

SENSORE DEVELOPS NEXT GENERATION GEOCHEMISTRY TOOL FOR EXPLORATION TARGETING

KEY POINTS

- SensOre's iChromite suite uses its proprietary SimClust™ technology to assess mineral chemistry data
- iChromite represents a major opportunity to unlock value from existing mining industry and government legacy data
- It provides increased ability to quickly assess large volumes of geochemical data using automated Machine Learning technologies to separate fertile and barren samples in the exploration workflow
- Smarter use of data in decision making to accelerate discovery and increase return on investment
- First application of iChromite mineral analysis applied to nickel and diamond exploration with encouraging results
- SensOre will apply its technology to other minerals including porphyry indicator minerals for assessment.

Geoscience technology disruptor SensOre Ltd (SensOre or the Company) (ASX: S3N) is pleased to announce the launch of iChromite, a new suite of automated mineral chemistry assessment tools it has developed that can identify exploration targets more efficiently and accurately. The mineral chromite is extremely stable in highly weathered environments. It preserves its unique geochemical fingerprint over geological time and thus has great utility for reliable detection of potential mineralisation and fertility.

iChromite uses new and highly innovative data processing techniques integrated with machine learning tools delivered from an agile accelerated program. The SensOre geochemical technology team has delivered the new tool suite from the first phase of a comprehensive research program directed at improving the fidelity of mineral chemistry. When the new tool is applied to the mineral chemistry of chromite, an important resistate heavy mineral sample, it can quickly aid in the rapid assessment of fertility, a key ingredient in generating new exploration targets for mineral discovery.

Importantly, the new technology workflow can be used to rapidly analyse the vast quantity of legacy industry chromite geochemical databases collected from across Australia (and the world) over many decades. Application of this technique will unlock value from in field sample collections and analysis currently concealed in mining and exploration company databases, which represents millions of dollars of previous investment.

SensOre CEO Richard Taylor said: *"As mineral exploration increasingly focusses on a new generation of targets to deliver mines of the future required to meet the world's increasing demand for critical minerals, the industry is moving into more remote projects and deeper targets. Consequently, this shift has brought back into focus the role of resistate mineral geochemistry in early-stage exploration programs. Aided by new machine learning tools such as iChromite, the technique is potentially undergoing a revolution or new dawn in greenfield exploration."*

Major benefits of iChromite application to geochemical 'Big Data':

- Rapidly and cost effectively process and classify vast quantities of historical chromite mineral chemistry data collected over many decades by industry
- Identify the unique geochemical fingerprints of chromites with high confidence – iChromite considers 14 elements simultaneously in the classification process compared to more traditional methods which commonly assess two or three elements at a time
- Provide important geological information such as age and paleo-tectonic environment.

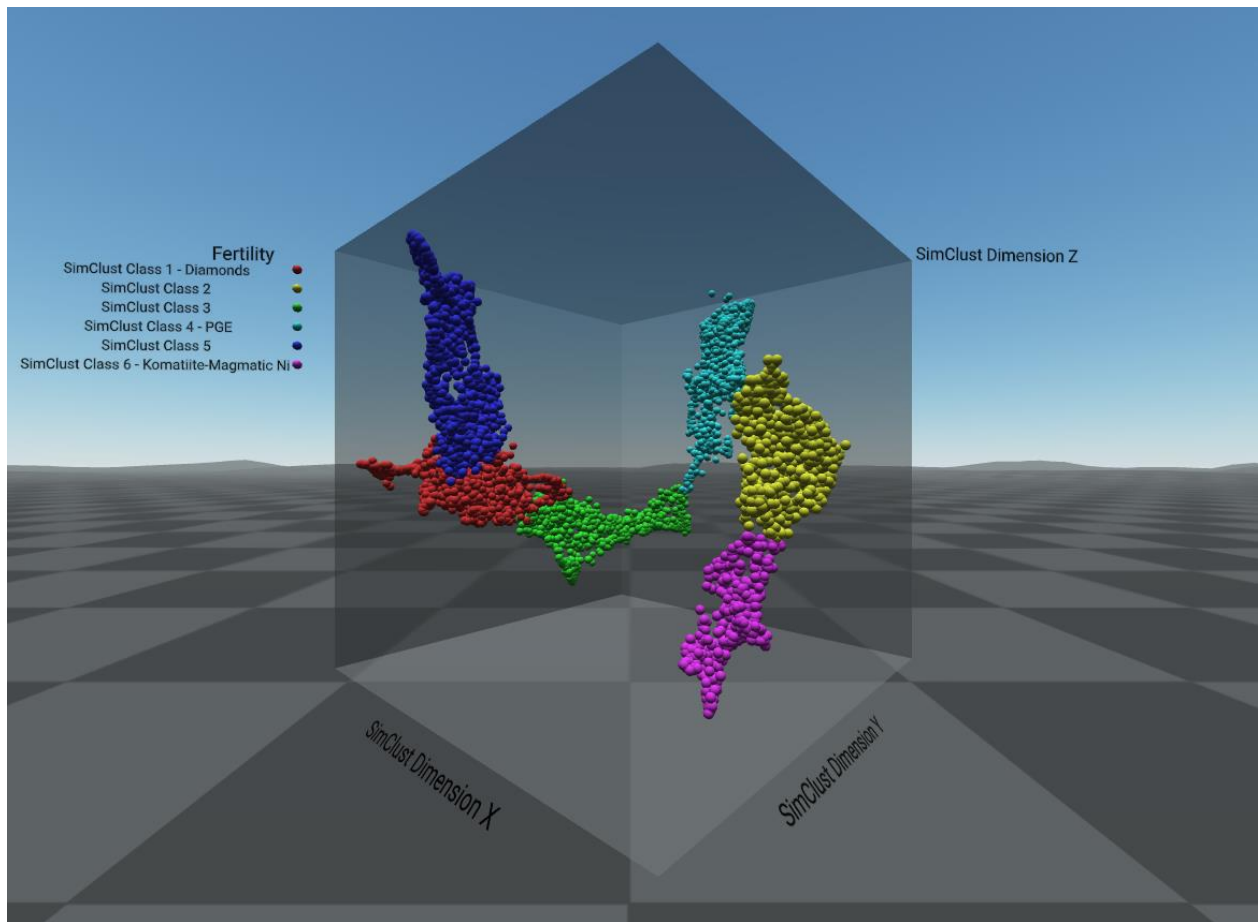


Figure 1: SensOre's iChromite discrimination diagram created by applying its SimClust™ algorithm to chromite geochemistry. Data is projected in 3D based on variation in 14-element chemistry space. Chromites from diamond-bearing kimberlites, komatiitic and magmatic-hosted Ni and mafic/ultramafic rocks occur in the classes indicated above.

SensOre's development of iChromite (Figure 1) significantly improves on the application of chromite kimberlitic indicator mineral (KIMS) as a vector to the presence of rocks such as kimberlites and lamproites and its use as a vector to nickel and copper, namely komatiitic-magmatic Ni and mafic/ultramafic-hosted V-Cr-PGE mineralisation.

SensOre's steps in developing the new technology:

- Compilation, cleaning, labelling and data imputation of global mineral geochemistry database + 1.5 million sample records
- Advanced text-mining applied to attached textural information and SensOre's adjacency modelling (SAM) utilized to identify individual samples coincident with, or proximal to, significant economic mineralization for 24 different deposit types using our global metallogenic databases
- *State-of-the-Art* unsupervised learning workflow (SimClust™) applied to chromite chemistry to automatically generate highly discrete populations in the data in 14 element space

- Application of SimClust™ technology resulted in identification of highly discrete populations that are observed to coincide with chromites derived from Komatiite and Magmatic Ni and V-Cr-PGE ore deposits in addition to diamond-bearing Kimberlites leading to development of iChromite.

SensOre is continuing development to apply its SimClust™ technology to other minerals including porphyry indicator minerals to assist with porphyry target assessment and vectoring. The new mineral datasets will allow SensOre to provide an advanced suite of machine learning tools, like iChromite, that can be applied to the SensOre data cube to be utilised in its own exploration programmes and by clients on their own data in SensOre's Solution as a Service (SOLAAS) targeting services.

What is the mineral Chromite?

Chromite, a spinel group mineral ($[\text{Mg}, \text{Fe}] [\text{Al}, \text{Fe}^{3+}, \text{Cr}]_3 \text{O}_4$), is a resilient accessory phase within ultramafic and mafic rocks that is considered to be a petrogenetic and tectonic setting indicator. Liquidus chromite can trace the composition of a differentiating magmatic liquid and is a proxy for parental magma conditions, such as Ni, Cr, Fe, Al, and Ti concentrations, oxidation state, and magma source compositions. The compositional trends of magmatic chromite may be employed to determine the petrogenesis of the parental magma(s), where distinctive trends and chemical compositions may be exhibited for different tectonic settings. It is also one of several Kimberlitic indicator minerals (KIMS) to have been intensively used in the diamond exploration industry since the early 1980s and has been instrumental in the discovery of many of the world's diamond deposits. The mineral is also associated with a range of economically significant mineral deposit types of interest in the battery metals space including Co, Ni and V. In addition, chromite is capable of withstanding low-medium grade metamorphism, preserving igneous compositions up to the lower amphibolite facies.

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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 PERSONS 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 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 the report of the matters based on his information in the form and context in which it appears.

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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.