19 September 2023



NEW LITHIUM PEGMATITE DISCOVERY CONFIRMED IN ROCK CHIPS AT ABBOTTS NORTH PROJECT, WA

Highlights

- The application of SensOre's proprietary AI/ML, complemented through reconnaissance mapping and sampling, has identified a new pegmatite field within the Abbotts Greenstone Belt sequence.
- Lithium mineralisation within the Buttamiah Prospect confirmed with rock chip samples reporting encouraging assays up to 1.25% Li2O:
 - 23ANR008 1.25% Li_2O or 5,800ppm Li, 397ppm Cs, 138ppm Ta_2O_5
 - 23ANR013 0.88% Li_2O or 4,070ppm Li, 224ppm Cs, 107ppm Ta_2O_5
 - 23ANR015 0.87% Li₂O or 4,050ppm Li, 512ppm Cs, 390ppm Ta₂O₅
 - At least three separate pegmatite dykes identified with Potassium / Rubidium ratios less than 10 indicating a highly fractionated, fertile field.
- The pegmatites in the vicinity of the anomalous (>0.1% Li2O) samples at surface are 2-3metres wide and up to 350m long. Several areas have multiple sub parallel units. Overall, the pegmatite field remains open to the north and under cover.

SensOre Ltd (ASX: S3N) is pleased to report that its subsidiary Exploration Ventures AI Pty Ltd (EXAI, 70% Deutsche Rohstoff AG: 30% S3N) has confirmed the presence of lithium bearing pegmatites at the recently discovered Buttamiah Prospect on the Abbotts North project leases. EXAI secured the option to acquire 100% of the project from a private company in August for a \$75,000 option fee, exercisable for \$275,000 by 2025.

SensOre CEO Richard Taylor said: "SensOre and Deutsche Rohstoff are excited by EXAI's success at Buttamiah. We are encouraged to see a new lithium discovery in a district with no previous lithium identified. In a market where prospective lithium projects attract a significant premium, EXAI has moved on an area where conventional targeting has overlooked the prospectivity, despite the presence of previously mapped pegmatites. On the back of success on this and other projects, SensOre and Deutsche Rohstoff are exploring options for the EXAI portfolio using SensOre's proprietary artificial intelligence driven targeting tools."

The Buttamiah Prospect is within EXAI's Abbotts North Project, approximately 35km to the North of Meekatharra in the Murchison region of Western Australia. Geologically the prospect is situated within a largely basaltic sequence of the Abbots Greenstone belt. The Abbotts Greenstone belt consists of a succession of mafic and ultramafic units as well as felsic volcanics and sediments. The sequence has been intruded by porphyries, pegmatites and granites. The margins of the belt are structurally complex and the belt is bounded by granites and monzogranites to the East, West and North.



Figure 1 – EXAI Lithium pegmatite sampling at the Buttamiah Prospect



Figure 2 – EXAI's Buttamiah Prospect within the Abbotts North Lithium Project with location of rock chip samples.

Locally, several pegmatite dyke swarms can be found sub-cropping mainly within a metabasalt unit and some of the structurally complex zones consisting of intercalated granite, greenstones and pegmatites. The extent of some of the pegmatites is difficult to ascertain due the presence of colluvial cover. The most fractionated pegmatite dykes are located within the mafic units furthest from the granite contact.

Initial indications show pegmatite swarms appear to increase in width to the East, adjacent to the granite contact. The sub-cropping pegmatites in the vicinity of the anomalous (>0.1% Li2O) samples are two to three metres wide at surface and have up to three sub parallel units between 0.2m and 3m in width. These units thin towards the West and are obscured by colluvium to the East but have a mapped length of over 350m.



Figure 3 – Abbotts North Project Location

The fertile units are typically one to five metres wide, strike approximately East-West and dip moderately to the North. There are occasional wider zones up to 15 metres wide and some rare North-South units roughly parallel to the regional foliation.

The majority of the samples taken were moderately to strongly weathered with feldspars showing varying degrees of kaolinization from partial to complete. The detailed lithium mineralogy is currently being investigated.

SensOre Ltd identified the target through the application of its proprietary machine learning tools and prospectivity mapping. Work is ongoing on the newly acquired Abbotts North project with a total of 33 rock chip samples collected to date. Additional samples have been collected and results are pending, however, due to surficial weathering drilling is required to better understand the mineralogy and tenor of lithium anomalism.

Sample ID	MGA North	MGA East	Li ₂ 0%	Li ppm	Cs ppm	Ta2O5 ppm	Rb ppm	Nb ₂ O ₅ ppm
23ANR001	7091030	641531	0.00	3.5	2.7	17.3	246	102.3
23ANR002	7091017	641577	0.01	27	14.6	25.5	1,260	146.0
23ANR003	7090982	641667	0.00	8	2.9	35.4	469	113.0
23ANR004	7090982	641667	0.00	2	0.3	11.1	17	16.5
23ANR005	7091107	640539	0.03	123	29.4	136.8	2,110	100.2
23ANR006	7091098	640430	0.03	121	45.6	73.9	2,500	72.3
23ANR007	7090956	640336	0.00	6.5	21.2	211.2	1,560	77.3
23ANR008	7090957	640315	1.25	5800	397.0	138.0	9,420	88.0
23ANR009	7090966	640272	0.03	146	31.4	175.8	2,690	63.0
23ANR010	7090948	640229	0.01	28	32.6	188.0	1,450	63.0
23ANR011	7090959	640175	0.00	12.5	53.0	180.7	2,010	67.3
23ANR012	7090973	640164	0.02	78.5	26.7	136.8	1,630	65.1
23ANR013	7090964	640132	0.88	4070	224.0	107.1	7,230	110.9
23ANR014	7090960	640017	0.14	637	120.0	223.4	4,040	85.1
23ANR015	7090999	640025	0.87	4050	512.0	390.7	8,560	157.4
23ANR016	7090993	640095	0.79	3670	311.0	199.0	6,150	103.7
23ANR017	7090999	640202	0.02	86	34.1	163.6	1,830	68.7
23ANR018	7091762	640377	0.00	4.5	10.9	14.9	1,740	29.3
23ANR019			Sample	e not subr	nitted for a	analysis.		
23ANR020	7091728	640202	0.00	3.5	29.2	95.1	1,780	64.4
23ANR021	7091792	640175	0.00	4.5	66.3	76.9	2,410	62.2
23ANR022	7091810	640091	0.00	6.5	36.5	133.1	2,540	116.6
23ANR023	7091276	640118	0.06	267	431.0	194.1	3,990	60.8
23ANR024	7091266	640214	0.65	3000	427.0	205.1	6,420	88.0
23ANR025	7091259	640333	0.02	89	79.6	54.3	3,800	54.4
23ANR026	7091271	640331	0.14	635	120.0	81.6	2,800	60.8
23ANR027	7091249	640376	0.01	39.5	61.0	94.6	2,500	88.0
23ANR028	7091234	640517	0.02	104	59.8	115.8	3,140	133.1
23ANR029	7091374	640488	0.00	1	0.8	27.1	79	44.4
23MWR001	7091745	640329	0.00	7	18.3	14.5	2,570	21.5
23MWR002	7091258	640270	0.49	2290	281.0	92.1	5,600	91.6
23MWR004	7090992	640132	0.44	2030	268.0	125.8	4,310	93.7
23MWR005	7090972	640166	0.18	831	83.0	123.3	2,810	73.7
23MWR006	7090527	640655	0.00	11.5	14.4	107.9	658	52.9

Table 1 – Buttamiah Rock Chip Results from the Abbotts North Project

This release was approved by the SensOre Board.

Enquiries

Richard Taylor Chief Executive Officer T: +61 3 9492 3843 Richard.taylor@sensore.com.au

Aiden Bradley Media & Investor Relations M: +61 414 348 666 aiden@nwrcommunications.com.au

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.

JORC CODE¹ 2012 EDITION – TABLE 1

SECTION 1: SAMPLING TECHNIQUES AND DATA

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code Explanation	Commentary	
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 	 Surface sampling reported in this ASX release was undertaken by SensOre Ltd targeting lithium. Handheld GPS locations and sample photographs were taken at all samples sites by Geologists in the field. Samples descriptions were completed by a Consultant Geologist on return from the field. Rock chip and/ or grab samples collected using hammer to obtain 5-10cm sized rock fragments from outcrops. Typical samples connected from a 2-3m radius for approximately 1-3 kilograms. Samples selected based on lithology within the locality and outcrop availability 	
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails,face-sampling bit or other type, whether core is oriented and if so, by what method, etc). 	 No drilling data reported in this ASX release. 	
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. 	 No drilling data reported in this ASX release. 	

1 Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, 2012 Edition, sets out minimum standards, recommendations and guidelines for public reporting in Australasia of Exploration Results, Mineral Resources and Ore Reserves, authored by the Joint Ore Reserves Committee of The Australian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and the Minerals Council of Australia.

Criteria	JORC	Code Explanation	Commentary	
Logging	 W be log ap es m W qu ch Th re 	hether core and chip samples have een geologically and geotechnically gged to a level of detail to support opropriate Mineral Resource timation, mining studies and etallurgical studies. hether logging is qualitative or nantitative in nature. Core (or costean, annel, etc) photography. he total length and percentage of the levant intersections logged.	 Rock samples have been geological logged for rock type weathering and estimated mineralogy. Logging qualitative in nature. Samples and outcrop were photocin the field. No measurement of sample widt recorded over the outcrop. 	cally intensity ographed th was
Sub-sampling techniques a sample prepa	g f nd aration	core, whether cut or sawn and whether harter, half or all core taken. non-core, whether riffled, tube mpled, rotary split, etc and whether mpled wet or dry. or all sample types, the nature, quality dappropriateness of the sample eparation technique. Uality control procedures adopted for subsampling stages to maximise presentivity of samples. easures taken to ensure that the mpling is representative of the in situ aterial collected, including for instance sults for field duplicate/second-half mpling. hether sample sizes are appropriate to e grain size of the material being mpled.	 The sample preparation technique samples was completed by an adlaboratory Bureau Veritas. The teand practices are appropriate for and style of mineralisation. The samples have been sorted and Primary preparation has been by the whole sample. The samples have been put a vibrating pulveriser. The sample size, while small is control be adequate for a first pass evolution of sample size to mitico coarse nature of pegmatites is dial obtain in a field environment. 	ue for all credited echniques r the type nd dried. / crushing have been n a sub- lverised in onsidered /aluation . Practical gate the ifficult to
Quality of as data and labo tests	say oratory • Th of pr te • Fc ha ar m ap • Na ac du ar ac ha	the assaying and laboratory ocedures used and whether the chnique is considered partial or total. or geophysical tools, spectrometers, andheld XRF instruments, etc, the arameters used in determining the halysis including instrument make and odel, reading times, calibrations factors oplied and their derivation, etc. ature of quality control procedures lopted (eg standards, blanks, uplicates, external laboratory checks) of whether acceptable levels of curacy (ie lack of bias) and precision ove been established.	 Samples were submitted to Bure Minerals Pty Ltd in Canning Vale analytical techniques detailed be Al, Ca, Co, Cu, K, Mn, Na, Ni, P, S, Zn: The sample(s) have been dig refluxed with a mixture of Acids Hydrofluoric, Nitric, Hydrochlorid Perchloric Acids. The analytes ha determined by Inductively Coupl (ICP) Optical Emission Spectrome (ICP102). Ag, As, Ba, Be, Bi, Cd, Ce, Cs, Dy, Gd, Hf, Ho, In, La, Li, Lu, Mo, Nb, Rb, Re, Sb, Se, Sm, Sn, Sr, Ta, Tb, Tm, U, W, Y, Yb, Zr : the sample(s been digested and refluxed with of Acids including Hydrofluoric, N Hydrochloric and Perchloric Acid analytes have been determined Inductively Coupled Plasma (ICP) Spectrometry (ICP302). B, Cr, Fe, Mg, Si, Ti : samples hav fused with Sodium Peroxide and subsequently the melt has been 	au Veritas for the elow: , Sc, V, gested and including c and ave been led Plasma etry Er, Eu, Ga, Nd, Pb, Pr, Te, Th ,Tl, s) have a mixture Vitric, ls. The by) Mass re been dissolved

Criteria	JORC Code Explanation	Commentary
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. 	 in dilute Hydrochloric acid for analysis The analytes have been determined by Inductively Coupled Plasma (ICP) Optical Emission Spectrometry (ICP104). The laboratory is accredited and uses its own certified reference material. Repeat samples and Standards were analysed as part of the QAQC process. Standard OREAS 750 was added into the analysis at a frequency of 1:20. No drilling intersections reported. Primary data is sent to the SensOre Group Principal Geoscientist – Data & Information Management, who imports the data into the industry accepted DataShed database software. Assay results are merged when received electronically from the laboratory. No adjustments or calibrations were made to any assay data. Li (ppm) was converted to Li₂O (%) by dividing by 10,000 to convert to Li (%) and then by multiplying by a conversion factor of 2.153. Ta ppm was converted to Ta₂O₅ ppm by multiplying by a conversion factor of 1.221. Nb pp, was converted to Nb₂O₅ ppm by multiplying by a conversion factor of 1.431.
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 samples have their location recorded using a handheld Garmin GPX64sx GPS unit to an indicative accuracy of <5m All sample locations are GDA94, MGA Zone 50 grid system.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. 	 Sampling was of an exploratory and reconnaissance nature and spacings are insufficient to establish continuity or define Resources. Samples were collected over a 0.5m to 3m area
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 	 Samples were point sampled from within a specific lithology and so do not relate to the orientation of the mineralisation. Rock chip samples collected in this way have an inherent availability bias due to weathering.

	Criteria	JORC Code Explanation	Commentary
		mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	
	Sample security	The measures taken to ensure sample security.	 All samples were packed in plastic bags, secured with cable ties and transported from the field by SensOre Ltd personnel to Perth who transported the samples directly to the Bureau Veritas laboratory in Canning Vale.
			 The laboratory checks the physically received samples against an EVAI generated sample submission list and reports back any discrepancies.
	Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• No external or third-party audits or reviews have been completed.

SECTION 2: REPORTING OF EXPLORATION RESULTS

(Criteria listed in the preceding section also apply to this section)

	Criteria		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 	 The results reported in this announcement are on granted exploration licence E51/2126 held by Matrix Exploration Pty Ltd (Matrix). Exploration Ventures AI Pty Ltd have signed a Letter Agreement with Matrix for an option to acquire 100% of the tenement. The tenement has recently been granted and is believed to be in good standing. There are no known impediments to obtaining a license to operate, other than those set out by statutory requirements, which have not yet been applied for.
	Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 No historical lithium exploration has been undertaken within the licence area. Past exploration has focused on gold and base metal exploration. No drilling has been completed within the tenure. Soil and limited stream sediment sampling has been undertaken by Silver Swan Group (A93462), Doray Minerals Ltd (A99138), Cervantes Gold Pty Ltd (A117232), Cervantes Corporation Limited (A120365) and Zeus Mining Pty Ltd (A122182, A123651, A131770 & A131774)
	Geology	• Deposit type, geological setting and style of mineralisation.	• The prospect area is located 35km north of Meekatharra in the Murchison region of

Criteria		Commentary
		 Western Australia. Geologically the prospect is situated within a largely basaltic sequence of the Abbots Greenstone belt. The Abbotts Greenstone belt consists of an intercollated succession of mafic, ultramafic, felsic volcanics and sediments. The sequence has been intruded by felsic porphyries, felsic pegmatites, and granite. The margins of the belt are structurally complex, and the belt is bounded by granites and monzogranites to the east and west and the north. The metamorphic grade appears to be mid to upper greenschist with some higher grade adjacent to the granite contacts. Locally several pegmatite swarms can be found outcropping mainly within the metabasalt and some of the structurally complex zones consisting of intercolated granite, greenstones, and pegmatites.
Drill hole 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 drill collar Elevation of RL (Reduced Level – elevation above sea level in metres) of the drill collar Dip and azimuth of the hole Down hole length and interception depth Hole length 	• No drilling data reported.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated 	 No aggregation or averaging has been applied to the reported data.

Criteria	Co	Commentary	
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole 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 (eg 'down hole length, true width not known'). 	The true orientation (dip and strike) of any mineralisation is not known, however as all data is point data no widths are reported.	
Diagrams	 Appropriate maps and sections (with 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 drill hole collar locations and appropriate sectional views. 	Figures pertinent to the exploration stage of the project are included in Company reports and announcements.	
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.	The accompanying document is a balanced report.	
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. 	No other substantial information is available other than that reported above.	
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). 	Further ground reconnaissance and sampling to determine the extent of the pegmatites and presence of lithium- bearing minerals.	
	 Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	Further exploration will be based on results received.	