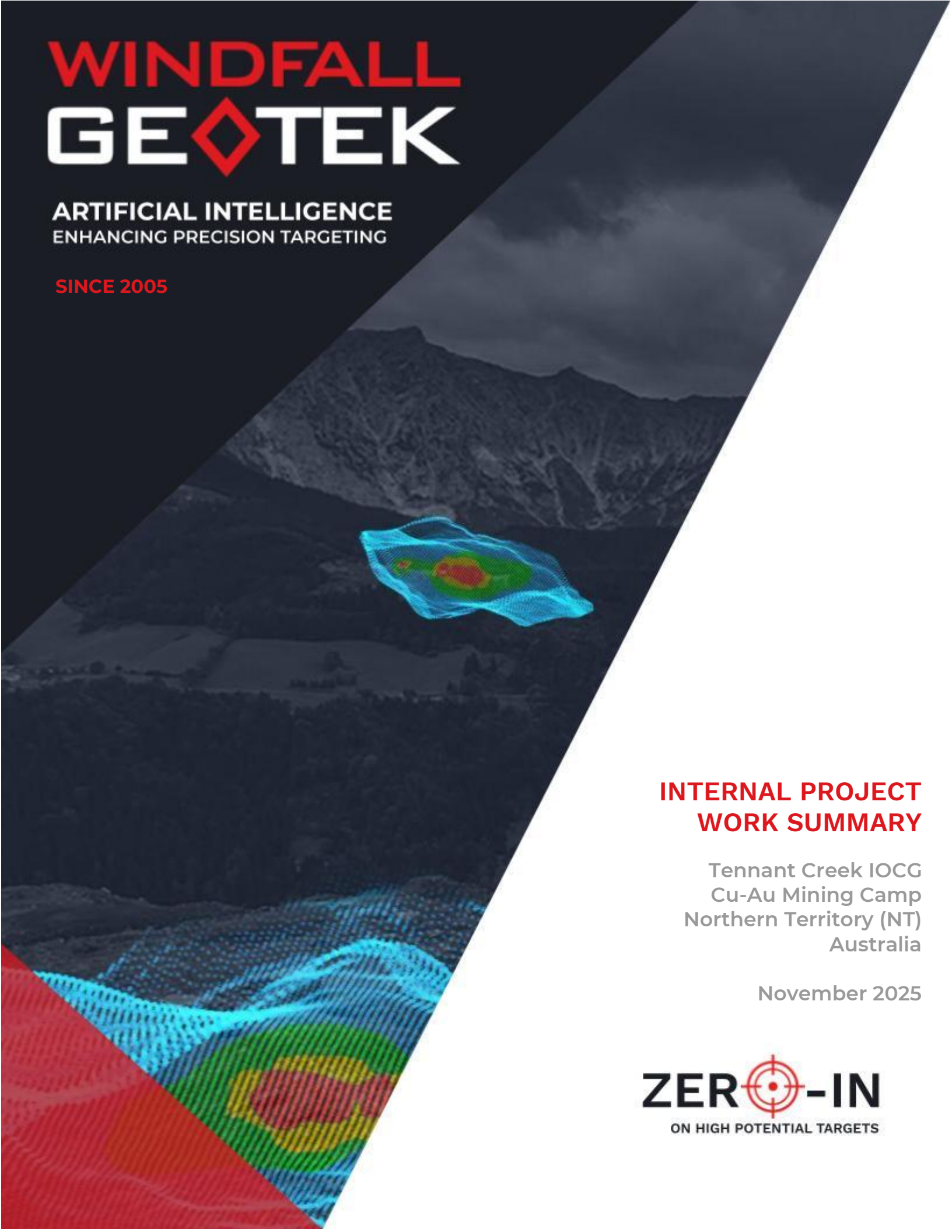
WINDFALL GEOTEK

ARTIFICIAL INTELLIGENCE
ENHANCING PRECISION TARGETING

SINCE 2005



INTERNAL PROJECT WORK SUMMARY

Tennant Creek IOCG
Cu-Au Mining Camp
Northern Territory (NT)
Australia

November 2025

ZERO-IN
ON HIGH POTENTIAL TARGETS

WORK PROPOSAL SUMMARY

WINDFALL GEOTEK proposes to use its proprietary AI System to develop IOCG Copper and Gold exploration targets over historic Tennant Creek Mining Camp Internal Project located in the Northern Territory, Australia (Figure 1). The project is considered highly prospective for Iron-Oxide Copper-Gold (IOCG) mineralization.

Geological Context

IOCG deposits are among the most metal-rich hydrothermal mineral systems globally, with Australia's Olympic Dam and Ernest Henry ranked as two of the largest deposits in terms of contained copper, gold and by-product metals. Exploration for IOCG deposits is typically guided by integrated geophysical surveys, with gravity and magnetic data forming the foundation of target generation. The distinctive density and magnetic contrasts created by iron oxide-rich alteration systems often produce characteristic anomalies that can be detected at depth, even beneath significant cover sequences. (*Inflection Resources website*)

The Palaeoproterozoic Tennant Creek Inlier is elongated in a northnorthwest to northwest direction, covering an area of ~44 000 km^2, ~500 km west of the Mount Isa Inlier (Le Messurier *et al.*, 1990). It is composed of three elements, the central of which, the Warramunga Province, hosts all of the mineralisation. The mineralised province is bounded to the north and south by overlying sequences of the coeval Ashburton and Davenport provinces respectively, while the inlier as a whole is surrounded by flat lying, mainly carbonate facies Cambrian rocks of the Wiso and Georgina basins to the west and east respectively, and by Mesozoic and younger cover. (after *PorterGeo* website)

Mineralisation within the Tennant Creek field is associated with ironstone bodies, characterised by ellipsoidal, lens, cigar-like and irregular geometries, that range in size from a few tonnes to several tens of millions of tonnes. In excess of 650 ironstone bodies are recorded in the Inlier, although only 25% contained any ore grade Cu, Au or Bi, many of which were only very minor in size, and only 100 of these have been mined in any way. (after *PorterGeo* website)

The Tennant Creek Inlier hosts a cluster of small, but high grade gold-copper-bismuth deposits, associated with magnetite and/ or hematite ironstones, that are distributed over an area of ~70 x 50 km. Examples of the largest and highest grade deposits include *Peko* (3.2 Mt @ 4% Cu, 3.5 g/t Au, 0.2% Bi, 14 g/t Ag) and *Juno* (0.45 Mt @ 0.4% Cu, 57 g/t Au, 0.6% Bi, 7 g/t Ag). The total production to 2000 was in excess of 156 tonnes of gold and 345 000 tonnes of copper since mining commenced in the 1930s. (after *PorterGeo* website)

Available Data

Northern Territory (NT) Geological Survey Public Database:

- Portion of 2020 Compilation of Magnetic and Radiometric Surveys data of Northern Territory (NT), Australia, at 80m resolution (Figures 2 & 3)
- Portion of 2020 Compilation of Gravimetry Surveys data of Northern Territory (NT), Australia, at 250m resolution (Figure 4)
- 38 158 Cu-Au Assays data from 84 777 drillholes (Figure 5)
- 7 007 Rock Samples Cu-Au Assays data (Figure 6)

Proposed AI Model

MODEL: Tennant Creek Mag-Grav-Rad Model

Project Area: 45 657 sq/km

Model Resolution: 80 m

Total Variables: 400

Total Data Points: 7 133 732

Element to identify: Two signatures will be created:

1- Cu (*threshold to be defined!)*
2- Au (*threshold to be defined!)*

Proposed Work

Step 1: Data Verification

- Review of all the geophysical, drillhole assays and rock samples data available in a digital format
- Ensure data characterize the similar geological context
- Verify the quality and quantity of the data for target generation

Step 2: Data Preparation

- Data prep. for magnetic and radiometric data

- Data prep. for primary magnetic, gravimetry, radiometric, derivative and neighbouring variables
- Compilation of variables dataset
- Compilation of training dataset using drillhole and surface samples assays data

Step 3: Target Generation

- Use AI Proprietary method to perform high similarity IOCG Cu and Au exploration targets

For further information or explanation, don't hesitate to contact WINDFALL GEOTEK.

Respectfully submitted

Grigor Heba, Principal Geologist, P.Geo., Ph.D.

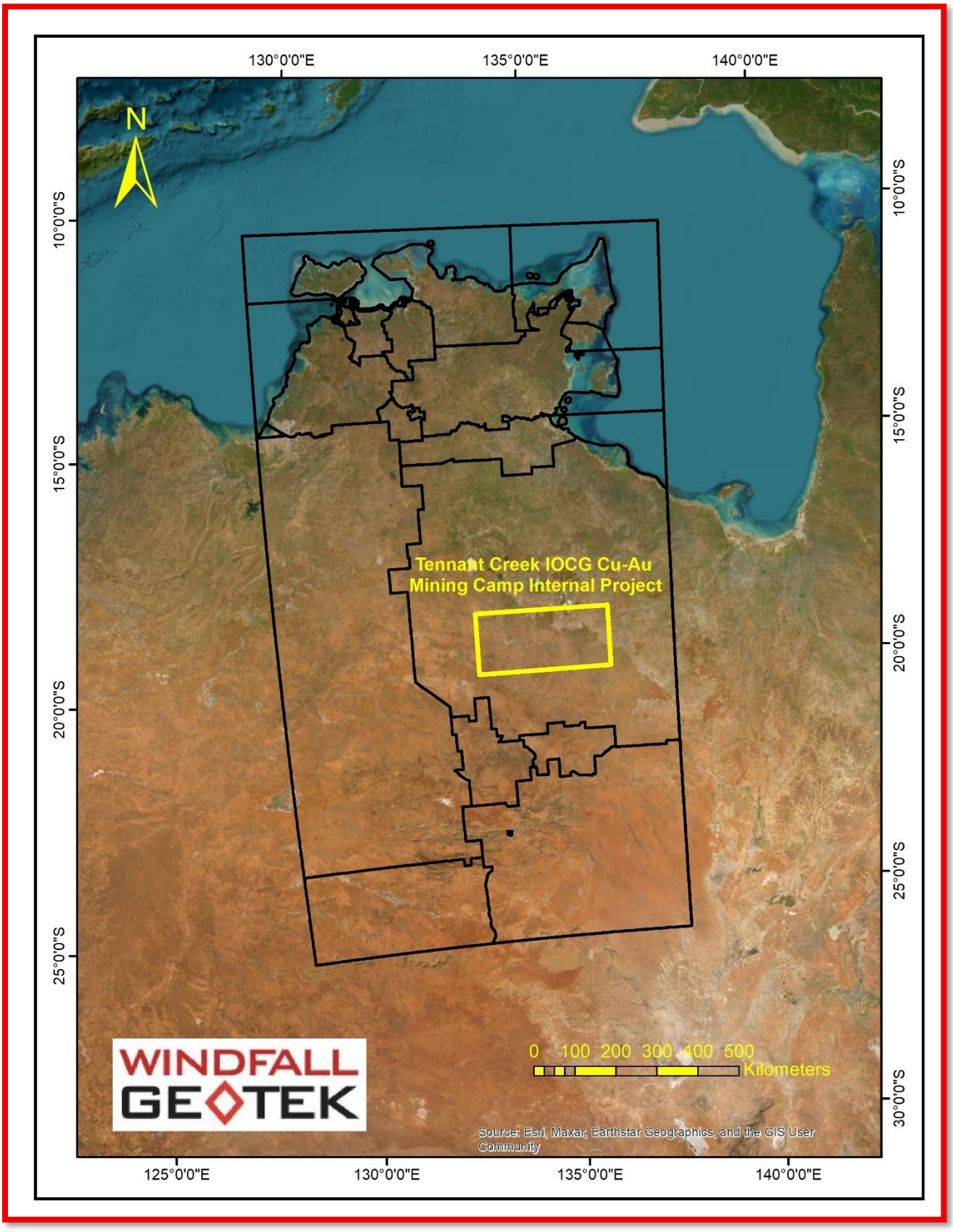


Figure 1: Tennant Creek IOCG Cu-Au Internal Project Location (Northern Territory, Australia)

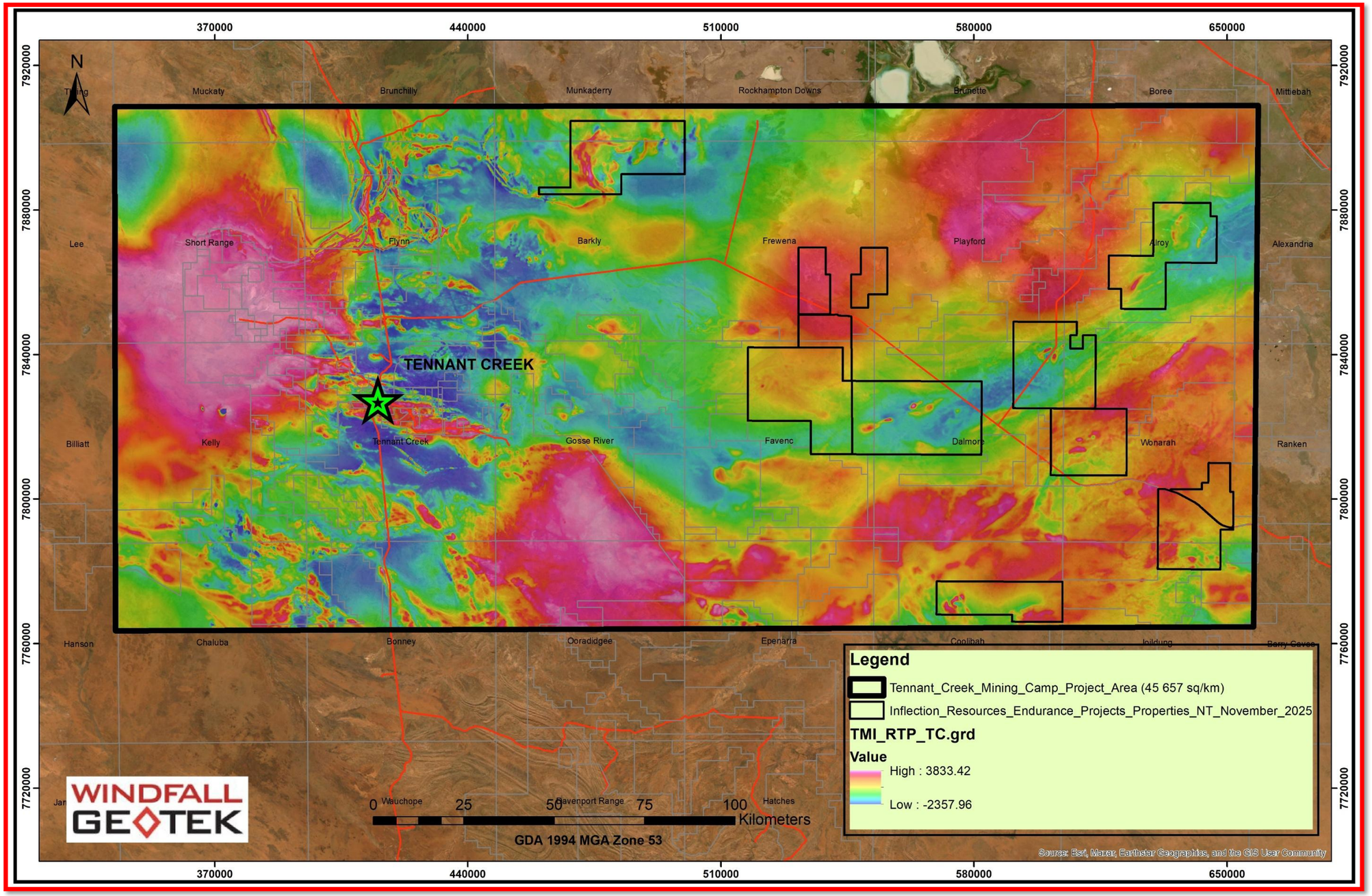


Figure 2: 2020 Compilation Magnetic data at 80m resolution (NT Geological Survey, Australia)

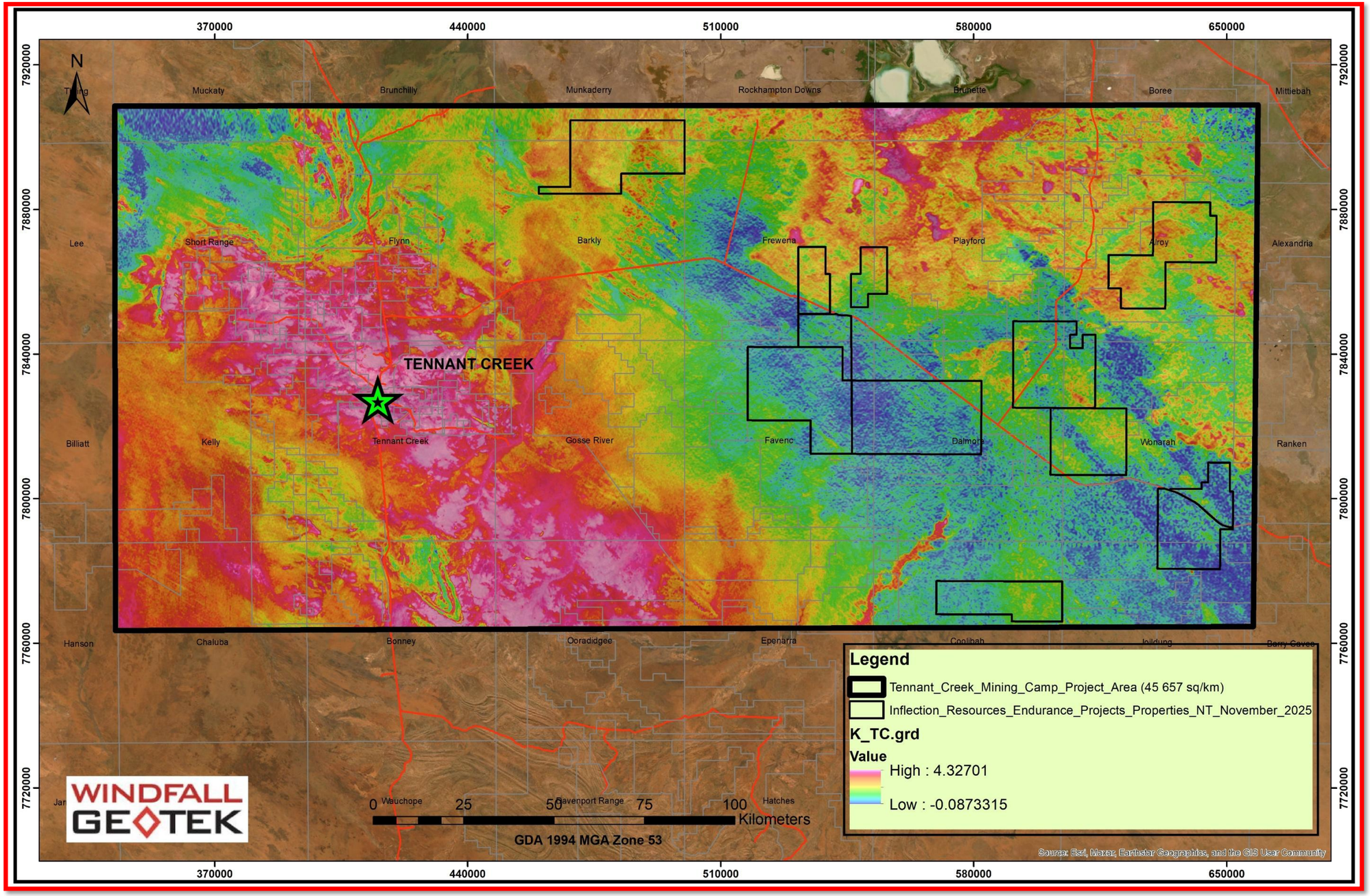


Figure 3: 2020 Compilation Radiometric data (K) at 80m resolution (NT Geological Survey, Australia)

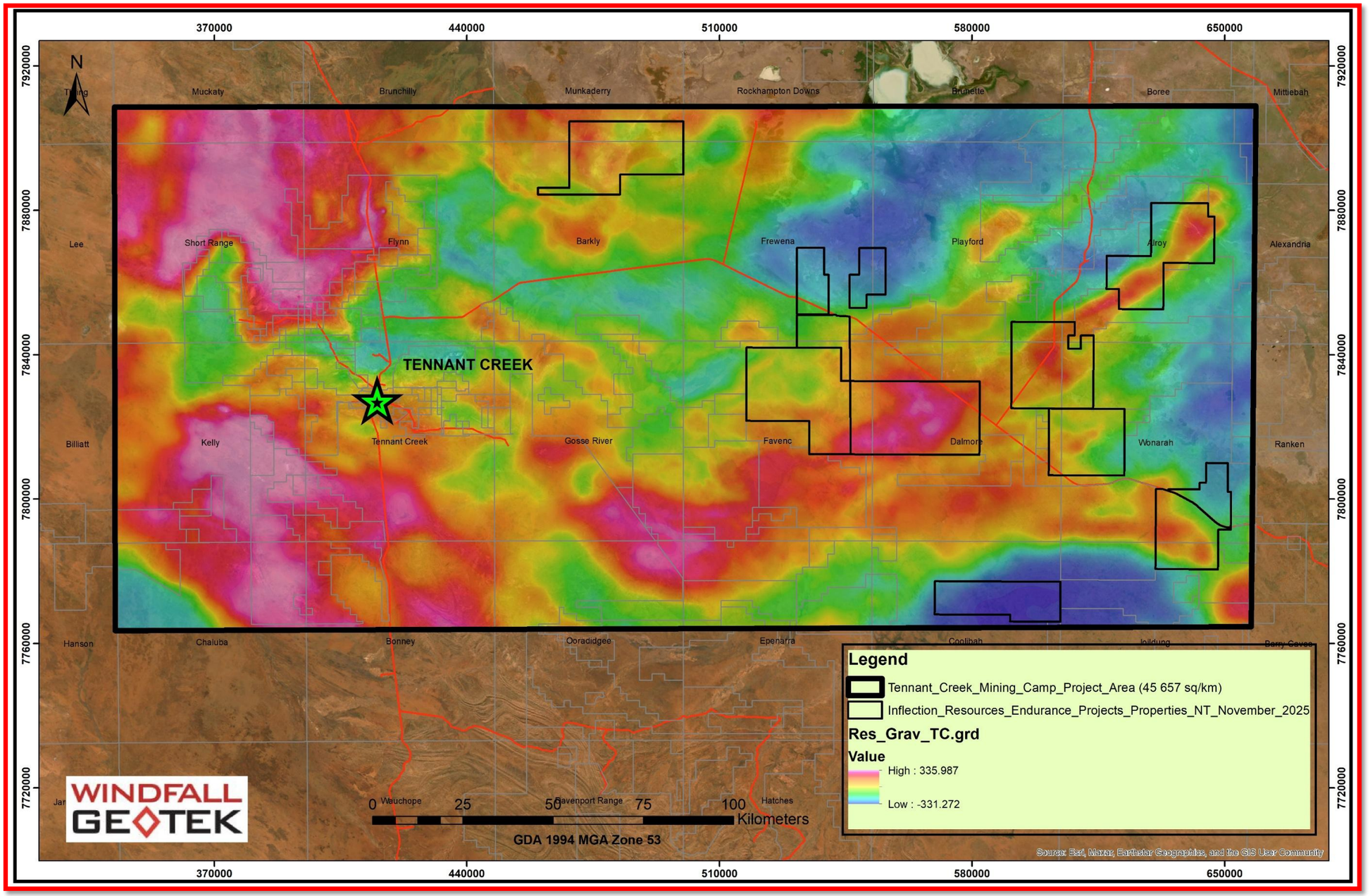


Figure 4: 2020 Compilation Gravimetry data (Res_Grav) at 250m resolution (NT Geological Survey, Australia)

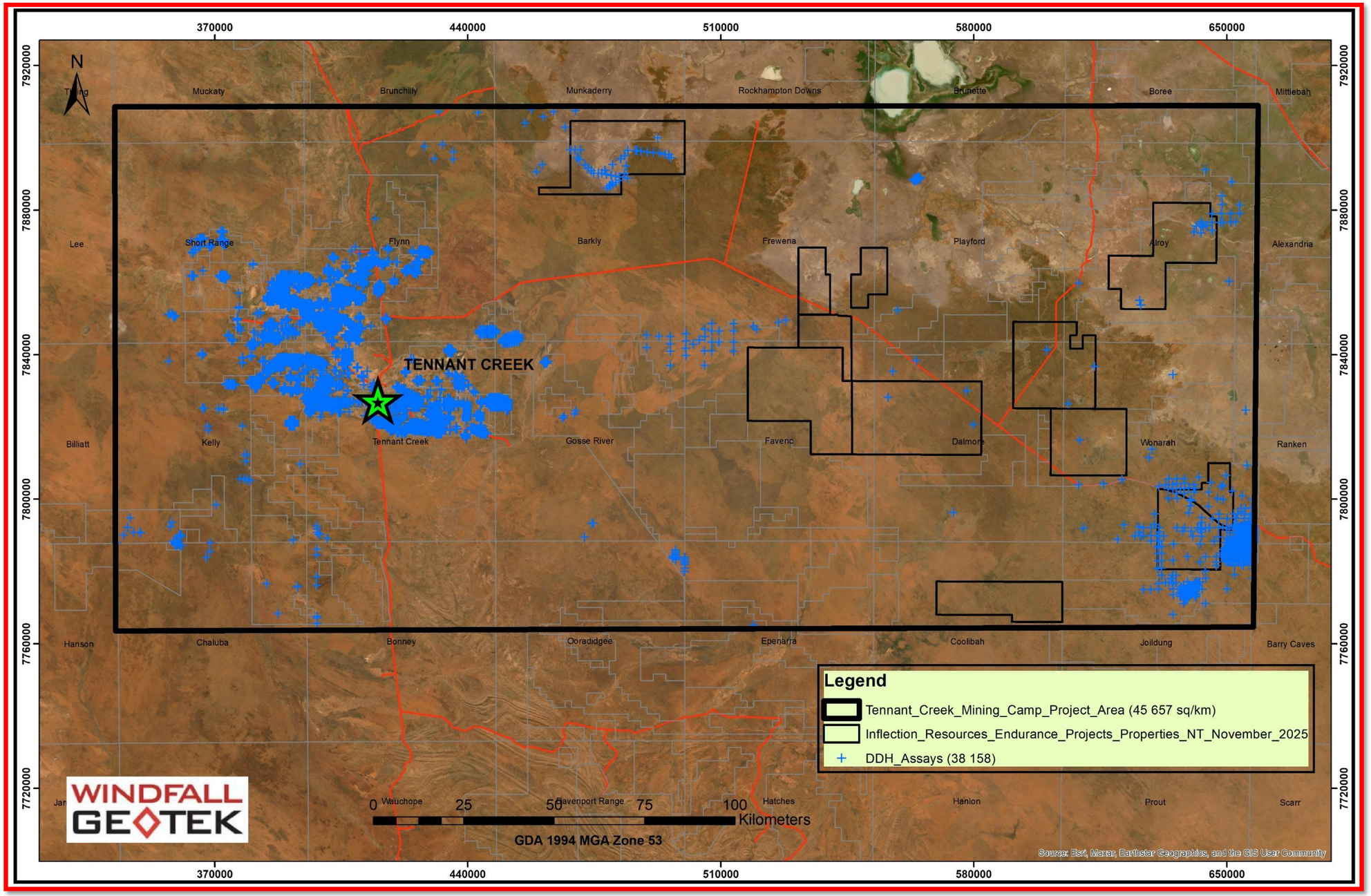


Figure 5: Distribution of Drillhole Cu-Au Assays data (NT Geological Survey, Australia)

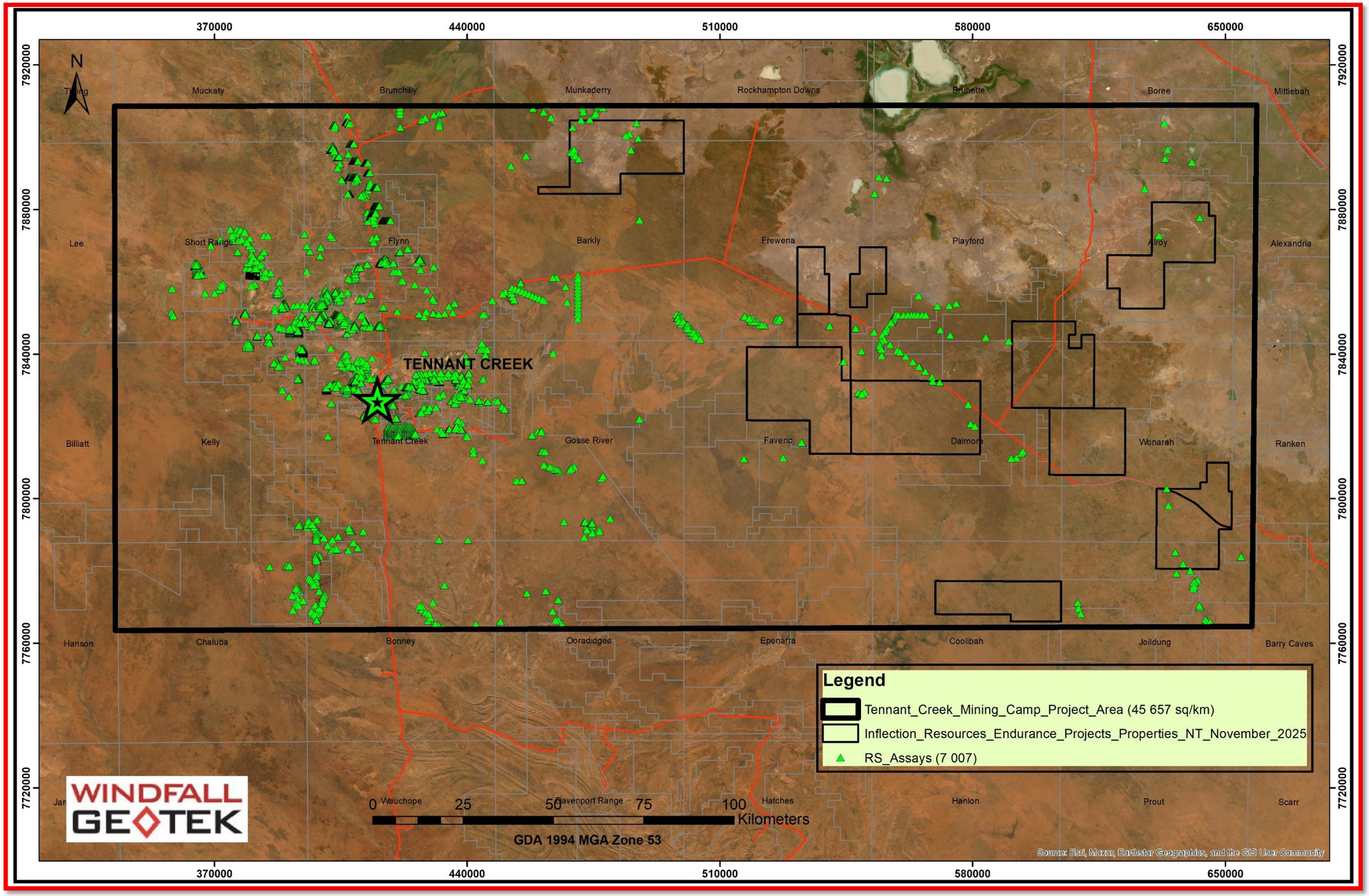


Figure 6: Distribution of Rock Sample Cu-Au Assays data (NT Geological Survey, Australia)