30 July 2021

Quarterly Activities Report for the period ended 30 June 2021

Significant Events

- Advanced mineral processing trials were completed on the downstream component of Renascor's planned vertically integrated Siviour Graphite Mine and Battery Anode Material Manufacturing Operation ("**Siviour**") in South Australia.
    - Renascor achieved results of 99.99% total carbon ("**C"**) (versus anode industry standard of 99.95% C), the highest purity levels achieved by Renascor to date[1].
    - The high purity results were achieved with Renascor's eco-friendly purification technique, which avoids the use of hydrofluoric acid ("**HF**") and instead uses an environmentally friendly and cost-effective method to purify Renascor's Siviour natural flake graphite for use in lithium-ion battery anodes.
    - In the recent tests, Renascor used sulfuric acid as the primary leaching agent, replacing hydrochloric acid, which Renascor used in previous tests[2]. By using sulfuric acid, Renascor expects increased operating and environmental efficiencies.
- Independent locked cycle flotation tests achieved graphite recovery of 94.5%, an increase compared to 91% in the Siviour Definitive Feasibility Study ("**DFS**")[3].
    - The increase in recovery offers the potential for increased economic efficiencies in the production of Graphite Concentrates, which Renascor plans to use as feedstock to produce Purified Spherical Graphite ("**PSG**") in the downstream operation[4].
- Independent large scale pilot trials produced bulk quantities of high purity Graphite Concentrates from ore samples from the Siviour deposit[5].
    - The on-going pilot trials have achieved graphite purities of up to 97.5% TC with graphite recovery of 93.2% by adjusting regrind times in the flotation circuit.
    - The increase in purity offers the potential for increased economic efficiencies in the downstream production of PSG, as less reagents and energy would be required in the downstream purification stage to achieve lithium-ion battery grade purities of +99.95% TC.
    - Graphite Concentrates produced from the pilot will be used for equipment selection and large-scale customer testing to support progression to binding offtake agreements.
- Renascor's cash position as of 30 June 2021 was approximately $17.3M.

Renascor Resources Limited
ABN 90 135 531 341

Head office:
36 North Terrace
Kent Town SA 5067

Phone: + 61 8 8363 6989
Email: info@renascor.com.au
www.renascor.com.au

Siviour Battery Anode Material Project

Downstream Battery-Grade Purification Trials

During the recently completed quarter, Renascor completed independent mineral processing trials with leading German battery mineral consultancy group Dorfner Analysenzentrum und Anlagenplanungsgesellschaft mbH ("**Dorfner ANZAPLAN**").

Background

Over the past five years, Renascor has undertaken comprehensive mineral processing tests that have included adapting an HF-free caustic roasting technique to purify Siviour Graphite Concentrates to +99.95% C, the minimum purity level generally accepted for incorporation of natural flake graphite into lithium-ion battery anodes[6].

Caustic roasting involves treating unpurified spherical graphite with a caustic solution before roasting at low temperature and leaching. An important advantage of our caustic roasting process is that it offers a more environmentally friendly process to purify graphite to battery-grade than the purification technique generally used in China, which uses more environmentally harmful HF.

In Renascor's initial HF-free purification trials, as well as for purposes of the Siviour Battery Anode Material Study in July 2020, Renascor used hydrochloric acid as the primary leaching agent[7]. Since this time, Renascor has continued to develop and refine its HF-free purification technique through programs designed to optimise both the quality of the graphite produced through its use, as well as the projected cost at commercial scale[8].

Purification Trials

Earlier this year, Renascor commenced optimisation trials with Dorfner ANZAPLAN, in collaboration with Renascor's external engineering advisors Wave International[9].

Dorfner ANZAPLAN is a leading consultancy and engineering company with particular experience in battery minerals. Dorfner ANZAPLAN's graphite expertise includes testing, developing, piloting and adapting mineral processing parameters to purify Graphite Concentrates to lithium-ion battery grade levels of +99.95% C. Wave International is an Australian-based resource development and engineering consultancy with extensive experience in the battery minerals sector, including acting in the capacity of external study manager and supervising engineers of the Siviour DFS[10].

The recent purification trials were designed to utilise Renascor's historical work and parameters for producing PSG from Siviour Graphite Concentrates, validate its suitability for producing battery-grade anode material and optimise its application for use at commercial scale.

As part of the recent trials, hydrochloric acid was replaced with sulfuric acid as the primary leaching reagent, with the trials consistently meeting or exceeding lithium-ion battery anode specifications, with results of up to 99.99% C (versus anode industry standard of 99.95% C). Further, these results were achieved with a decreased consumption of sulfuric acid, as compared to previous trials using hydrochloric acid.

The transition to sulfuric acid has the potential to reduce reagent consumption costs due to the lower volume requirement as compared to hydrochloric acid.

Further, the revised reagent regime is also expected to result in environmental benefits. Due to its relative chemical stability, as compared to hydrochloric acid, sulfuric acid is transported and used without significant dilution, which results in reduced chemical, energy and water consumption in both the leaching and water treatment phases.

With the optimisation trials with Dorfner ANZAPLAN now completed, Renascor will commence lock-cycle tests, with results to be used for detailed engineering design for construction of Renascor planned

PSG manufacturing facility in South Australia. The locked cycle tests will not only focus on the purification process, but also reagent usage optimisation and the water treatment circuit.

Locked Cycle Flotation Tests

During the recently completed quarter, Renascor completed locked cycle flotation tests on the Graphite Concentrate Flotation circuit, the upstream component of Siviour project.

Background

Following completion of the Siviour DFS in November 2019[11], Renascor undertook bench scale mineral processing trials to optimise and validate the Graphite Concentrate mineral processing parameters adopted in the Siviour DFS. The bench scale tests included tests focused on maximising graphite recoveries by adjusting mineral processing parameters from the flowsheet adopted in the Siviour DFS.

Locked Cycle Tests

The recently concluded locked cycle flotation tests were commissioned after completion of the bench scale tests with the principal objective of confirming the optimised flowsheet from the bench scale tests and validating grade and recovery assumptions.

The locked cycle flotation tests differ from the previous optimisation tests by more closely approximating processing conditions by including recycle streams from the flotation process and assessing the efficiency in producing Graphite Concentrates at requisite purity levels.

The tests were undertaken at ALS Metallurgy (Perth), in collaboration with Renascor's external engineering advisors Wave International. Tests were completed on the same composite material used in the test work for the Siviour DFS, representing ore that, pursuant to the mining plan adopted in the Siviour DFS, is scheduled to be processed in the first five years of mining.

The locked cycle flotation tests achieved graphite recovery of 94.5%, which compares favourably to the Siviour DFS graphite recovery of 91%. The tests achieved purity of 94.6% carbon, which is comparable to the result from the Siviour DFS[12].

The increase in recovery offers the potential for increased economic efficiencies in the production of Graphite Concentrates, which Renascor plans to use as feedstock in Renascor's planned downstream advanced manufacturing facility to produce PSG for use in lithium-ion battery anodes[13].

The results also offer further validation of the mineral processing parameters for the planned Graphite Concentrate operation and provide data for detailed engineering and equipment sizing and selection.

Large Scale Pilot Production Trials

During the recently completed quarter, Renascor commenced a large-scale pilot production trial to produce large scale samples of Siviour Graphite Concentrates and to test, at scale, adjustments to the flotation circuit to optimise the production of high purity Graphite Concentrates in the upstream component of the Siviour operation[14].

The trials, which are on-going and expected to be completed in the current quarter, are being undertaken at an independent commercial graphite facility in China to produce Graphite Concentrates via conventional froth flotation. In 2018, Renascor undertook an 18 tonne pilot production trial at the same graphite facility[15]. Sample for the trials consists of approximately 63 tonnes of ore collected from reverse circulation drilling at Renascor's Siviour Graphite Deposit and transported to the graphite facility earlier this year.

The sample ore was processed through a large-scale continuous pilot flotation circuit with a through-put capacity of up to 800kg per hour.

Flowsheet parameters were adopted based on those used in recent locked cycle tests[16], with the results of the production trials to date achieving average purity of 95.5% TC and average graphite recovery of 94.9%.

A separate 3.5 tonne trial, undertaken with an adjustment made to increase re-grind times in the flotation circuit, achieved purity of 97.5% TC with graphite recovery of 93.2%.

The results from the trials compare favourably to the locked cycle tests, which achieved purities of 94.6% TC with graphite recovery of 94.5%[17], as well as the Siviour DFS, which adopted average purity of 94% to 96% total graphitic carbon and graphite recovery of 91%[18].

The results from the pilot trials suggest the potential for Renascor's Graphite Concentrate flowsheet to meet or exceed the results from previous mineral processing work, including the parameters adopted in the Siviour DFS[19].

Further, the results from the production run with increased re-grind times suggest there is potential to improve the purity of Siviour Graphite Concentrate feedstock to the downstream PSG plant above the levels previously suggested from Renascor's previous test work.

This increase in purity offers the potential for increased economic efficiencies in the downstream production of PSG, as less reagents and energy would be required in the downstream purification stage to achieve lithium-ion battery grade purities of +99.95% TC.

Renascor plans to continue with the current pilot trials to produce additional Graphite Concentrates, with program expected to be completed in early August 2021.

Graphite Concentrates produced from the pilot will also be used for downstream equipment selection trials and large-scale customer sample testing to support the progression to binding offtake agreements.

Renascor also plans to incorporate the results from the pilot operation into flotation optimisation and more detailed engineering on the Graphite Concentrate operation.

Offtake and Product Qualification

During the recently completed quarter, Renascor continued to advance discussions with existing and potential offtake partners.

Renascor has already executed three 10-year offtake MOUs for up to 10,000 tpa of PSG each with two leading anode manufacturing companies and a leading Japan-based global trading company:

- Shanxi Minguang New Material Technology Co. Ltd ("**Minguang New Material**"), a subsidiary of Fujian Metallurgical Holding Co. Ltd. (one of China's largest battery material groups); and
- Jiangxi Zhengtuo New Energy Technology Co. Ltd. ("**Zeto**")**,** an anode supplier to battery giant BYD Co. Ltd amongst others.
- Hanwa Co. Ltd. ("**Hanwa**") amongst the largest traders of battery chemicals in the Asian region, with a market capitalization of ¥ 140 billion (A$1.7 billion)[20] and reported net sales of more than ¥ 1,700 billion (A$21 billion) in 2020[21].

Both Minguang New Material and Zeto have advanced the Siviour PSG product through the initial product qualification[22] process, and during the recently completed quarter, Renascor sent samples to Hanwa for initial testing. Renascor is currently preparing larger scale samples for each of Minguang New Material, Zeto and Hanwa for further testing (see above – "Large Scale Pilot Production Trials") to support progression to binding offtake.

During the recently completed quarter, Renascor received a significant volume of inbound enquiries from leading anode and battery companies and provided sample material for initial testing. Customer product testing is ongoing.

As a result of this increased interest from anode and battery companies, Renascor is now considering an increase to its Stage 1 production plans and / or an additional Stage 2 PSG production, and during the recently completed quarter, Renascor commenced detailed planning to assess the feasibility of such expanded production capacity.

Carnding Gold Project

During the recently completed quarter, Renascor announced the results of reconnaissance drilling at its Soyuz gold prospect in South Australia's Central Gawler Craton. Soyuz is part of Renascor's 100%-owned Carnding Project.

Renascor completed a total of 1,896m of reverse circulation drilling comprising fourteen holes varying in depth from 84m to 162m. The drill program focused on identifying potential extensions to previous high-grade drill intercepts and an induced polarisation ("**IP**") chargeability anomaly defined by a co-incident IP/gold and multi-element REE anomaly.

Drilling intersected widespread gold mineralisation, with thirteen of fourteen holes returning intervals of gold mineralisation (>0.1 g/t Au). Drilling results include significant gold intersections proximate to previous high-grade gold intercepts, including:

- 11m @ 0.9 g/t (21SZRC010, 143m to 154m), including 4m @ 2.0 g/t (145m to 149m) and 1m @ 3.3 g/t (148m to 149m), approximately 100m vertically below 2m @ 16.4 g/t (SZRB006, 30m to 32m)[23],
- 2m @ 2.0 g/t (21SZRC010, 79m to 81m), and
- 1m @ 2.6 g/t (21SZRC012, 74m to 75m).

A complete list of drill results is included in Renascor's ASX announcement dated 9 April 2021.

Drilling at Soyuz extended the gold mineralised system approximately 400m further south to over 800m and 500m in a E-W direction. See Figure 1, which shows the defined gold envelope relative to historic drilling and the recently completed drilling . The gold envelope coincides with a soil gold anomaly defined by a recent geochemical survey.

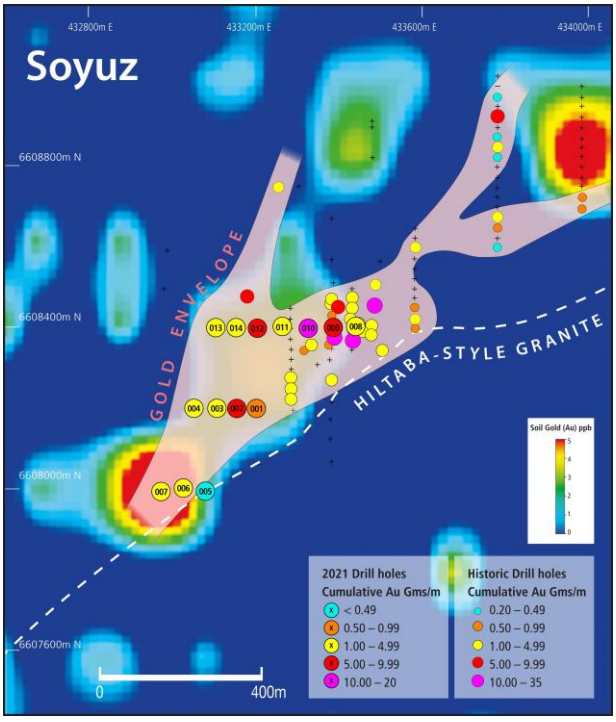

Figure 1. Gold envelope and granite boundary over gold soil image

The results confirm the presence of a broad system of gold mineralisation, with multiple, possible sub-vertical, low level gold shoots, following the granite contact, within an amphibolite / granite host sequence.

The Carnding project area contains multiple gold anomalies defined by soil gold geochemistry, with drill-testing generally limited to Soyuz. See Figure 2. The widespread presence of gold mineralisation at Soyuz suggests potential for these gold-in-soil geochemical anomalies to offer targets for further evaluation.

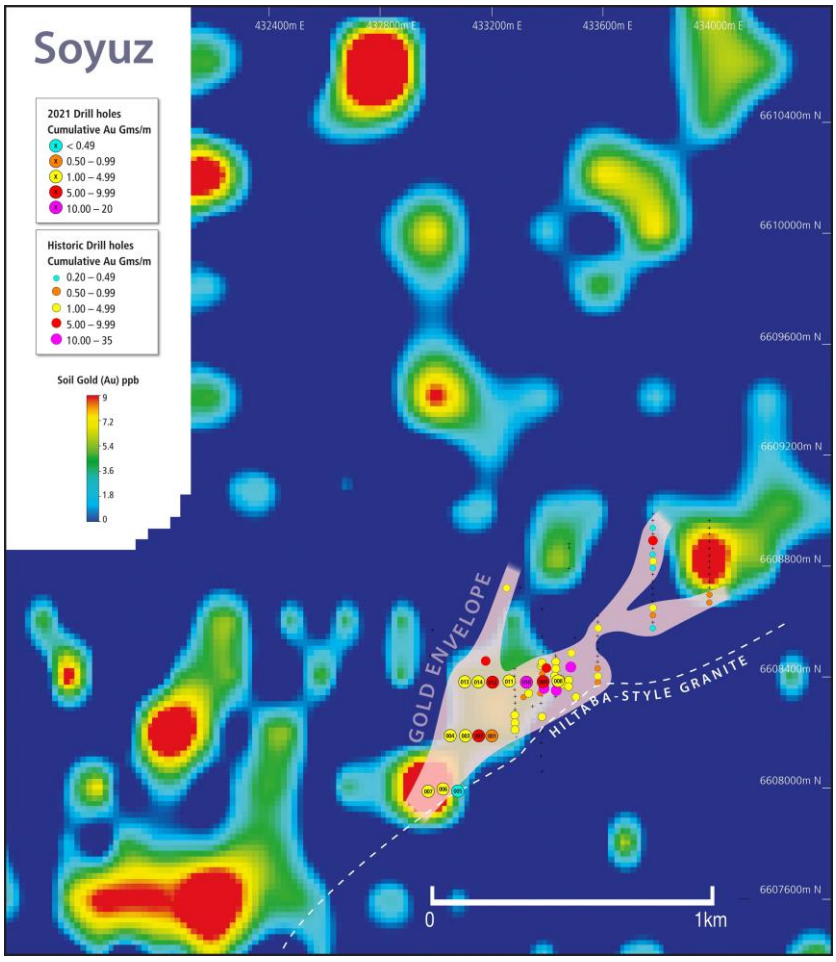

Figure 2. Soil gold geochemical anomalies

Further exploration will be required to delineate the size and continuity of gold mineralisation and potential for economic gold deposits within the areas drilled in the recent program, as well as gold in soil geochemical anomalies along the granite boundary to the south-west, which have not yet been drill tested.

Renascor's next step activities will include infill soil sampling and further evaluation of priority targets within the anomalous gold zones at Soyuz and in the wider Carnding project area.

Corporate Events

During the recently completed quarter, Renascor completed a placement ("**Placement**") to raise approximately $15 million (before costs) led by institutional investors in Australia and overseas[24]. Pursuant to the Placement, Renascor issued 187,500,000 fully paid ordinary shares in the Company at a price of A$0.08 per share to raise $15 million before offer costs. The issue of shares under the Placement was completed without shareholder approval, utilising the Company's capacity provided by Listing Rule 7.1.

The Placement is projected to fund all technical, regulatory and marketing workstreams required to reach a Final Investment Decision on Siviour.

Renascor intends to use the net proceeds from the Placement to fund:

- Engineering studies, including the expansion of PSG production capacity,
- Pilot plant production,
- The completion of all regulatory approvals,
- Product qualification and offtake,
- Front-end engineering design,
- The commencement of long lead time procurement and detailed design, and
- Financing and due diligence.

Notes in relation to Appendix 5B

The Company had exploration and evaluation costs of $585,000 during the quarter relating principally to the Siviour and Carnding projects as detailed above.

Payments to related parties and their associates during the recently completed quarter and outlined in Section 6 of Appendix 5B to this quarterly activities report were $136,000. These payments are related to salaries, superannuation and service and consultancy fees paid to directors and director-related entities during the quarter. In addition, there were payments to director-related entities of $15,000 in relation to capital raising costs during the quarter

Competent Person's Statements

Exploration Results

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

This report may contain forward-looking statements. Any forward-looking statements reflect management's current beliefs based on information currently available to management and are based on what management believes to be reasonable assumptions. 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.

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

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

For further information, please contact:

David Christensen
Managing Director

+61 8 8363 6989

info@renascor.com.au

Appendix 1

Summary of tenements for quarter ended 30 June 2021

(ASX Listing Rule 5.3.3)

Project Name	Tenement	Area km²	Registered holder/Applicant	District	Company Interest
Willouran	EL 6170	259	Renascor Resources Limited (Renascor)	South Australia	100%
Flat Hill	EL 6549	283	Renascor	South Australia	100%
Witchelina	EL 6403	316	Renascor	South Australia	100%
Iron Baron	EL 5822 (ELA 2020/232)	180	Renascor	South Australia	100%
Old Wartaka	EL 6191	14	Renascor	South Australia	100%
Carnding	EL 5856 (ELA 2020/231)	35	Renascor	South Australia	100%
Malbooma Railway	EL 6585	32	Renascor	South Australia	100%
Outalpa	EL 6450	159	Astra Resources Pty Ltd (Astra) *	South Australia	100%*
Cutana	EL 6451	157	Astra*	South Australia	100%*
Malbrom	EL 6197	81	Ausmin Development Pty Ltd (Ausmin) *	South Australia	100%*
Lipson Cove	EL 6423	329	Ausmin*	South Australia	100%*
Verran	EL 6469	690	Ausmin*	South Australia	100%*
Malbrom West	EL 5714 (ELA 2020/193)	270	Ausmin*	South Australia	100%*
Dutton Bay	EL 6032	31	Ausmin*	South Australia	100%*
Siviour	ML 6495	16	Ausmin*	South Australia	100%*

* Astra and Ausmin are 100%-owned subsidiaries of Renascor.

[1] Previous trials achieved purity levels of 99.98% C. See Renascor ASX announcement dated 22 February 2021.
[2] See Renascor ASX announcements dated 28 November 2018, 12 August 2019 and 1 July 2020.
[3] See Renascor ASX announcement dated 11 November 2019, page 17.
[4]See Renascor ASX announcement dated 2 July 2020.
[5] The graphite production trials are currently on-going. The results reported here were originally reported on 28 July 2021. See Renascor ASX announcement dated 28 July 2021. The Siviour ore samples used in the production trials were sent to China for processing earlier this year. See Renascor ASX announcement dated 13 May 2021.
[6] See Renascor ASX announcements dated 28 November 2018, 12 August 2019, 22 February 2021 and 28 May 2021.
[7] See Renascor ASX announcements dated 28 November 2018, 12 August 2019 and 1 July 2020.
[8] See Renascor ASX announcements dated 14 July 2020, 12 August 2020 and 22 February 2021.
[9] See Renascor ASX announcement dated 28 May 2021.
[10] See Renascor ASX announcement dated 1 July 2020.
[11] See Renascor ASX announcement dated 11 November 2019, page 17.
[12] See Renascor ASX announcement dated 11 November 2019, page 17.
[13]See Renascor ASX announcement dated 2 July 2020.
[14] The graphite production trials are currently on-going. The results reported here were originally reported on 28 July 2021. See Renascor ASX announcement dated 28 July 2021. The Siviour ore samples used in the production trials were sent to China for processing earlier this year. See Renascor ASX announcement dated 13 May 2021.
[15] See Renascor ASX announcement dated 31 October 2018. Graphite concentrates produced from the 2018 program were used for both test work supporting the processing of graphite concentrates into PSG and for subsequent testing by existing and potential PSG offtake partners.
[16] See Renascor ASX announcement dated 12 July 2021.
[17] See Renascor ASX announcement dated 12 July 2021.

[18] For purposes of the Siviour DFS, Renascor reported Graphite Concentrate in total graphitic carbon. See Renascor ASX announcement dated 11 November 2019, p 17. Renascor has subsequently adopted the convention of reporting Graphite Concentrate purities in total carbon, which is more widely used by perspective purchasers of Siviour Graphite Concentrates and Purified Spherical Graphite.
[19] Renascor ASX announcement dated 11 November 2019, p 17.
[20] Bloomberg data 24 March 2021.
[21] Hanwa news announcement 12 February 2021. See https://www.hanwa.co.jp/ms/data/pdf/ir/20210212en_3704.pdf.
[22] See Renascor ASX announcement dated 11 February 2021
[23] See Renascor ASX announcement dated 4 August 2020.
[24] See Renascor ASX announcement dated 23 April 2021.