PEGMATITES IDENTIFIED ON LITHIUM JOINT-VENTURE AI TARGETS

Highlights

- SensOre has identified lithium fertile pegmatite signatures on 3 of 4 joint-venture targets where initial fieldwork has commenced.

- Anomalous lithium and lithium index pathfinder elements identified in ultrafine soil sample and pXRF geochemical analysis.

- Lithium fertile pegmatites and pegmatite signatures have been confirmed on additional AI ML generated lithium targets, additional joint-ventures are expected to be closed in coming months.

- Pending the success of SensOre's New South Wales geophysics research and development, next steps involve the application of techniques to existing appropriate available radiometric data layers and low-level radiometric and magnetic data acquisition as rapid first assessment of lithium fertility of known pegmatite fields.

SensOre Ltd (ASX: S3N) ("SensOre" or the "Company") is pleased to advise that it has identified pegmatite or pegmatite geochemistry signatures on 3 of 4 joint venture projects during early field reconnaissance programs. Similar positive results have been experienced on a further six targets currently undergoing target evaluation.

SensOre CEO Richard Taylor said: "A high hit rate of targets with pegmatites outcropping or evidence of geochemistry associated with concealed pegmatites is an exciting start to our field programs. Potential coupling with our geophysical R&D, we will be in a good position for drilling programs planned for later this year. Many of the major lithium mines in Western Australia started from identification of pegmatite swarms on surface. Lithium is key to our battery industries in Australia and new methods of detecting fertile systems are to be sources of growth for the industry."

Identifying pegmatites together with geochemical pegmatite indicators is validating SensOre's AI and Machine Learning (ML) generated lithium targets from work in mid-late 2022. SensOre's targeting involves deployment of AI ML technologies on its giant Western Australia hyper cube consisting of thousands of fused geoscience data layers including a proprietary granite fertility layer. Four joint ventures have been executed to date in addition to three new tenement applications. Work continues assessing many additional predicted targets across Western Australia. This target analysis and joint venture negotiations are expected to add additional joint-ventures in the short to medium term.

Identification of pegmatites or geochemical pegmatite indicators in the near surface is an important first step in SensOre's lithium exploration activity to validate target generation. SensOre's targets are a mixture of outcropping pegmatites or under shallow transported cover and require application of either conventional surface geochemical and geophysical techniques or application of SensOre's geochemical and geophysical AI ML toolkit for lithium exploration.

One of these new detection tools includes the possible deployment in Western Australia of a research and development project being undertaken in NSW.[1] SensOre recently completed a low level radiometric and magnetic

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1 ASX Release 30 May 2023 'Airborne Geophysical Survey Completed Targeting LCT – Pegmatite Potential at Stelar Metal's Trident Project'.

data acquisition program in the Curnamona region on Western NSW. The objective of this survey and the research and development is to field validate desktop studies that show detection of a caesium isotope signatures is possible in radiometric surveys. Caesium is present in LCT pegmatites so can be used for assessment of pegmatites for lithium fertility.
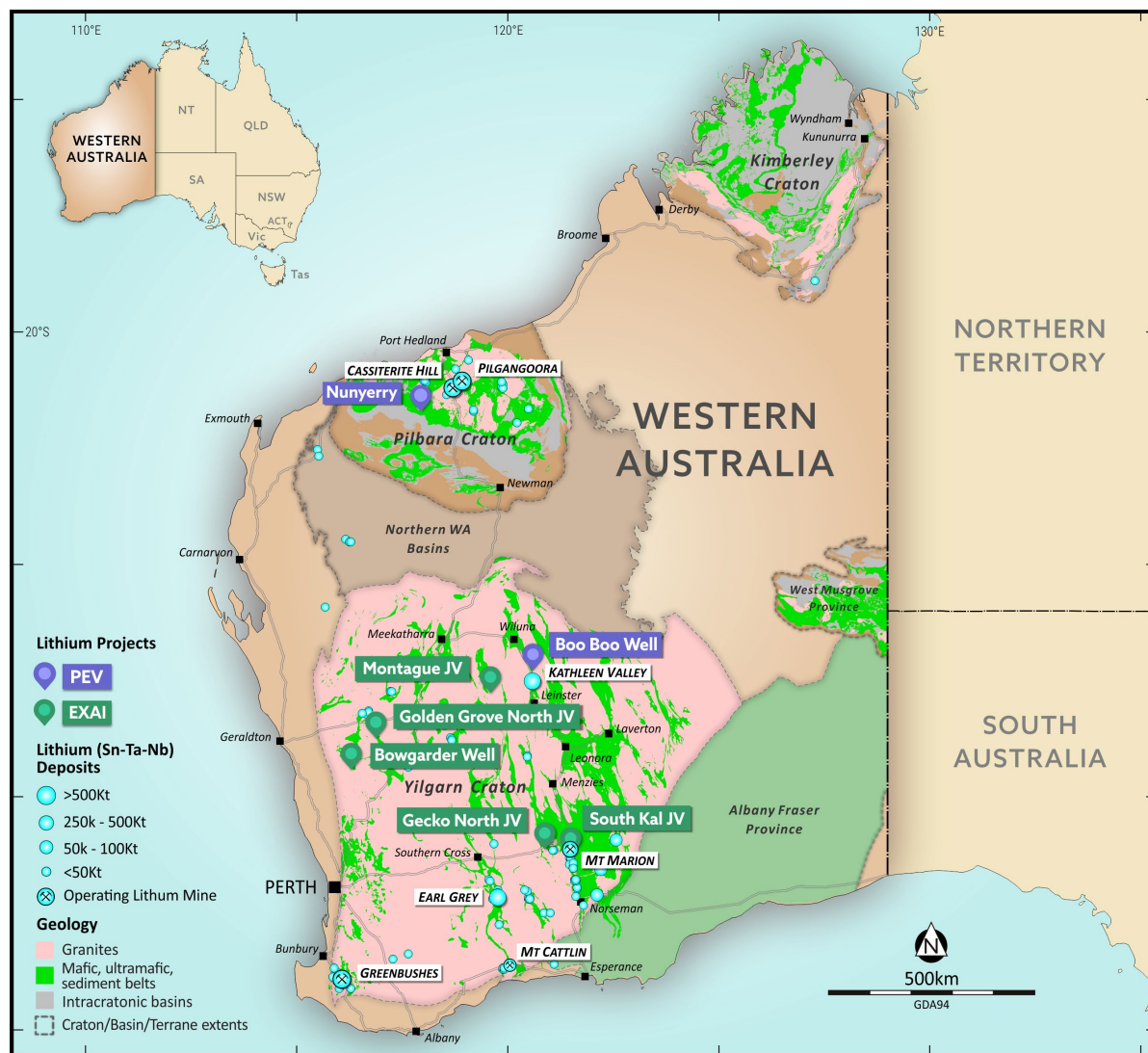
Figure 1 – SensOre Lithium project portfolio June 2023

Work on existing exploration projects presented in figure 1 is summarised below.

Golden Grove North Joint Venture[2]

The Golden Grove North project, located in the Yalgoo greenstone belt, is an emerging lithium fertile camp which contains the advanced LCT lithium pegmatite project held by Firetail, near the Melville gold deposit. This Joint venture with Venture minerals (ASX - VMS), within the Deutche Rohstoff joint venture subsidiary EXAI,[3] was EXAI's most recent project addition. Exploration fieldwork commenced in May evaluating the prospectivity of the area and will be ramping up in coming months. The project tenure is large and is known to host mapped felsic intrusives and pegmatitic rocks. EXAI plans to conduct initial systematic mapping and sampling to determine fertility and identify potential high priority areas. SensOre's AI-generated lithium fertile granites are associated with the targets across the joint venture tenure. Reported evidence of LCT pegmatites adjacent to the project makes it a compelling area and, once the due diligence period is completed, EVAI plan to complete extensive field investigations prior to drill testing planned for 2H 2023.

Montague Joint Venture[4]

SensOre's proprietary DPT® and mineral Adjacency Mapping targeting technologies together with geochemical analysis has identified a large compelling target within a region with no previous lithium exploration. Regionally the project is located west of the Ida Fault where generally the LCT pegmatite occurrences are closely associated with the margins of greenstone belts and fertile granites where zones of structural complexity are evident. The project is highly prospective with existing drilling and surface GSWA reported geochemistry compiled by SensOre highlighting LCT pegmatite fertility and GSWA mapping identifying many pegmatite occurrences. The greenstone lithologies are favourable, dominated by mafic and ultramafic rocks, especially within 1-5km of surrounding recently assessed fertile granite contacts. Additionally, the structural complexity and upper greenschist metamorphic grade further highlight the potential of the broader mining camp. SensOre through EXAI are focusing on evaluating the large and high-quality geochemical database, mapping and sampling the surrounding pegmatites within the Gum Creek Greenstone belt to determine fertility from soil geochemistry under areas of thin cover surrounding the Montague mining area. Current work includes undertaking unsupervised machine learning evaluation of large geochemical data bases as well as traditional geological mapping and auger sampling to generate drill targets planned for testing in 2H 2023.

Gecko North[5]

DPT and lithium prospectivity mapping using geochemistry, geology and geophysics has predicted a prospective area within 10km of the Eastern Goldfields Terrane boundary (Ida Fault). The area is predominantly mafic sequence with upper greenschist to lower amphibolite metamorphism. The geochemistry and geology contain many known Area Selection Criteria (ASC) which ticks a lot of boxes for evaluating LCT pegmatite potential.

EVAI are targeting 1-5km around the outside of the granite in a favourable structural and lithological position. Evidence of LCT pegmatites have been identified to the north and south further highlighting the potential for LCT fertility under shallow transported and residual cover. Reconnaissance mapping has shown much of the area has thin transported cover and residual regolith. Surface geochemistry (ultrafine soils) has identified several anomalies. Further work is being undertaken to better define the anomalies and delineate drill targets below cover for testing in 2H 2023.

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2 ASX Release, 12 May 2023 'SensOre and Venture Minerals Reach Farm-in Agreement on Golden Grove North.
3 ASX Release 22 March 2022 'SensOre and Deutsche Rohstoff Agree Lithium Exploration Terms'.
4 ASX Release 23 January 2023 'Lithium Exploration Farm-in Agreement for Montague Project'.
5 ASX Release 10 November 2022 'SensOre and Lith Gold to Pursue Gecko North Lithium'.

South Kalgoorlie[6]

DPT targeting identified a large signature associated with potential repeats of the Mt Marion camp. While a source granite is elusive, some geophysical interpretations from combined gravity and magnetics show evidence of deeper granites. To date no lithium exploration has been undertaken on the project and there is no existing multielement geochemical analysis. EVAI are conducting baseline data for geochemical and hyperspectral analysis as well as completing geological mapping and geophysical interpretation. To progress to more detailed work evidence of LCT pegmatites on the project is required.

This release was approved by the SensOre CEO.

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About SensOre

SensOre aims to become the top performing minerals targeting company in the world through the deployment of AI and machine learning (ML) technologies, specifically its Discriminant Predictive Targeting® (DPT®) workflow. SensOre collects all available geological information in a terrane and places it in a multidimensional hypercube or data cube. SensOre's big data approach allows DPT predictive analytics to accurately predict known endowment and generate targets for further discovery.

The SensOre Group has built a tenement portfolio of highly prospective, wholly-owned and joint ventured battery metals tenement packages located in Western Australia. As the capacity of SensOre's AI technologies expand to new terranes and a broader range of commodities, the Company anticipates that new targets will be identified and acquired in Australia and internationally.

SensOre's DPT technology has been developed over many years and involves the application of new computer assisted statistical approaches and ML techniques across the workflow of mineral exploration. The workflow includes data acquisition, data processing, ML training, ML prediction and analysis through DPT. SensOre has acquired numerous data sets and used these to generate mineral system targets. Targets have been analysed and vetted by SensOre's experienced exploration geoscientists. Publicly available data in the form of geophysics, surface geochemical, drilling and geological layers and derivatives have been compiled into a massive data cube covering much of Western Australia. SensOre believes that the combination of big data and ML techniques will provide the next generation of exploration discovery.

Competent person's statement

The information in this announcement that relates to Exploration Results and Mineral Resources is based on information compiled by Robert Rowe, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM) and is a Registered Professional Geoscientist in the field of Mineral Exploration with the Australian Institute of Geoscientists. Mr Rowe is a full-time employee and the Chief Operating Officer of SensOre. Mr Rowe has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being 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. Mr Rowe consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Forward-looking statements

This announcement contains or may contain certain 'forward-looking statements' and comments about future events, including in relation to SensOre's business, plans and strategies and expected trends in the industry in which SensOre currently operates. Forward-looking statements involve inherent risks, assumptions and uncertainties, both general and specific, and there is a risk that such predictions, forecasts, projections and other forward-looking statements will not be achieved. Forward looking statements are based on SensOre's good faith assumptions as to the financial, market, regulatory and other relevant environments that will exist and affect the Company's business and operations in the future. A number of important factors could cause SensOre's actual results to differ materially from the plans, objectives, expectations, estimates, targets and intentions expressed in such forward-looking statements, and many of these factors are beyond SensOre's control. Forward-looking statements may prove to be incorrect, and circumstances may change, and the contents of this announcement may become outdated as a result. SensOre does not give any assurance that the assumptions will prove to be correct. Readers should note that any past performance is given for illustrative purposes only and should not be relied on as (and is not) an indication of the Company's views on its future financial performance or condition. Past performance of the Company cannot be relied on as an indicator of (and provides no guidance as to) future performance including future share price performance. Except as required by law or regulation, SensOre undertakes no obligation to provide any additional or updated information whether as a result of new information, future events or results or otherwise. Nothing in this announcement should be construed as either an offer to sell or a solicitation to buy or sell SensOre securities.