ASX: **SLB**
stelarmetals.com.au

5 June 2025
ASX ANNOUNCEMENT

New licence application for HMS exploration in the Gawler Craton, SA

Highlights

- Stelar has applied for a new Exploration Licence (ELA2025/0001) considered prospective for Heavy Mineral Sands (HMS) in the Gawler Craton region of South Australia
- ELA2025/0001 "*Wynbring*", has a similar geological setting to Petratherm and Marmota's nearby Muckanippie HMS Projects
- Paleochannels previously explored for uranium by Mega Uranium (TSX:MGA), but not for HMS
- Work programs including shallow surface sampling and aircore drilling are scheduled to commence in second half of 2025

Stelar Metals Limited (ASX:**SLB**) ("**Stelar**" or "**the Company**") is pleased to announce that it has applied for a new Exploration Licence (ELA2025/0001) "*Wynbring*" in the Gawler Craton in South Australia. Wynbring, covers a large 327km^2 area located 75 kilometres west of Tarcoola township. Stelar considers the new tenement, which straddles the Muckanippie Shear Zone, to be prospective for titanium and potentially palaeochannel hosted uranium (Figure 1).

Petratherm Limited (ASX:PTR) announced in late 2024 the discovery of significant titanium-bearing heavy minerals sand concentrations associated with the Muckanippie Intrusive Complex (**MIC**) and the Muckanippie Shear Zone (**MSZ**) in the Gawler Craton to the north of Wynbring.

Recent announcements by both Petratherm[1] and Marmota Limited (ASX:MEU)[2] on 29 May 2025 continue to report near-surface thick intersections of Heavy Minerals (**HM**) extending over large areas with PTR's Rosewood prospect now extending over 15km^2. At MEU's Muckanippie Project heavy minerals sands are concentrated in palaeo-drainage channels with

[1] ASX:PTR – 29 May 2025 "*Drilling at Rosewood returns best results to date with 1.6km extension of high-grade HM mineralisation*"
[2] ASX:MEU - 29 May 2025 "*Muckanippie yields spectacular Heavy Mineral concentrations*"

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Marmota reporting multiple thick high-grade heavy mineral intersections including: 37m @ 45% HMS in 25MKAC068 [2-39m][2]

Stelar's new Wynbring tenement application shares a similar geological setting and straddles the MSZ on the southern margin of the Mulgathing Trough. Geophysics and historic shallow uranium drilling demonstrate a well-developed and complex palaeo-drainage system on the new tenement that overlies potential source magnetic source rocks which have not been evaluated previously for HMS or titanium.

Titanium metal is produced from titanium-rich HMS. Titanium based alloys, due to their lightweight, high-strength, high melting-point and high resistivity to corrosion are increasingly in demand throughout the aeronautic, defence, marine, medical and renewable energy industries. Titanium dioxide is a key white pigment used in paints, plastics, paper, and other materials.

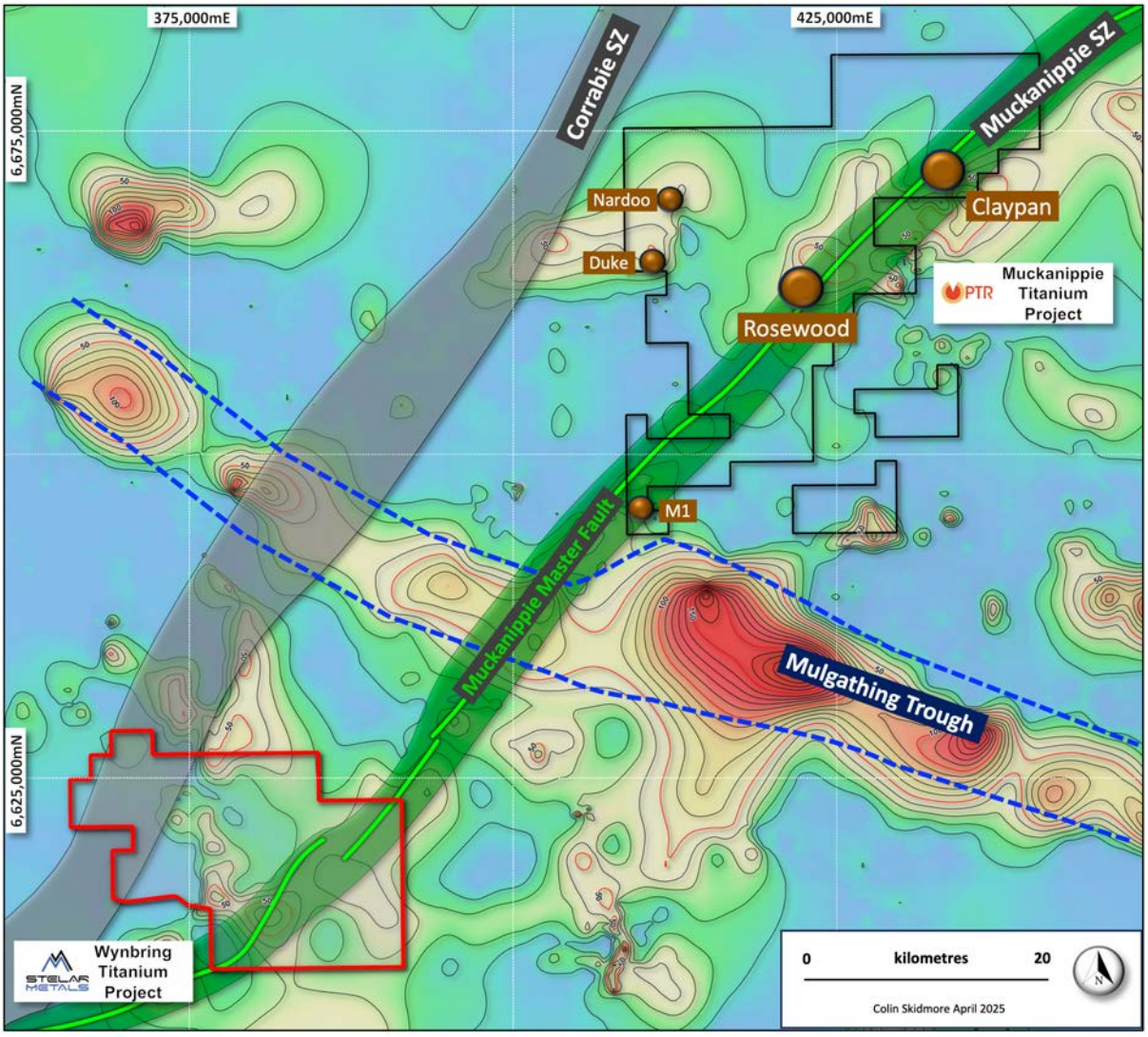

Figure 1: Location of "Wynbring" ELA2025/0001 in relation to Petratherm's Muckanippie Titanium Project showing key structures on interpreted depth-to-basement imagery

Geological Setting

Stelar's new Wynbring tenement application is dominated by shallow cover and little work has been undertaken to characterise or understand the basement geology in this area which is poorly understood. Recent geophysical surveys by the Geological Survey of South Australia (**GSSA**) clearly delineate the Muckanippie Shear Zone (MSZ) as a splay off the Coorabie Shear Zone. The MSZ extends across the Wynbring tenement, and is recognised as a key factor directly related to the titanium source rocks to the north on Petrotherm's tenure,. Also evident in the geophysical datasets are circular magnetic highs interpreted as intrusive magnetic plutons, that during near surface weathering, resulted in enrichment of heavy mineral sands in the developing placer deposits (Figure 2). Petrotherm's large Rosewood titanium prospect is evidently directly related to a partially demagnetised circular anomaly.

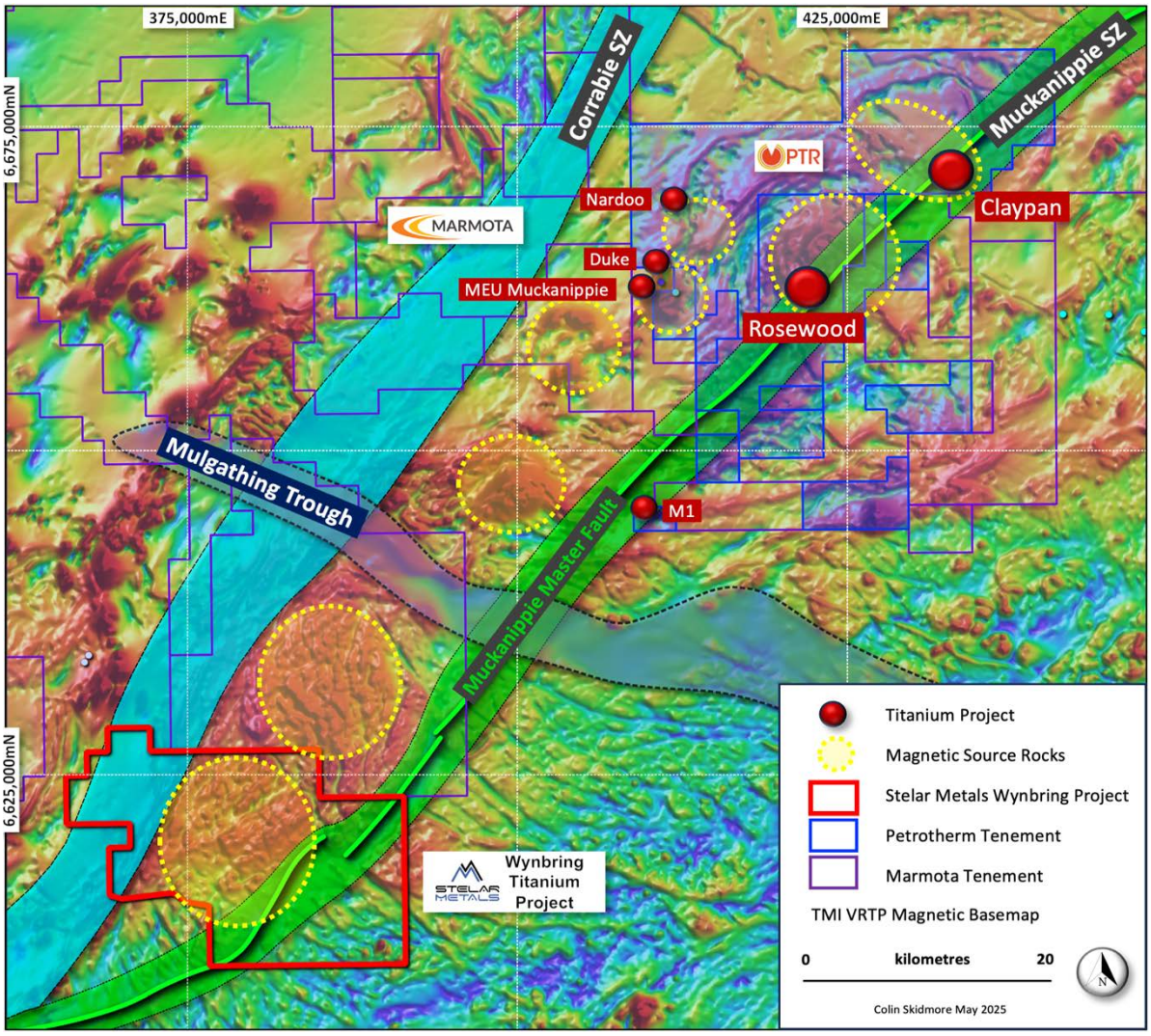

Figure 2: Wynbring tenement ELA2025/0001 in relation to Petratherm's Muckanippie Titanium Project showing key structures and circular magnetic source rocks on magnetic imagery

The MSZ at Wynbring is more complex with releasing and restraining bends as well as breaks and offsets. These features control the morphology of the younger incised palaeo-drainage systems and potentially allow for enhanced trap site development and the discrete concentration of HMS.

The palaeo-drainage systems appear well developed and are similar to the palaeo-drainage systems at the Warrior Uranium Project, located 25 kilometres to the east.

Previous Work

Previous exploration work at Wynbring is limited to palaeo-channel uranium exploration. In the 1970's, Japanese companies including PNC and Nissho Iwai undertook shallow reverse circulation (**RC**) drilling programs, however relied on wireline logging techniques only with no assessment of the heavy mineral sand potential. Historic Open-file Reports detail that Mega Uranium (TSX:MGA) again considered the uranium potential in 2011 with additional shallow RC drilling using wireline logging with only limited assays. Their geological logs however included descriptions of elevated heavy mineral sand concentrations estimated visually up to 4% HMS[3].

Visual estimates of mineral abundance should never be considered a proxy or substitute for laboratory analyses where concentrations or grades are the factor of principal economic interest. Visual estimates also potentially provide no information regarding impurities or deleterious physical properties relevant to valuations.

Next Steps

The application has progressed with the South Australian Regulators and Stelar has already paid the annual licence and administration fees. Tenure granting is considered imminent. Stelar has already approached the Traditional Owners to negotiate access onto the tenement for on-ground exploration work.

Stelar has identified that a number of drill cuttings from the historic shallow uranium holes are preserved at GSSA's core library. Stelar's geologist will examine and analyse these cuttings to assess the HMS component and titanium potential, which has not previously been considered in this area.

Stelar's on-ground work program, which is scheduled to start in second half of 2025, will include: outcrop mapping, surface and shallow auger sampling, followed by a shallow aircore (AC) drilling program.

[3] SA Open File report ENV11508

THIS ANNOUNCEMENT HAS BEEN APPROVED FOR RELEASE BY THE BOARD OF STELAR METALS LIMITED

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ABOUT STELAR METALS

Stelar Metals' experienced and successful exploration and development team is targeting the discovery and production of critical minerals, with increasing global demand to enable the world to achieve net zero emissions.

Stelar's Baratta Copper Project, located in South Australia, is hosted within the Adelaidean rocks of the Flinders Ranges. The Project is considered highly prospective for sediment-hosted copper mineralisation, akin to the Central African Copper belt. The historic Baratta Copper Mine produced copper ore between 1896 and 1904 from a 1.5 km-long zone of strata bound workings in a structure splaying off the Bibliando Thrust. Stelar is conducting exploration activities a 7-kilometre corridor of copper mineralisation and geophysical targets that have been overlooked by previous explorers.

Stelar's Trident Lithium Project is located near mining, industrial, transport and green power infrastructure at Broken Hill in NSW. The Trident Lithium Project extends over the 20km strike length of the Euriowie Tin Pegmatite Field and is highly prospective for hard rock lithium mineralisation. Mapped LCT-type pegmatites vary in size but can be up to 100 metres wide and extend in outcrop for over 1 kilometre in length. Trident was one of Australia's first lithium and tin mining provinces, highlighting both the fertility and large scale of Stelar's lithium-rich pegmatite system.

EXPLORATION RESULTS

The information in this announcement related to Exploration Results is based on information compiled by Mr Colin Skidmore, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Skidmore is a full-time employee of Stelar Metals Ltd. Mr. Skidmore has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activities 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 (the JORC Code (2012)). Mr. Skidmore consents to including matters in this announcement based on his information in the form and context in which it appears.

This announcement includes information related to Exploration Results prepared and first disclosed under the JORC Code (2012) and extracted from the Company's initial public offering prospectus, which was released on the ASX on 16 March 2022. A copy of this prospectus is available from the ASX Announcements page of the Company's website: https://stelarmetals.com.au/.

The Company confirms that it is unaware of any new information or data that materially affects the information in the relevant market announcement. Where the information relates to Exploration Results, the Company 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.

JORC Code, 2012 Edition – Table 1: Wynbring

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.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• No sampling reported
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 reported.
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 reported
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• No drilling reported
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• No sampling reported
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.* • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• No analysis undertaken
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.*	• No sampling undertaken

Criteria	JORC Code explanation	Commentary
	• *Discuss any adjustment to assay data.*	
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.*	• No sampling undertaken
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.*	• No sampling undertaken
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 mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• No sampling undertaken
Sample security	• *The measures taken to ensure sample security.*	• No sampling undertaken
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have been undertaken

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	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 Wynbring Project is located on ELA2025/0001. ~70km west of Tarcoola on the Gawler Craton in South Australia. • Application ELA2025/0001 was lodged by Resource Holdings No 1 Pty Ltd (RH1) a wholly owned subsidiary of Stelar Metals Limited. ELA2025/0001 is expected to be granted shortly. • Wynbring is located on Mulgathing Pastoral Lease. • Native Title Determinations hare held by Antakirinja-Matu Yankunytjatjara Aboriginal Corporation RNTBC (AMYAC) in the northern portion and the Far West Coast Aboriginal Corporation (FWCAC) in the southern portion
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Wynbring has previously been explored by PNC and Nissho Iwai for uranium on the 1970's who used mud drilling and wireline gamma. • In 2011, Mega Hindmarsh continued uranium exploration with additional drilling and wirerline gamma logging. Visual geological logs reported elevated HMS (Open File ENV11508) • Various geophysical surveys have been conducted by the South Australian Geological Survey including high-resolution aeromagnetics including the 2019 Gawler Craton Airborne Survey (GCAS)
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Titanium mineralisation is targeted in palaeo-drainage and placer deposits which have developed in the Gawler Craton basement associated with the Muckanippie Shear Zone and plutonism. •

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 hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• No drilling reported

Criteria	JORC Code explanation	Commentary
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 sampling reported
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').*	• No sampling 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 in this announcement
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.*	• No sampling reported
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.*	• GCAS 2019 high resolution magnetic and radiometric data along with historic gravity data is available from SADEM. • Samples from historic drill holes are preserved in the GSSA's Adelaide Core Library.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Stelar plans to gain land access and once granted will commence exploration with mapping shallow near surface geochemical sampling and shallow aircore drilling.