

16 October 2023

ASX:  
S3N

## S3N COMPLETES NSW DATA ACQUISITION & IDENTIFIES NEW LITHIUM PROSPECTIVITY AT TRIDENT

### Highlights

- SensOre and Stellar Metals have completed their research efforts on the highly prospective Trident lithium tenements near Broken Hill (NSW), identifying new areas of prospectivity at surface, as well as deeper concealed targets
- The collaboration looked at deploying AI/ML applications on surface geochemistry and high-resolution geophysical techniques in support of lithium exploration
- SensOre received funding from the NSW government worth \$318,000 to assist with the data cube build. The NSW data cube is now available for targeting by SensOre clients
- Innovative AI and ML predictive methodologies were established over large areas of New South Wales for identifying pegmatites as sources of economic lithium, tin, tantalum and caesium

Stellar Metals (**ASX:SLB**) and SensOre Ltd (**ASX:S3N**) recently completed research under their data sharing agreement, developing innovative lithium targeting tools and deploying the newly completed SensOre NSW data cube. The research revealed new areas of high LCT-pegmatite prospectivity along a NNW-SSE trend. LCT-pegmatites are predicted where previous exploration targeting high-grade tin and tantalum overlooked LCT pegmatite potential. Potential was identified in the central and northern project areas, as well as new opportunities around the source granite/granite-gneiss complex in the south. Direct targeting from radiometric data is encouraging and work to integrate results with the magnetic data is on-going.

**SensOre CEO Richard Taylor said:** "We are pleased to have such stunning initial results from our first targeting runs deployed for Stellar Metals. The new innovative tools, validated through field work, open up many new possibilities for SLB. The Stellar project represents the first targeting exercise deploying the recently completed NSW data cube, combining geoscience data across geophysics, geochemistry, drilling and geological data layers with spectacular preliminary results".

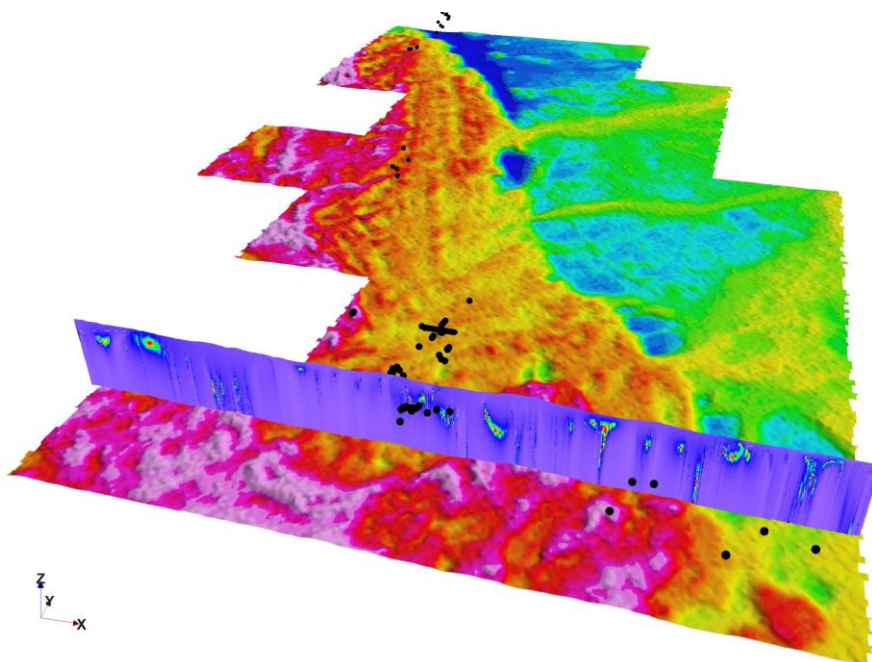


Figure 1: 3D perspective view (towards NNW) of pegmatite samples on a pseudo-chair diagram of Total Dose grid and vertical section of Cauchy downward continuation calculated on a single flight line of magnetic survey data.

## SensOre Adjacency Model for Li Prospectivity

SensOre's Adjacency Model, AI/ML technology was applied to high-resolution magnetics and 256-channel radiometric data combined with Geochemical Data Analytics to identify extensive prospective areas for LCT-bearing pegmatites. SensOre's Adjacency Model (SAM) targets spatial contiguity, of geochemical enrichment and/or depletion patterns and geophysical characteristics that surround ore deposits. In this instance, SensOre used mapped occurrences of pegmatites to compute spatial proximity of high-resolution magnetic data and 256-channel radiometric data features to identify pegmatite signatures using advanced ML tools. Once these pegmatite signatures were quantified, they were targeted throughout the rest of the geophysical data across Stellar Metals' Trident Project. SAM maps identify/confirm and/or predict prospective mineral trends and mineral systems by computing categorical probabilities of adjacency to ore deposits typically labelled as 'Barren', 'Distal', 'Proximal' and 'Ore'.

SensOre then employed Factor Analysis on multi-element geochemical data collected from pegmatites over Stellar's Trident Project. This work identified a multielement geochemical signature consistent with LCT pegmatite mineralisation (i.e., Factor 2 positively loaded with Li-Cs-Ta-Sn-Be-Nb) with high factor scores coinciding with high SAM prospectivity probabilities and, as expected, high Li-grades. The targeting coincidence of independent geophysically driven and geochemically driven approaches provides confidence to the identified LCT targets. At Trident, we were able to show that samples exhibiting relatively high Factor 2 loading scores tend to be in the northwestern and south-central areas.

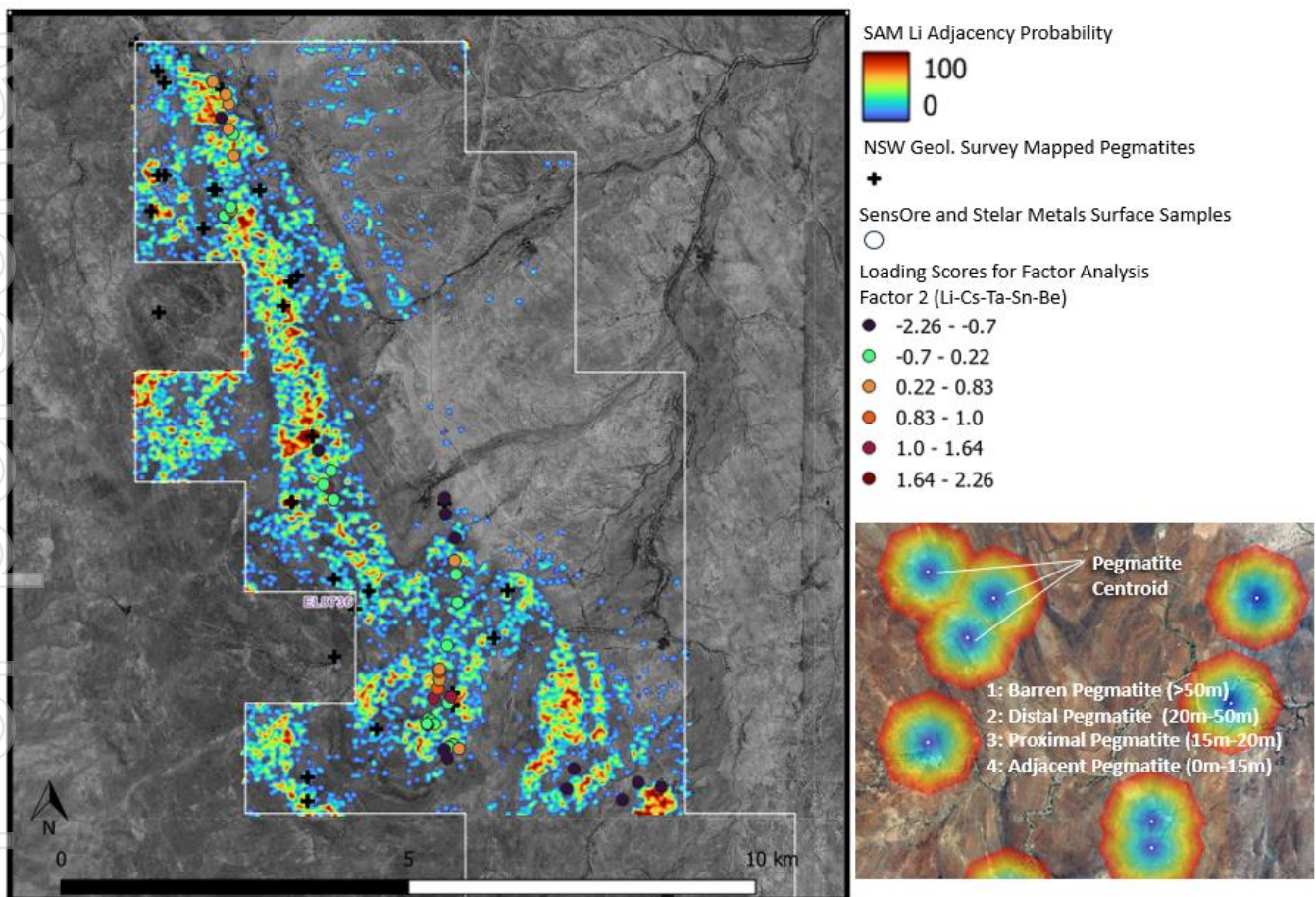


Figure 2: Lithium Pegmatite Prospectivity / Spatial Adjacency Mapping Over the Trident Prospect

## Critical Minerals and High-Tech Metals Activation Fund Background

SensOre received grant funding from the NSW government worth \$318,000. The NSW Critical Minerals and High-Tech Metals Strategy outlines the NSW Government's commitment to drive investment into the critical minerals and high-tech metals sector across the entire supply chain in NSW. The Strategy outlines the market opportunities for critical minerals and high-tech metals in NSW, including the specific investment and job-creating opportunities and competitive advantages for NSW to establish a viable, valuable and sustainable sector. To realise the strategy, the NSW Government has established the \$130 million Critical Minerals and High-Tech Metals Activation Fund to drive investment and support the development of the sector. The Fund aims to position regional NSW as a major global supplier and processor of critical minerals and high-tech metals.

### Enquiries

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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 technology 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.