling techniques and sample preparation	• If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. • For all sample types, the nature, quality and appropriateness of the sample	**1. RC Drill Chips** • All samples were marked with unique sequential numbering as a check against sample loss or omission. • At the Bureau Veritas laboratory sample

Criteria	JORC Code explanation	Commentary
	preparation technique. • Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. • Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. • Whether sample sizes are appropriate to the grain size of the material being sampled.	preparation involved the original sample being dried at 105° for up to 24 hours on submission to laboratory. • Sample is split to less than 3 kg through linear splitter and excess retained. • Pulverising was completed using LM5, 90% passing 75 µm in preparation for analysis using the Bureau Veritas network. **2. DD Core** • HQ3 diameter core is cut in half to preserve the orientation mark. • Graphite intervals are sampled using ¼ HQ3 diameter core. • Every twenty five samples a duplicate sample is collected using ¼ HQ3 diameter core and submitted for check analysis. • All the samples are marked with unique sequential numbering as a check against sample loss or omission. • Samples were crushed and pulverised using LM5, 90% passing 75 µm in preparation for analysis using the Bureau Veritas network.
Quality of assay data and laboratory tests	• The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. • 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.	• All samples were sent to Bureau Veritas laboratory in Adelaide for preparation and for Total Graphitic Carbon (TGC) analyses and the DD core for additional multi element analysis using a mixed acid digest. • Sampling was guided by Renascor Resources Limited's protocols and QA/QC procedures. • Duplicate analysis was completed and no issues identified with sampling reliability. • 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). • Bureau Veritas Minerals has adopted the ISO 9001 Quality Management Systems.

Criteria	JORC Code explanation	Commentary
		All Bureau Veritas laboratories work to documented procedures in accordance with this standard.
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel. • The use of twinned holes. • Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. • Discuss any adjustment to assay data.	• QA/QC protocols were adopted for the drill programs. • Duplicate analysis was completed and no issues identified with sampling representatively. • There are three DD holes that twinned earlier RC holes. • Field duplicates and standards were not submitted by Renascor with the November 2016 diamond drill samples. Renascor intended to submit these and procedures are in place to ensure QAQC samples are submitted in future. • Field duplicates and standards were inserted at a rate of 4% and 3%, respectively, for the 2017 RC drilling program. Field duplicates results are good and there is excellent correlation of assayed sample results against industry standards. • Results from standards indicate good accuracy for data <20% TGC and a bias to higher grades for TGC >20%. This would affect less than 1% of the data. • No adjustments have been applied to the results.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	• All drill holes were pegged using a hand-held GPS. Upon completion, all RC and DD hole collar locations were picked up using a Trimble DGPS. • The collar coordinates were entered into the drillhole database. • The degree of accuracy of drillhole collar location and RL is estimated to be within 0.1m for DGPS and 5m error level for the hand-held GPS. • The grid system for the project was Geocentric Datum of Australia (GDA) 94, Zone 53.
Data spacing and distribution	• Data spacing for reporting of Exploration Results.	• Holes were drilled on sections on either 100m or 200m spacing.

Criteria	JORC Code explanation	Commentary
	• Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. • Whether sample compositing has been applied.	• Geological interpretation and mineralisation continuity analysis indicates that data spacing is sufficient for definition of a Mineral Resource. • 86% of the samples were taken over a 1 m interval of 1 m. • DD core sampling was based on geological boundaries with a general maximum limit of 1 m thickness and a minimum of 0.2 m thickness for assay samples.
Orientation of data in relation to geological structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	• 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. • The orientation of drilling is not expected to introduce sampling bias.
Sample security	• The measures taken to ensure sample security.	• Unique sample number was retained during the whole process. • Samples were delivered to Bureau Veritas Minerals as they were collected.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• All data collected was subject to internal review.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• All drilling was entirely within Exploration Licence EL5618 (formerly EL4430) granted on 29 January 2015, expiring 28 January 2020. EL5618 is 100% owned by Ausmin Development Pty Ltd and is in good standing with no known impediments. • The drilling was carried out on agricultural freehold land.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Several companies have carried out historic exploration over many years, but without any focus on graphite

Criteria	JORC Code explanation	Commentary
		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. • 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.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Mineralisation within Meso-proterozoic sediments of the Hutchison Group. Graphite is hosted by graphitic pelitic schists.

Drillhole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  • easting and northing of the drillhole collar
	  • elevation or RL (elevation above sea level in metres) of the drillhole collar
	  • dip and azimuth of the hole
	  • down hole length and interception depth
	  • hole length.
		• Exploration results are not being reported for the Mineral Resources area.

Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.*	• Exploration results are not being reported for the Mineral Resources area. • Metal equivalent values have not been used. • A nominal 3% Total Graphitic Carbon lower cut-off has been applied in the determination of significant intercepts.
Relationship between mineralisation widths and intercept lengths	• *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect.*	• Drill holes intersected mineralisation at near perpendicular to the strike orientation of the host lithologies. • Twenty-nine of the thirty four drill holes in the January 2017 programme were vertical and five holes were orientated at -70° on a bearing of 180°. • Exploration results are not being reported for the Mineral Resources area.
Diagrams	• *Appropriate maps and sections (with*	• Relevant diagrams have been included

Criteria	JORC Code explanation	Commentary
	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.	within the Mineral Resource report main body of text. • Exploration results are not being reported for the Mineral Resources area.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Exploration results are not being reported for the Mineral Resources area.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Exploration results are not being reported for the Mineral Resources area. • Metallurgical samples were collected from ¼ HQ drill core from graphite rich intervals from drillhole 16SIVRCDD035
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).*	• 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.

Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. • Data validation procedures used.	• Primary data was captured into spreadsheet format by the supervising geologist, and subsequently loaded into the Renascor Resources Limited's database. • Additional data validation, by Optiro, included checking for out of range assay data and overlapping or missing intervals.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	• 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.
Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological	• Confidence in the geological interpretation of the deposit is moderate. The spatial

Criteria	JORC Code explanation	Commentary
	interpretation of the mineral deposit. • Nature of the data used and of any assumptions made. • The effect, if any, of alternative interpretations on Mineral Resource estimation. • The use of geology in guiding and controlling Mineral Resource estimation. • The factors affecting continuity both of grade and geology.	extent and geometry of the graphitic horizon is supported by geophysical interpretation (electromagnetic). The geological confidence has been considered for classification of the resource. • Mineralisation hosted within a sequence of micro-gneiss, metasediments and schists. • 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. • Geological interpretation was completed on a sectional basis, from which geological surfaces were interpolated for mineralisation the top and base of the mineralisation. A small horizon, located above the mineralised horizon was interpreted using an enclosed wireframe. These interpretations were used to constrain the grade estimation. • There are no alternative detailed interpretations of geology. • 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 un-mineralised domains.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The 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. • The mineralised horizon has an average thickness of 21 m (range of 3 m to 53 m) and the depth to the top of the mineralised

Criteria	JORC Code explanation	Commentary
		horizon ranges from 4 m to 122 m with an average depth of 43 m. • Drilling has closed the deposit to the south: it remains open to the east, west and north.
Estimation and modelling techniques	• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. • The assumptions made regarding recovery of by-products. • Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. • Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates. • Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drillhole data, and use of reconciliation data if available.	• Drillhole sample data was flagged from interpretations of the top and base of the mineralised horizon. • Sample data was composited to a 1 m downhole length. • Data has a low coefficient of variation and a top-cut grade was not applied. • The Mineral Resource was estimated in March 2016 and in October 2016. Classification and validation of the current model against this is consistent with the infill and extensional drilling. • TGC mineralisation continuity was interpreted from variogram analyses to have a horizontal range of 260 m (east-west) by 155 m (north-south). • Drillhole spacing at Siviour Prospect (where Indicated Resources have been defined) is at a spacing of 100 m to 200 m along strike and on-section spacing ranges from 40 m to 100 m. • Inferred mineralisation has been interpreted from an EM anomaly and a line of drilling at Buckies, 850 m along strike to the north. • The maximum extrapolation distance is 50 m along strike and 70 m across strike. • Grade estimation was into parent blocks of 25 mE by 50 mN on 2 m benches. Block size was selected based on kriging neighbourhood analysis. • Estimation was carried out using ordinary kriging at the parent block scale. • The search ellipses were oriented within the plane of the mineralisation. • 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 six times

Criteria	JORC Code explanation	Commentary
		the initial search, with reduced sample numbers required for estimation. • Around 90% of the block grades were estimated in the first pass. • 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.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• Tonnes have been estimated on a dry basis. • Moisture content has not been tested.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• The Mineral Resource is reported above a 3% TGC cut-off grade to reflect current commodity prices and open pit mining methods.
Mining factors or assumptions	• 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.	• Planned extraction is by open pit mining. • Mining factors such as dilution and ore loss have not been applied.
Metallurgical factors or assumptions	• 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.	• No metallurgical assumptions have been built into the resource models. • The results from metallurgical testwork have been considered for Mineral Resource classification. • 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. • During September 2016, ALS Metallurgical performed preliminary metallurgical tests on samples from diamond drillhole 16SIVDD035. These tests mimic the test sequence originally undertaken on core

Criteria	JORC Code explanation	Commentary
		from diamond drillhole CRD090 at Paxtons and the results confirm the ability to produce concentrates with conventional metallurgy techniques that result in a marketable graphite product. • Additional testwork on a representative composite sample of the graphite mineralisation at Siviour has been conducted by Bureau Veritas. Results to date demonstrate the ability to produce, from the composite sample being tested, concentrates with conventional metallurgy techniques that results in a marketable graphite product.
Environmental factors or assumptions	• Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation.	• No assumptions have been made regarding waste and process residue. • Environmental studies will be undertaken if the project progresses to a pre-feasibility level.
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. • The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. • Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• Bulk density was measured for 242 core samples from diamond holes. Two outliers were excluded (of 1.54 t/m^3 and 4.43 t/m^3). The density data has a range of 1.61 to 3.19 t/m^3. • Analysis of this data indicated that there is no relationship with TGC grade or depth. • A lithological model was developed to capture material with higher density and material with lower density. Bulk densities of 2.0 t/m^3 and 2.2 t/m^3 were assigned to the material where the dominant lithology was consistent with a lower density and a bulk density of 2.6 t/m^3 was assigned to material with a dominant lithology consistent with a higher density. A density of 1.9 t/m^3 was assigned to the cover sediments and near surface clay horizon.
Classification	• The basis for the classification of the Mineral Resources into varying confidence categories. • Whether appropriate account has been taken of all relevant factors (i.e. relative	• Mineral Resources have been classified on the basis of confidence in geological, grade and quality continuity using drill hole data, drill hole spacing, geological model, test work results, modelled grade continuity and conditional bias measures (slope of the

Criteria	JORC Code explanation	Commentary
	confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). • Whether the result appropriately reflects the Competent Person's view of the deposit.	regression and kriging efficiency) as criteria. • The results from metallurgical testwork have been considered for Mineral Resource classification. Metallurgical testwork data at Siviour confirms data obtained from the adjacent Paxtons prospect. • In Optiro's opinion there are reasonable prospects for eventual economic extraction. • Measured Mineral Resources - none defined. • 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. • Inferred Mineral Resources have been defined in areas where extension of mineralisation is supported by limited drilling and interpretation of geophysical data. • The classification considers all available data and quality of the estimate and reflects the Competent Person's view of the deposit.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• The resource estimate has been peer reviewed by Optiro staff.
Discussion of relative accuracy/confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. • 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.	• The assigned classification of Indicated and Inferred reflects the Competent Person's assessment of the accuracy and confidence levels in the Mineral Resource estimate. • The confidence levels reflect production volumes on an annual basis.

Section 4 Estimation and Reporting of Ore Reserves

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Reserves	• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. • Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	• The Indicated Resources from Section 3 of these tables has been used as the basis for conversion to the Ore Reserve • The Mineral Resources are inclusive of the Ore Reserve.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• The competent person, Ben Brown, visited the site in January 2018. He also inspected core in storage in Adelaide in November 2017.
Study status	• The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. • 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.	• All aspects of the project are deemed to be at least to a prefeasibility level with all sections analysed and reported by third party professional and qualified entities. • The project is technically achievable and economically viable and all material modifying factors have been considered and included in the Prefeasibility Study (the PFS).
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	• Cut-off grade was based on the processing plant feed grade that produced the breakeven point of product revenue less all associated costs except mining costs on a block by block basis in the resource model. Cut-off grade for a 1.65Mtpa processing plant was calculated at 1.41%TGC however, the lowest grade Indicated Resource block has a value of 2.68% TGC which is significantly higher than the calculated cut-off grade. • Processing test work suggests that recovery is linear regardless of TGC grade.
Mining factors or assumptions	• 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	• Whittle LG shell optimisation was carried out on Indicated Resources only to identify the mining sequence and location of economic shells. The optimisation was constrained by the Driver River in the west and south and constrained by public unsealed roads to the north and east. The optimised selected shells were then used to base detailed mine designs

Criteria	JORC Code explanation	Commentary
	or by preliminary or detailed design). • 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. • The assumptions made regarding geotechnical parameters (eg pit slopes, stope sizes, etc), grade control and pre-production drilling. • The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate). • The mining dilution factors used. • The mining recovery factors used. • Any minimum mining widths used. • The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion. • The infrastructure requirements of the selected mining methods.	as provided in the PFS. The mine designs were then scheduled with the results placed in a cost model to evaluate the feasibility of mining these design at a PFS level. Indicated Resource material considered economic to place through the processing plant was converted to a Probable Ore Reserve. • 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 PFS. This mining method suits the thick flat lying shallow nature of mineralisation and results in a low stripping ratio of around 1.7 over the life of mine. Other bulk mining methods were assessed with truck and excavator conventional mining clearly found to be the most suitable mining method. • Pit wall slope angles were based on geotechnical parameters provided by Mining One Pty Ltd for the small-scale production plant mine designs while the large-scale plant designs which were completed prior to the release of geotechnical slope wall parameters used an overall slope wall angle of 45 degrees which is at least 5 degrees less than the advised values. • The cut-off grade was applied to the resource model to flag possibly economic blocks. A 1m skin was placed around these blocks and flagged to represent dilution from mining on each bench and projected up 2m to represent bench recovery. The resource model was then transferred into a 10x10x2m mining model to create a diluted mining model. • Overall resource recovery is around 98% with around 3% dilution and applied in the mining model. • Minimum mining width is 20m but due to the flat lying nature of mineralisation is not a constraint on mining. • Mine designs include Inferred Resource which makes up just less than 6% of total processing plant feed while 3% is unclassified waste rock with the remaining 91% being Indicated Resource. Removing Inferred Resource makes no material difference to project economics. Inferred Resource is generally at the Indicated Resource boundary and part of the Indicated Resource only Whittle shell and mine design volumes and is mined incidental to Indicated Resource. • Infrastructure requirements are modest for the selected mining method with no upgrade of nearby services and infrastructure required.

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td>Metallurgical factors or assumptions</td><td>• The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.
• Whether the metallurgical process is well-tested technology or novel in nature.
• The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.
• Any assumptions or allowances made for deleterious elements.
• 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.
• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?</td><td>• The metallurgical process is to crush, grind and float which is common for this style of mineralisation and is commonly used in mine sites the world over.
• Variability test work for all levels of weathered material have been processed with a range of head grades which suggests a flat recovery curve giving only one domain of ore with relatively even flake size distribution. The understanding of recovery in completely weathered material however requires further test work but only represents the minority of mineralisation
• No deleterious elements have been identified.
• Pilot scale test work and bulk sampling is not required at the PFS level.
• Specification is dependent on the end use and customer. The concentrate produced from test work is benchmarked at a weighted average 95% C purity, distributed as shown below:
<table><tr><th>Flake category</th><th>Microns (µm)</th><th>Purity (C)</th><th>Distribution</th></tr><tr><td>Jumbo</td><td>>300</td><td>94%</td><td>6%</td></tr><tr><td>Large</td><td>180 to 300</td><td>96%</td><td>20%</td></tr><tr><td>Medium</td><td>150 to 180</td><td>96%</td><td>10%</td></tr><tr><td>Small</td><td>75 to 150</td><td>96%</td><td>43%</td></tr><tr><td>Fine</td><td><75</td><td>94%</td><td>21%</td></tr></table></td></tr>
<tr><td>Environmental</td><td>• 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.</td><td>• Background studies are in progress at and around the project site. No significant environmental impacts are expected. The majority of acid rock drainage tests so far show waste rock to be non-acid forming. Waste rock from mining operations is to be placed into the pit and in a combined tailings and waste rock facility which can be viewed in the PFS report. The mining lease application is in progress with no issues expected to deny approval. Precedence is positive with three other graphite projects obtaining mining leases on the Eyre Peninsula.</td></tr>
<tr><td>Infrastructure</td><td>• 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.</td><td>• The project site is accessible by public unsealed road with the sealed Lincoln highway 8km from site. The main power grid is 8 km away which can provide more than the required power for the project. Water supply from SA water currently exists on the project site and has enough capacity to supply the 200ktpa processing plant option. For the larger plant configurations a sea water desalination plant is required with the sea 10km from the project site. Service connection routes can be run on road reserves without native title and</td></tr>
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		native vegetation issues. • Local skilled and unskilled labour can be sourced in the immediate area and from nearby centres such as Whyalla and Port Lincoln. • Not being a remote project site there is many existing accommodation options with no accommodation facilities required to be constructed for the project.
Costs	• The derivation of, or assumptions made, regarding projected capital costs in the study. • The methodology used to estimate operating costs. • Allowances made for the content of deleterious elements. • The source of exchange rates used in the study. • Derivation of transportation charges. • The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc. • The allowances made for royalties payable, both Government and private.	• Experienced contractors and consultants provided capital costs from vendor quotes, actual costs from similar projects and cost databases • Operating costs were built up from first principles, from service providers and benchmarked where possible for such things as electricity and water prices. These services were provided by experienced contractors and consultants. • No significant deleterious elements have been identified from test work to date. • Exchange rates were based on industry projections and current spot exchange rates. From sensitivities studies the project in construction phase has limited exposure to exchange rates with only the grinding and float circuits sourced from overseas. • Transportation charges were derived by logistics service and port services provider quotes. • Spot prices are used for graphite prices with treatment and refining charges not applicable. • 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.
Revenue factors	• 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. • The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	• The mined head grades are determined from the mining schedule, which is based on the Mineral Resource with mining modifying factors applied for recovery and dilution. • 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 in each flake size range as shown in the Renascor product specification table shown below. This enables the calculation of revenue over a basket price in US dollars. Renascor sourced the basket price from reputable sources and existing projects. The weighted average price of Siviour graphite product was calculated to be US$1056.50 per tonne FOB from Port Adelaide at 94-96% purity.
Market assessment	• The demand, supply and stock situation for the particular	• Renascor has had extensive engagement with end-users, intermediaries, specialty price reporting consultants and

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	commodity, consumption trends and factors likely to affect supply and demand into the future. • A customer and competitor analysis along with the identification of likely market windows for the product. • Price and volume forecasts and the basis for these forecasts. • For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	other graphite market participants regarding the potential sale of Siviour graphite concentrates, and these discussions provide the basis for the pricing model. • Renascor completed a customer competitor analysis on existing raw graphite producers and upcoming producers. • Renascor is currently in talks with potential customers and aims to sell high purity products is market segments such as the battery market and for bulk industrial uses. Large flake size material is targeted at niche markets such as expandable graphite and higher prices industrial applications.
Economic	• 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. • NPV ranges and sensitivity to variations in the significant assumptions and inputs.	• A financial model was built and developed by Renascor to calculate common metrics such as NPV with a common discount of rate of 10%, IRR and payback period for all production scenarios. • Sensitivities to IRR and NPV were conducted on Exchange Rate, Price, CAPEX and OPEX with these inputs factored by up to ±30%. Grade and price were the most influential on IRR and NPV as shown in the PFS report, but significantly in each scenario the project remains viable.
Social	• The status of agreements with key stakeholders and matters leading to social licence to operate.	• Engagement with stakeholders is ongoing with no issues leading to agreement being expected.
Other	• To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves: • Any identified material naturally occurring risks. • The status of material legal agreements and marketing arrangements. • 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.	• No known naturally occurring risks have been identified or likely • Legal and marketing arrangements are in progress by Renascor • A mining lease application is currently in progress with the South Australian government with a supporting PEPR.

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	Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	
Classification	• The basis for the classification of the Ore Reserves into varying confidence categories. • Whether the result appropriately reflects the Competent Person's view of the deposit. • The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• The classification of Indicated Resource into Probable Reserve inside the mine designs was based on the level of confidence in the Siviour PFS. • This is considered appropriate by the competent person with all necessary study work to support this level of confidence completed.
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	• The Ore Reserve has not been subjected to third party independent review only internal review by Optima Consulting and Contracting Pty Ltd.
Discussion of relative accuracy/ confidence	• 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 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. • 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. • Accuracy and confidence discussions should extend to specific discussions of any applied	• The level of accuracy of the Ore Reserve is at the PFS level or ±25%.

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	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. • 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.	