EXPLORATION MANAGER'S UPDATE ON PROPOSED ACTIVITIES FOR 2023

Following a review of the extensive and successful exploration conducted during multiple programs in Australia last year, Inca Minerals Limited (ASX: ICG; Inca or the Company) is pleased to provide an update on proposed upcoming exploration activities scheduled for the 2023 field season.

The proposed exploration program builds on the work completed in 2022, which represented a significant advancement on the understanding and prospectivity of a number of the Company's Australian projects.

Highlights

- Soil surveys are planned for MaCauley Creek, Queensland to follow up anomalous multi-element (Cu-Ag-Pb-Zn-Sn-Bi-Li-W) geochemistry in rock chips, coincident with strong magnetic and gravity anomalies and strong chargeability trends identified from Gradient Array IP data.
- Planning is underway for follow-up RC drilling at the Wallaroo Prospect, MaCauley Creek to test areas of anomalous copper mineralisation identified from rock chip geochemistry, coincident with a 1000 x 400m NE-SW oriented magnetic feature. This area is highly accessible with a sealed road running through part of it to the Mount Moss mines and Zigzag stations. The area is also cross-cut by station tracks and fence lines, providing good access.
- High-power Pole – Dipole IP surveys (with a high depth resolution of up to ~500m) to be undertaken in the central area of MaCauley Creek, where several abandoned small mine workings have been mapped. The aim of this survey is to evaluate the occurrence at depth of primary sulphides that may be the source of the supergene enrichment mapped at the surface.
- RC drilling planned at the Camel Creek and Spinifex Pigeon Prospects within the Jean Elson Project in the Northern Territory, targeting zones of anomalous rock chip geochemistry and chargeability trends identified from Gradient Array IP.
- Completion of one RC drill-hole next to drill-hole FW220008 completed in 2022, north-east of the Mount Lamb trend within the Frewena Project area, NT to follow anomalous Cu-Ag-Zn geochemistry.
- Within the Frewena Frontier Project area, RC drilling is planned over zones of modelled gravity lows targeting inferred phosphate mineralisation similar to the Wonarah (Avenira) Phosphate Deposit. The Wonarah phosphate deposit, which is hosted within gravity lows, is one of the biggest phosphate deposits in Australia. Inca's modelled gravity lows at both Frewena East and Frewena Frontier, which are interpreted to be phosphate-bearing, have a bigger footprint than the Wonarah deposit.
- Potentially, one deep percussion-diamond drill-hole (~1000m) to be drilled at Frewena Fable targeting modelled strong and coincident magnetic and gravity isosurfaces.
- Discussions with all stakeholders to allow for the smooth execution of these programs have been initiated and are advancing positively on all fronts.

During the 2022 exploration field season, Inca successfully completed its maiden drill program in Australia within its Frewena Group of Projects in the Barkly Tablelands, NT, generating highly encouraging results that clearly demonstrate that a fertile mineral system is in place in the area.

In addition to the drilling, Inca also commissioned a review of historic non-Inca drill-holes within its tenement holdings at Frewena East, leading to the identification of an Exploration Target of 453-761 million tonnes of phosphate mineralisation within its Frewena East Project area, directly north of the Wonarah (Avenira) Phosphate Deposit (please refer to ASX announcement and CP statements of 30 January 2023 and we confirm that we are not aware of any new information or data that materially affects the information included this announcement). The Wonarah Phosphate Deposit is one of the largest phosphate projects in Australia with an applied minimum cut-off of 15% P2O5 Wonarah has a total resource of 532.9Mt[1].

Gradient Array Induced Polarisation (GAIP) and Versatile Time-Domain Electromagnetic (VTEM) surveys were also completed at the Jean Elson Project in the NT followed by a reconnaissance field trip in late 2022, which culminated with the sampling and assaying of 46 rock chips as reported previously (ASX announcement of 7 February 2023).

At its Queensland Project at MaCauley Creek, Inca completed two types of geophysical surveys: Gradient Array Induced Polarisation (GAIP) and gravity surveys, over selected high priority areas. Following processing and interpretation of the acquired geophysical datasets, chargeability/conductivity trends and areas of anomalous gravity and magnetics coincident with surface Cu-Ag-Pb-Zn mineralisation were identified. These surveys and data interpretation were followed in November 2022 by reconnaissance geological mapping and rock chip sampling, with 70 samples collected and assayed (ASX announcement of 23 February 2023).

Following a review of its 2022 activities, a robust and cost-effective exploration program is being designed which will keep Inca busy during the 2023 field season. Upcoming exploration activities include but are not limited to those listed below.

MaCauley Creek Project, Queensland

Following evaluation of geological and recently acquired rock chips geochemical data in conjunction with Gravity and Gradient Array Induced Polarisation (GAIP) geophysical datasets, two high-priority targets requiring immediate exploration follow-up work have been identified.

One, located in the central part of the tenements, is named “Central Area Prospect” and another, located to the north-east of the tenements, is named the Wallaroo Prospect.

In addition to these two prospect areas, the western part of the tenements stands out as highly prospective. This area is defined by anomalous magnetic/gravity signatures, which extend north-east into the Mt Moss magnetite and base metals mines (Figure 1).

The texture of the magnetic anomalies shows distinctive discontinuities and truncations, suggesting that there has been significant fracturing/faulting within the western portion of the MaCauley Creek Project Area. Fracturing is vital in mineral exploration because it serves as conduits and provides pathways for the migration of connate waters from deeply buried sedimentary units and reduced fluids from mantle sources whose interaction with oxidised shallow waters near-surface create good redox differentials, favourable for the deposition of mineral deposits. This area is recommended for systematic soil surveys in 2023.

[1] Source of information: AEV Australian Potash and Phosphate Conference (22 Nov 2022) and AEV ASX announcement (14 Oct 2022).

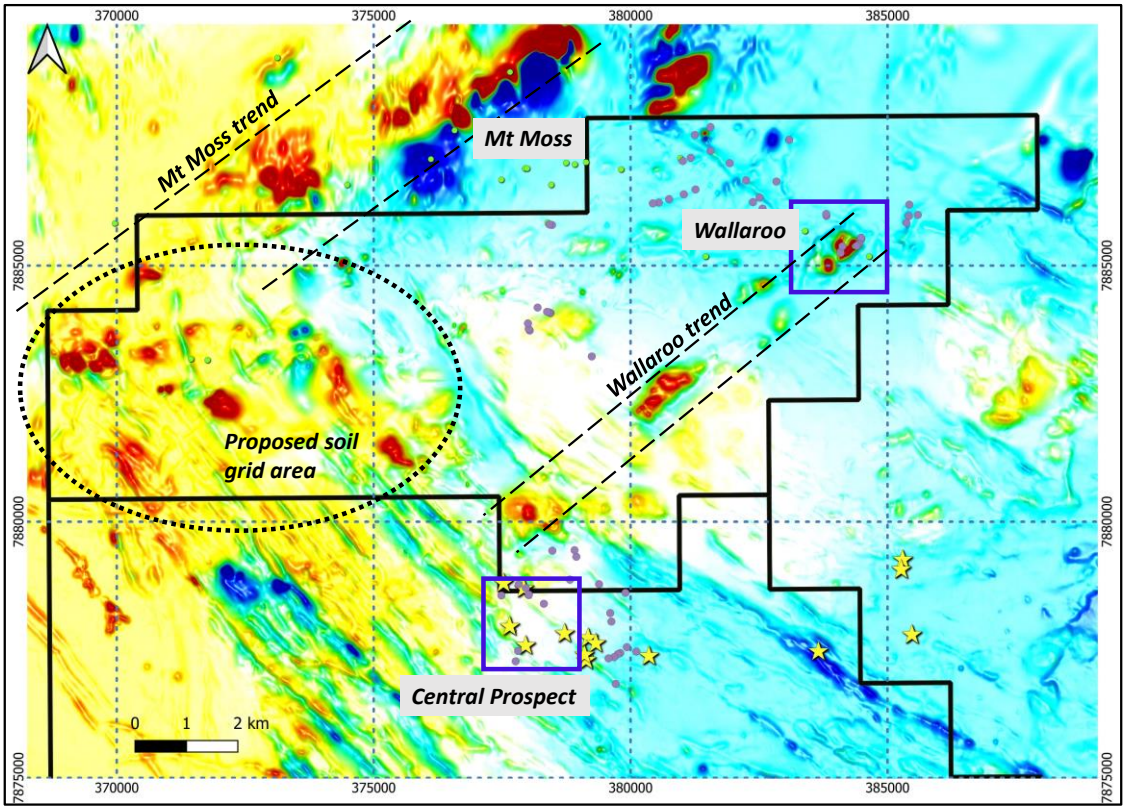

Figure 1: Overview of the MaCauley Creek Project area showing the locations of Wallaroo and Central Prospects including locations of major mineral occurrences and abandoned small workings (yellow stars). The map, superimposed on Total magnetics (TMIRTP), shows the anomalous Mt Moss magnetite-base metals magnetics trending NE-SW into the western part of MaCauley Creek, which is recommended for systematic soil surveys. Wallaroo, located in the northeast is also defined by a NE-SW magnetics trend, which extends into the Central prospect area. It should be noted that the general geological and structural orientation of MaCauley Creek is NW-SE, thus these two potentially mineralised trends may represent younger systems that truncated the country-rock geology, leading to the dumping of mineral systems.

Interpretation of recently acquired Gradient Array IP (GAIP) survey data over the Central Area prospect has led to the identification of a major chargeability feature trending NW-SE (concordant with the regional geological and structural orientation of the broader area) over 1,000m length with variable thickness between 50 and 150m, Figure 2.

An abandoned and shallow Cu-Ag pit named "Western" (~10m depth by 5 m wide) lies centrally on this trend. This is a significant target for follow-up RC drilling, to be preceded by soil surveys aimed at defining geochemical vectors for more effective targeting.

This chargeability trend has not been previously drilled and represents a strong target with sufficient size and geometry to host economic mineralisation. Because gradient array IP surveys are highly applicable in the assessment of shallow and horizontal chargeability and resistivity variations in the subsurface, the identification of outcropping mineralisation within this area thus suggests potential for near-surface discoveries. The yellow stars represent the locations of historic diggings and abandoned artisanal mines (Figure 2).

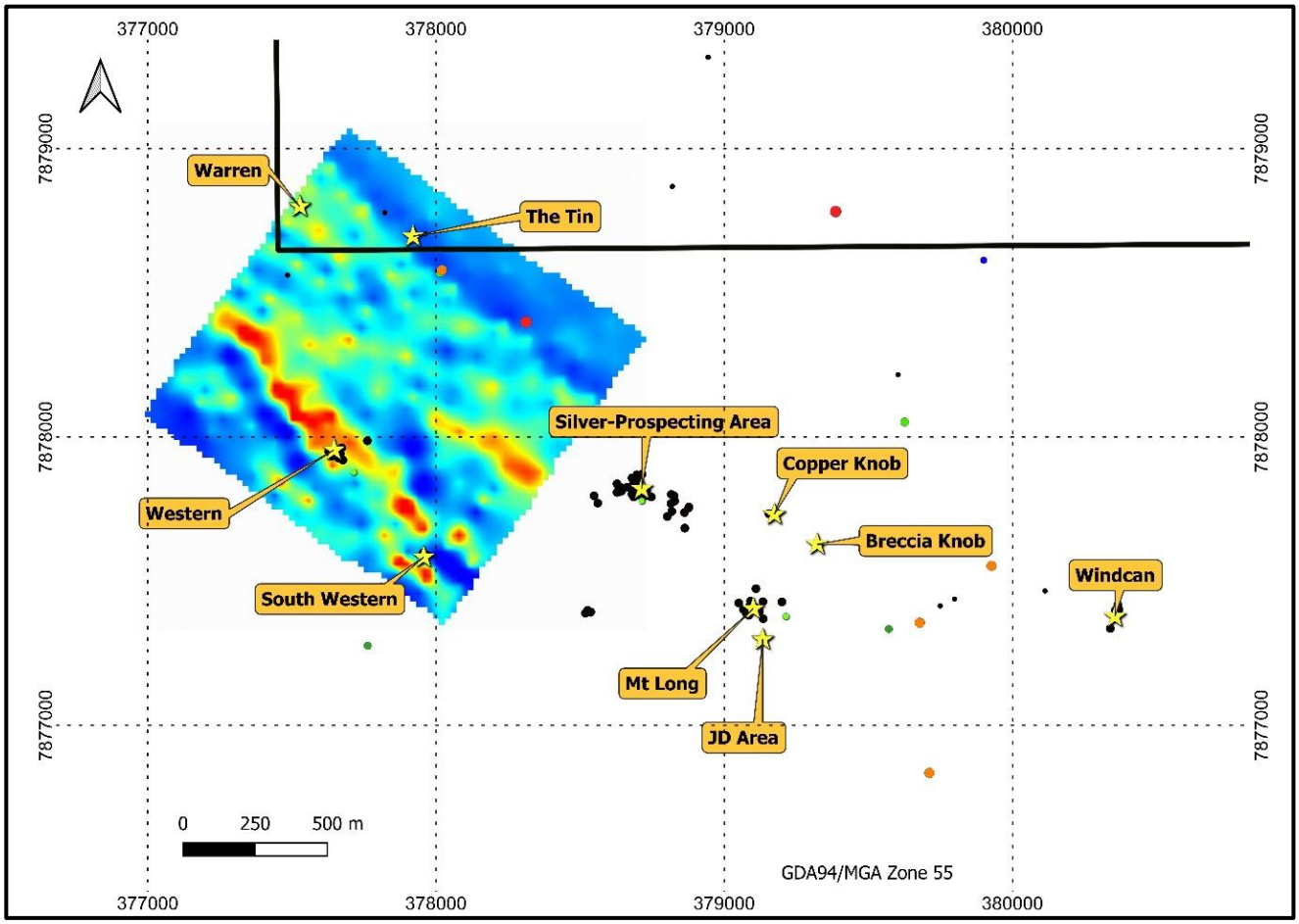

Figure 2: Central Prospect showing a coincident NW-SE chargeability/conductivity trend, historic drilling (black dots) and other named prospects. The "Western" prospect lies on this chargeability feature and has not been drilled and therefore, comprises a good area for first pass soil surveys followed by drill-testing.

High-power Pole – Dipole IP surveys (with a high depth resolution depth of up to 500m) are recommended in the central area of MaCauley Creek, where several abandoned small mine workings including Copper Knob, Breccia Knob, JD Area, Mt Long, Silver Prospect and Windcan have been mapped (Figure 2 above).

The aim of these surveys is to evaluate the occurrence at depth of any primary sulphides, principally chalcopyrite, that may be the source of the supergene enrichment mapped at the surface in these abandoned mines. A geophysical consultant has been commissioned to provide a quote for the capturing, processing and interpretation of this IP survey.

At the north-east of MaCauley Creek (Wallaroo Prospect), RC drilling is recommended to test a zone of anomalous copper mineralisation identified from rock chips geochemistry coincident with a 1000 x 400m NE-SW oriented magnetic feature.

As shown in Figure 3, this magnetic feature lies on a trend that stretches for 8km into the Central Prospect, broadly simulating the NE-SW orientation of the magnetics, which define the Mt Moss mines, located 7km to the north-west.

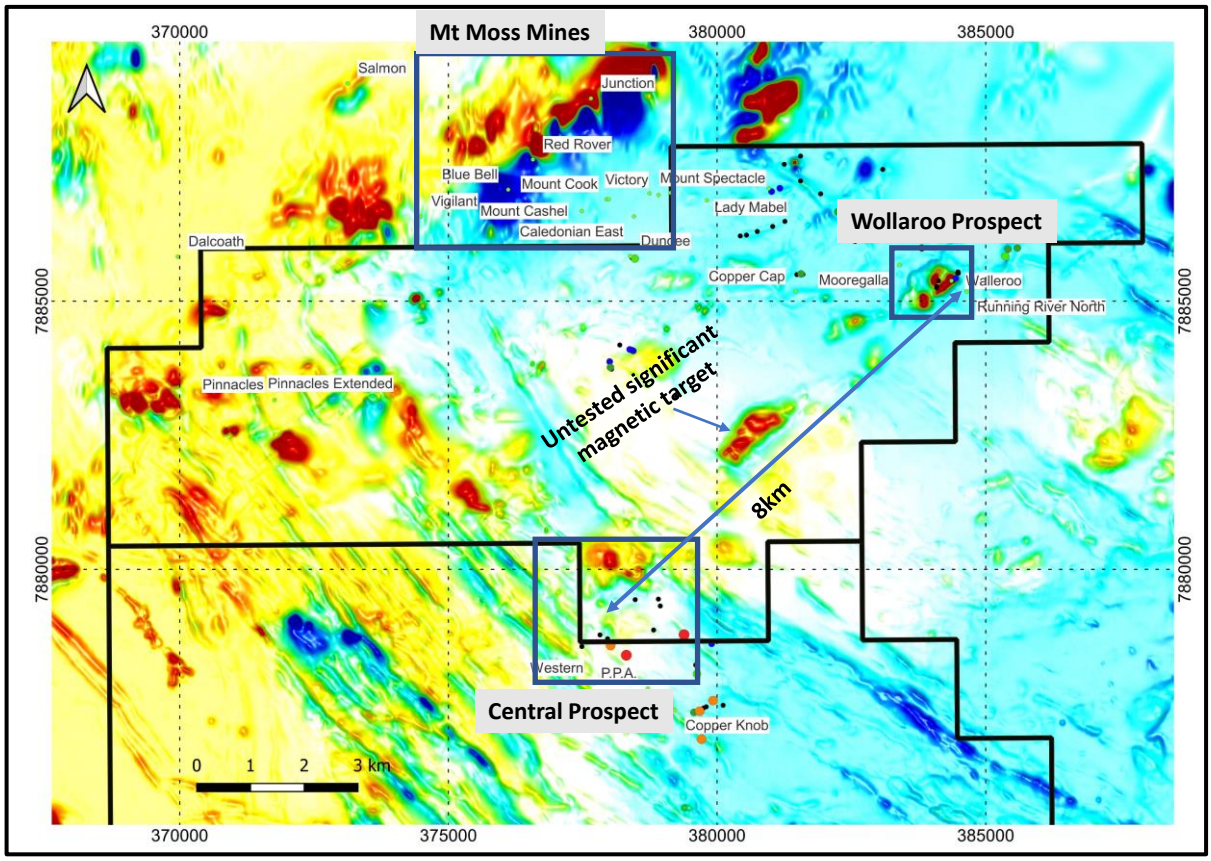

Figure 3: Location of the Wollaroo Prospect in NE MaCauley relative to the Central Prospect, other named prospects, and Mt Moss mines. Wollaroo is located 8km NE of the Central Prospect. A very significant and untested magnetic target, 1300m X 450m lies halfway between Wollaroo and the Central Prospect and will be investigated as part of the ongoing 2023 field program.

The Wollaroo Prospect, which has been recommended for RC drill-testing, is defined by strong magnetics coincident with highly anomalous copper geochemistry at surface (Figure 4a). This area is highly accessible with a sealed road running through part of it to Mount Moss mines and Zigzag stations. The Wallaroo target area is also cross-cut by station tracks and fence lines, providing good access for exploration activities (Figure 4b).

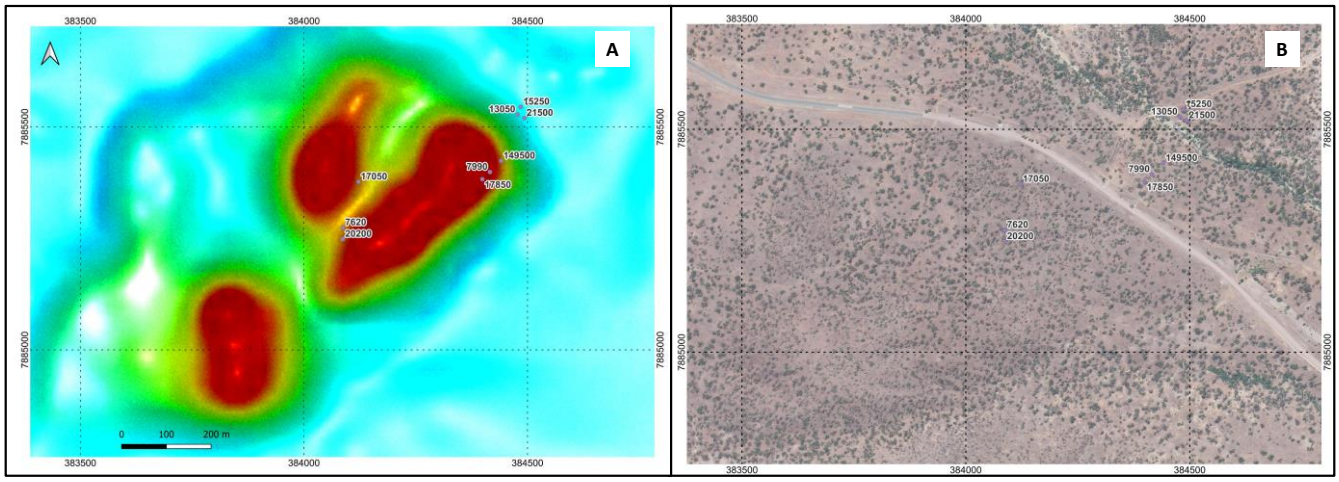

Figure 4: Wallaroo Prospect is defined by a broadly NE-SW magnetic trend associated with outcropping copper, mainly as malachite (A). The area is highly accessible as it is cut a sealed road, numerous station tracks and fence lines, which provide good access throughout the area (B). The numbers on both maps are copper assays in rock chips, all reported in ppm units.

Jean Elson, Northern Territory

The Jean Elson Project is located in the East Arunta Region of the Northern Territory, about 290km north-east of Alice Springs (Figure 5).

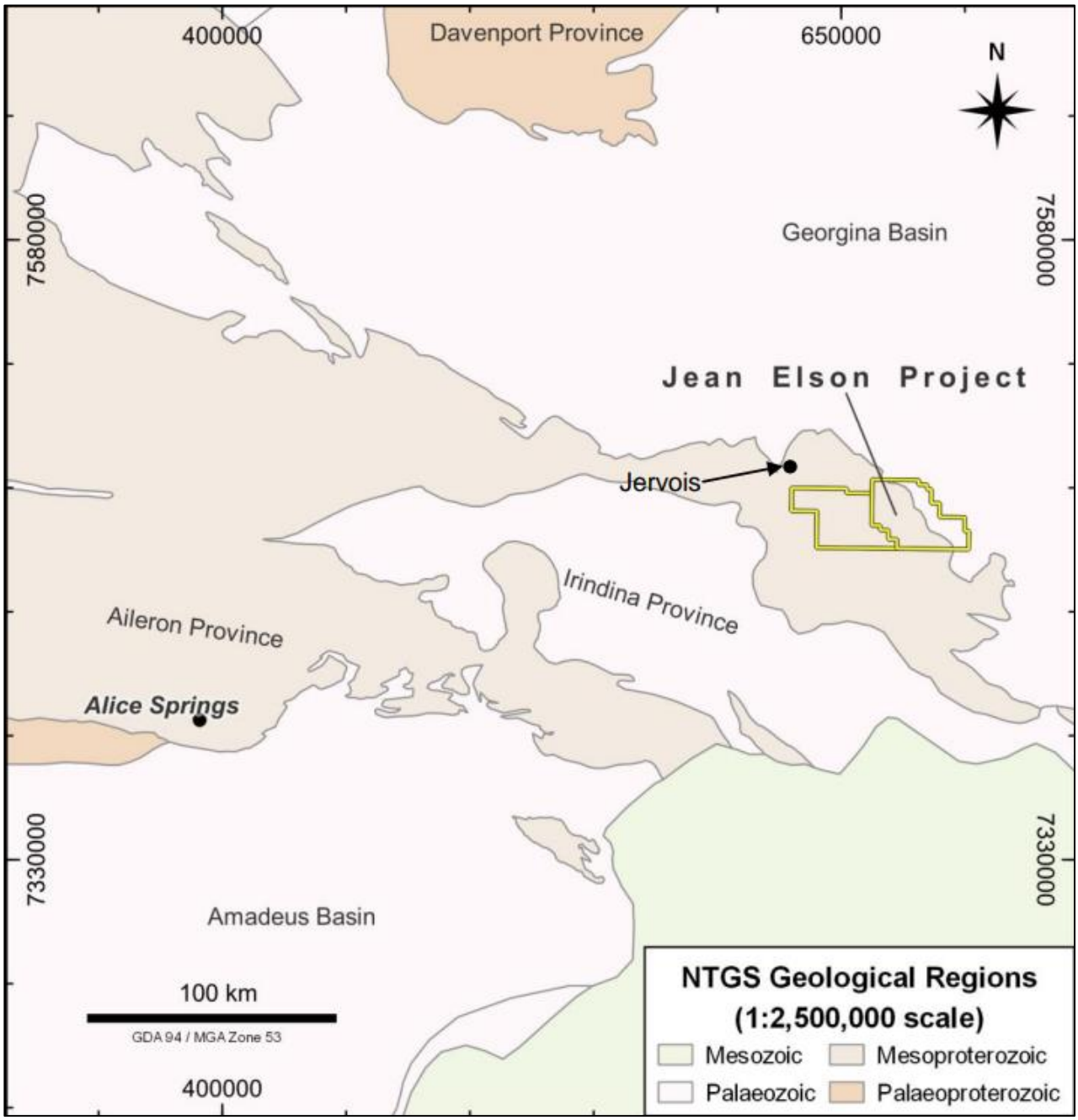

Figure 5: Location of Inca's Jean Elson Project NE of Alice Spring on a background of NTGS 1:2,500,000 scale regional geology map.

As shown in Figure 5, this project is located approximately 30km south-east of the Jervois base metals projects (Cu-Ag-W-Pb-Zn), with estimated resources of 20.9Mt @ 2% Cu and 32g/t Ag, hosted in the Bonya Metamorphics.

Based on regional structural features, outcropping mineralisation, alteration systems, geochemistry and geophysical anomalisms, several prospects have been identified within Inca's Jean Elson Project (Figure 6).

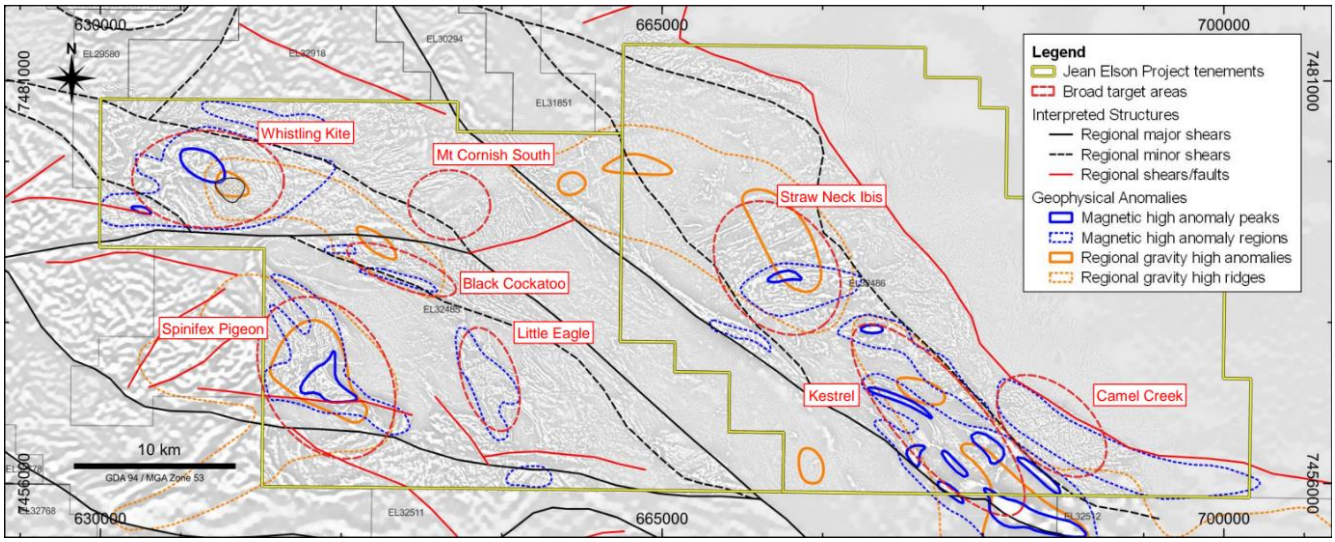

Figure 6: An overview of the Jervois Project with named prospects, regional structures, and interpreted geophysical anomalies.

Several prospects have now been mapped at the Jean Elson Project, and mineralisation and other prospective geology has been identified. However, for the 2023 field season first-pass RC drilling is planned only for the Camel Creek and Spinifex Pigeon Prospects where compelling targets have been identified. These targets are defined by zones of anomalous rock chip geochemistry and chargeability trends coincident with conductivity, which were identified from Gradient Array IP datasets captured in 2022.

The Camel Creek target is particularly important because it is associated with outcropping copper, local gravity features, shearing and faulting, and high temperature alteration of the host granites which are all the geological ingredients required for large-scale mineral deposits (Figure 7).

Target generation and interpretation of regional datasets is ongoing in the other prospects and will culminate with drill-testing when viable drill-hole sites are determined.

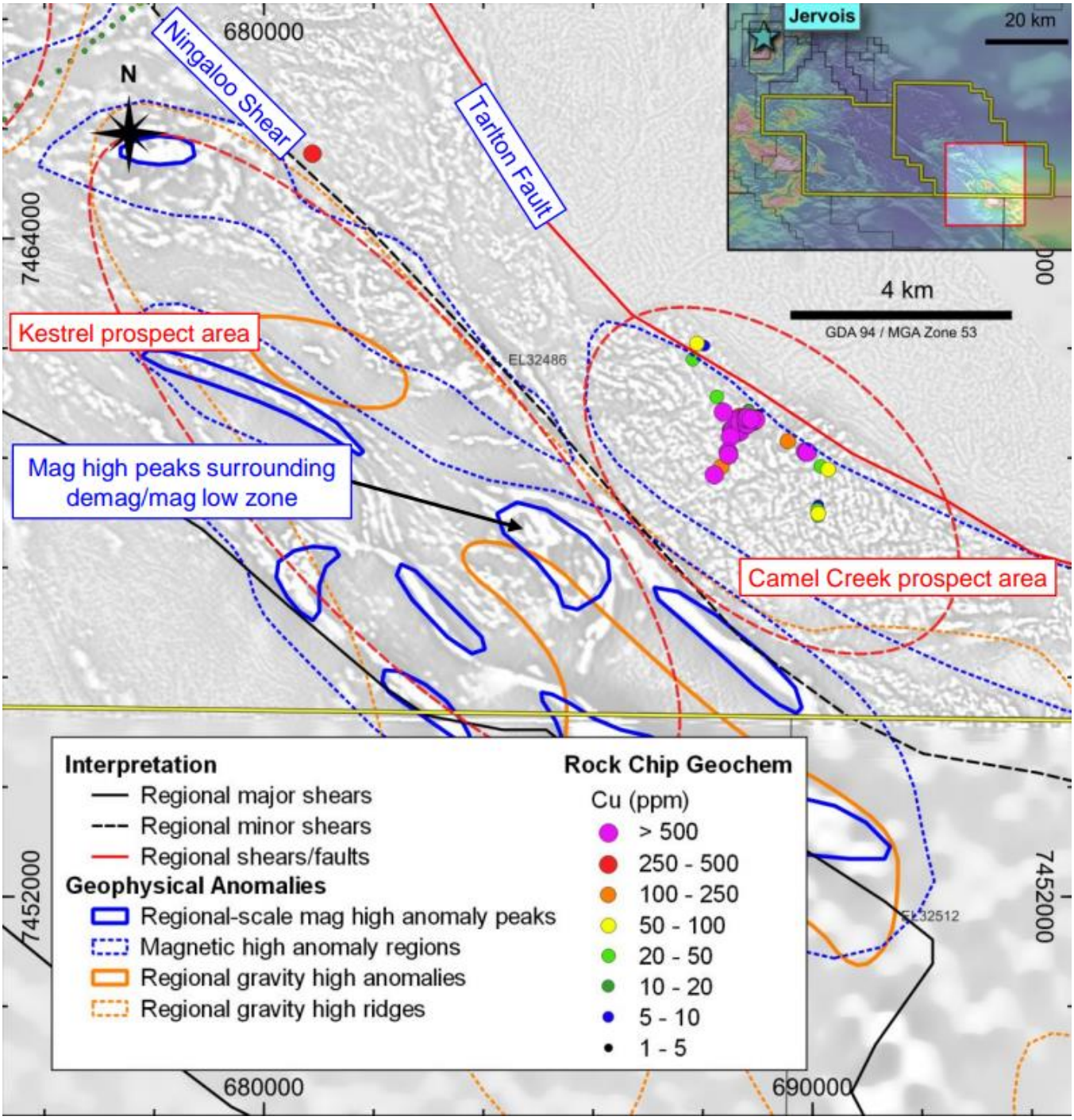

Figure 7: Camel Creek Prospect showing coincidence of rock chips geochemistry with local gravity and structural features.

Frewena Project Northern Territory

In 2022, Inca completed a reconnaissance drill program at the Mount Lamb gravity/magnetic trend within the Frewena Project, East Tennant, which is located at the Barkly Tableland 215km east of Tennant Creek.

Following a review of what were considered to be encouraging drill results, one RC drill-hole (FW220011) is initially planned to follow up anomalous Cu-Ag-Zn geochemistry and IOCG/SEDEX signature, geology and alteration characteristics, which were intersected in drill-hole FW220008 located north-east of the Mount Lamb trend. Anomalous geochemistry in FW220008 included 54m from 473m @ 1.3g/t Ag, 66m of low but anomalous copper from 461m @ 187ppm Cu, 18m from 313m @ 0.21% Zn, 70m from 431m @ 693ppm Zn and 24m from 501m @ 0.1% Zn.

The location of the proposed drill-hole relative to FW220008 and modelled gravity and magnetic isosurfaces is presented in Figure 8.

A 450 – 500m drill-hole (FW220011) will sufficiently test the modelled geophysical features.

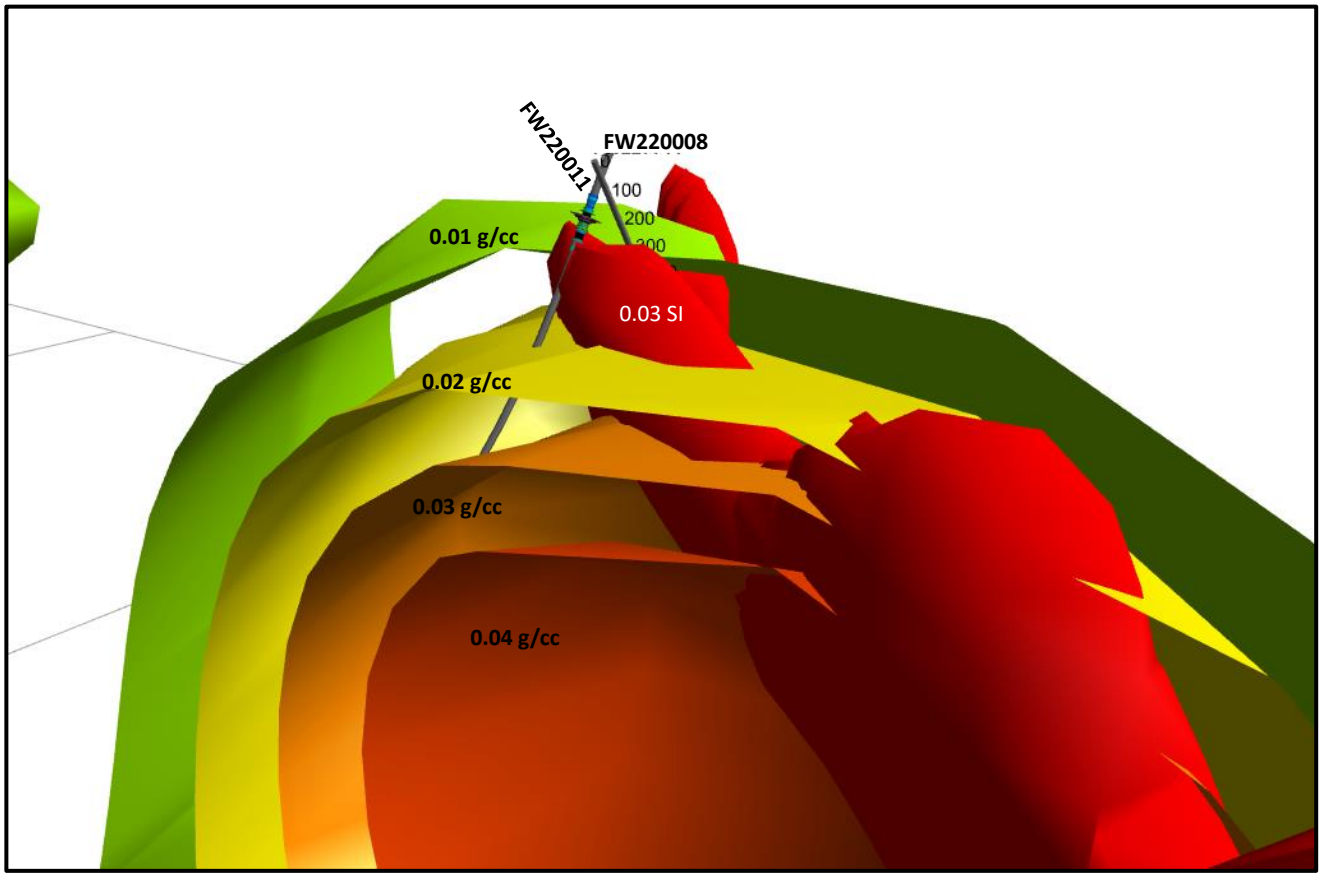

Figure 8: FW220011 designed to follow-up anomalous geochemistry intersected in FW220008. The hole is designed to test coincident magnetic and gravity isosurfaces. FW220008 is modulated by copper, showing anomalism within the area of coincident magnetics and gravity.

Modelling of UBC gravity and magnetics inversion data for the Frewena Project is ongoing, aimed at identifying other shallow and compelling targets that will be cost-effective to drill-test. One deep percussion-diamond drill-hole (~1,000m) is also being considered at Frewena Fable, targeting modelled strong magnetics coincident with gravity isosurfaces. More than one Priority 1 target was identified by AMAGRAD and Gravity Survey work conducted in 2020, and modelling is ongoing to refine the position of the proposed drill-hole.

During the 2022 field season, Inca commissioned the evaluation/interpretation of gravity data over the Frewena Project area, which led to the identification of significant phosphate prospectivity within the Frewena Project area. The Wonarah phosphate deposit, which is located about 20km to the south-east of Frewena Far East, is hosted within the Gum Ridge Limestones and a gently faulted sub-basin filled with Cambrian sediments. Existing drill-holes roughly define the Wonarah phosphate deposit on a gravity low, which appears to correlate with several gravity anomaly lows within Inca's tenements (Figure 9).

A review of historical exploration drilling on Frewena East has led to the identification of an Exploration Target of 453-762 million tonnes at 14-18% phosphate. In addition, the AMAGRAD survey completed in 2022 identified broad and subtle gravity anomaly lows within the Frewena Frontier Project area, which potentially represent sub-basins like the one hosting the Wonarah phosphate deposit, one of the largest phosphate projects in Australia with an applied minimum cut-off of 15% P2O5 Wonarah has a total resource of 532.9Mt[1].

During the 2023 field season, Inca Minerals plans to complete a scout reconnaissance RC drill program over the identified zones of modelled gravity lows, at Frewena Frontier, targeting phosphate mineralisation like the Wonarah (Avenira) Phosphate Deposit.

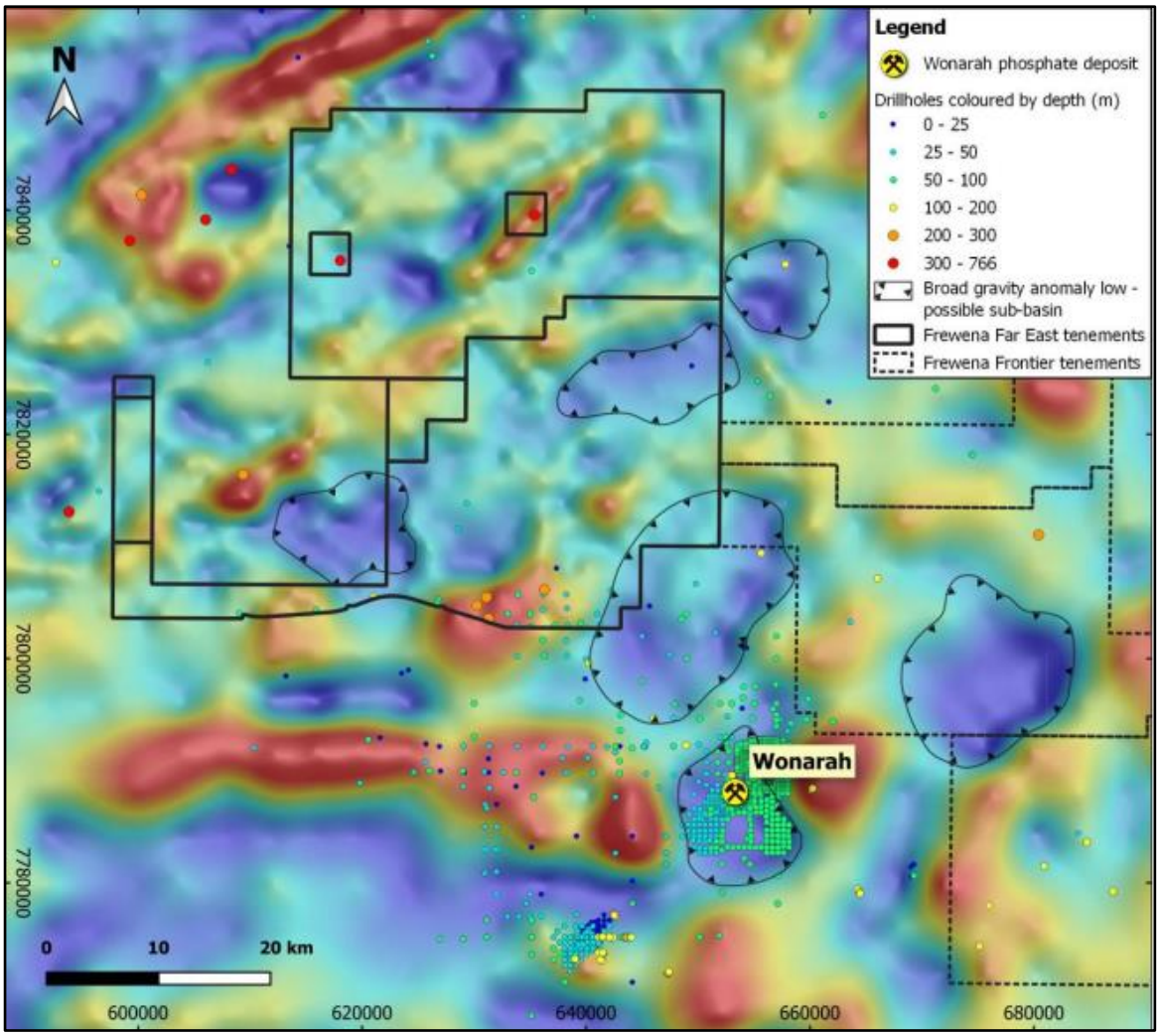

Figure 9: Frewena Far East gravity Bouguer anomaly 25km high-pass image, along with broad gravity lows representing possible shallow Cambrian sub-basins and existing drill-holes. These shallow Cambrian sub-basins are interpreted to have high prospectivity for phosphate. The Wonarah Phosphate deposit, also shown on the map is hosted on similar gravity lows.

Competent Person's Statements

The information in this report that relates to exploration activities for the MaCauley Creek Project, located in Queensland, the Jean Elson and Frewena Projects, located in the Northern Territory, is based on information compiled by Dr Emmanuel Wembenyui BSc (Hons), MSc Applied Geology and PhD Geochemistry who is a Member of The Australasian Institute of Mining and Metallurgy, MAusIMM and The Australian Institute of Geoscientists, MAIG. He has sufficient experience, which is relevant to the exploration activities, styles of mineralisation and types of deposits under consideration, and to the activity which has been 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". Dr Wembenyui is a fulltime employee of Inca Minerals Limited and consents to the announcement being issued in the form and context in which it appears.

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This announcement has been authorised for release by the Board of Inca Minerals Limited.

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