EL 25889 MOUNT TOLMER EAST NT

ANNUAL REPORT FOR THE SECOND YEAR OF EXPLORATION ENDING 10TH OCTOBER 2009

Report prepared for Outback Metals Limited

By

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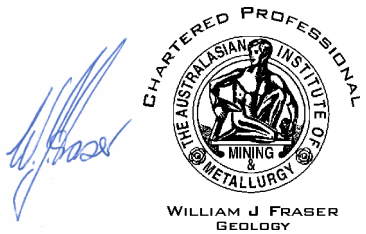
The potential geological and geophysical situations, the opinions, interpretations and estimates contained in this report are speculative and high risk.

1:100 000 Geological Map Series

REYNOLDS RIVER 5071

1:250 000 Geological Map Series

PINE CREEK SD5208



CONTENTS

FIGURES

1. EXECUTIVE SUMMARY

During the second year of exploration Outback Metals examined the previous exploration reports in more detail and carried out modelling of the existing airborne geophysical data. Further work was delayed until the results of the GA AEM survey became available in September 2009. However this was a disappointment because it was found that GA had terminated the flight lines well to the east of the Litchfield National Park and EL 25889.

The main focus of attention for field work in 2010 will be the area surrounding the Tolmer Uranium Prospect originally found and drilled by Rio Tinto Finance and Exploration with 2x B size cored drill holes in 1954.

Radiometric traversing and prospecting on foot for alteration is recommended along the trace of Giants Reef Fault within the retained portion of the EL.

The southern, relinquished portion of the EL is considered to have no immediate exploration potential

2. INTRODUCTION

EL 25889 of 3 sub-blocks was first granted to Corporate Developments Pty Ltd on 11th October 2007. Preparatory to the ASX listing Outback Metals Limited (OUM) made an outright purchase of Corporate Developments.

At the end of the second year the EL was reduced to 2 sub-blocks as shown in Fig 1.

The EL is located about 80km south south east of Darwin near Mount Mabel on the eastern side of the Tolmer Plateau and borders on the Litchfield National Park. The country is mainly very rugged hill country and deeply incised tablelands (Figs 1 to 2 refer).

Modern mineral exploration was carried out by:

- Nevsam Mining and CRA Exploration, 1970-73 on EL 588 for uranium
- UAL and Mines Administration, 1977-83 on EL 1298 for uranium
- Pan D'Or Mining, 1981-82 on EL 3137 for gold and base metals
- BHP Minerals, 1983-84 on EL 4068 for diamonds and kimberlitic diatremes
- Total Mining and PNC (Australia) 1986-92 on EL 4856 for uranium
- Aztec Mining 1997-98 on EL 8412 for gold

The Tolmer Uranium Prospect as listed in the NTGS MODAT database is located on Giants Reef Fault Zone in the far western part of the EL. This was discovered in 1954 on the published geophysical maps of a BMR airborne scintillometer survey and drilled by Rio Tinto Finance and Exploration on former A to P 79 in 1954 (Searle, 1954, 1955).

During the second year of tenure OUM carried out a review of the historical exploration, geological and geophysical interpretation of the data available in the various NTGS databases and downloaded the September release of relevant data from the completed 2009 Geoscience Australia Airborne Electromagnetic Survey (GA AEM), Rum Jungle portion.

The mineral commodities considered by OUM were uranium, gold and base metals.

3. GEOLOGY

In 1981-85 NTGS carried out field geological mapping and airphoto interpretation of REYNOLDS RIVER 1:100 000 scale geological map sheet (Pietsch et al, 1989). The published map (refer to the portion shown on Fig 3) shows that the EL comprises almost entirely deeply incised Paleoproterozoic siltstones and sandstones, with some intercalated conglomerates of the Burrell Creek Formation. These rocks are displaced 12km or so south west-north east by the Palaeozoic-Proterozoic Giants Reef Fault.

The writer has in the past (c 1969) personally viewed outcrops along Giants Reef Fault in the field (by helicopter access) and the historic Rio Tinto drill core (formerly stored at Rum Jungle) and drill sites and considers that there has been significant local hydrothermal/mesothermal alteration of the Burrell Creek Formation metasediments with accompanying potential for uranium mineralisation.

4. AIRBORNE GEOPHYSICS

4.1 NTGS Magnetics

The EL and relinquished portion are located in a relatively quiet magnetic zone with no significant dipoles and there is no coincident trace of the Giants Reef Fault even on RTP and 1VD filtered images.

The significance of the prominent south westerly trending linear which lies just beyond the north west corner of the EL is not understood. (Fig 4)

4.2 NTGS Radiometrics

There are only three total count radiometric anomalies and these relatively weak and are located within the retained portion of the EL.

There are no anomalies in the relinquished portion (Fig 5).

The eU radiometric image shows some coincidence of weak anomalies with total count radioactivity (Fig 6).

4.3 2009 Geoscience Australia Airborne Electromagnetic Survey (GA AEM)

During September the 2009 raw and processed AEM data became available from the GA Rum Jungle survey. However a GIS plot of the flight lines revealed that GA terminated the lines well to the east of the Litchfield National Park and therefore there is no coverage of the EL.

5. EXPLORATION POTENTIAL

Transcurrent (strike-slip) movement on the south westerly trending Giants Reef Fault Zone has displaced meta-sedimentary units of the Paleoproterozoic Burrell Creek Formation some 12km to the south west. On reconstruction, this is about the same distance south westerly from the known uranium mines and occurrences at Rum Jungle. If the Tolmer Prospect is dominantly on the south block then the Prospect if it is co-genetic with Rum Jungle uranium mineralisation may be closely related.

In 1970 the writer (Fraser 1971) carried out an airborne scintillometer survey by a Jet Ranger Series I or “A” model helicopter over the northern part of the Tolmer plateau. During the course of this work the Rio Tinto drill sites were located. The much degraded (oxidised) Rio Tinto B size cores were located at the former TEP Rum Jungle core shed.

6. CONCLUSIONS AND RECOMMENDATIONS

The absence of any GA AEM data is very disappointing as it may have confirmed the presence of conducting horizons associated with uranium mineralisation within the Burrell Creek Formation.

Radiometric traversing and prospecting on foot for alteration is recommended along the trace of Giants Reef Fault within the retained portion of the EL.

The Tolmer Uranium Prospect should be re-examined.

7. REFERENCES

Fraser WJ 1971. PA2729 Tolmer Plateau, Nevsam Joint Venture, Report on percussion & rotary drilling June - July 1971. OFCR 1971-0126 (unpublished).

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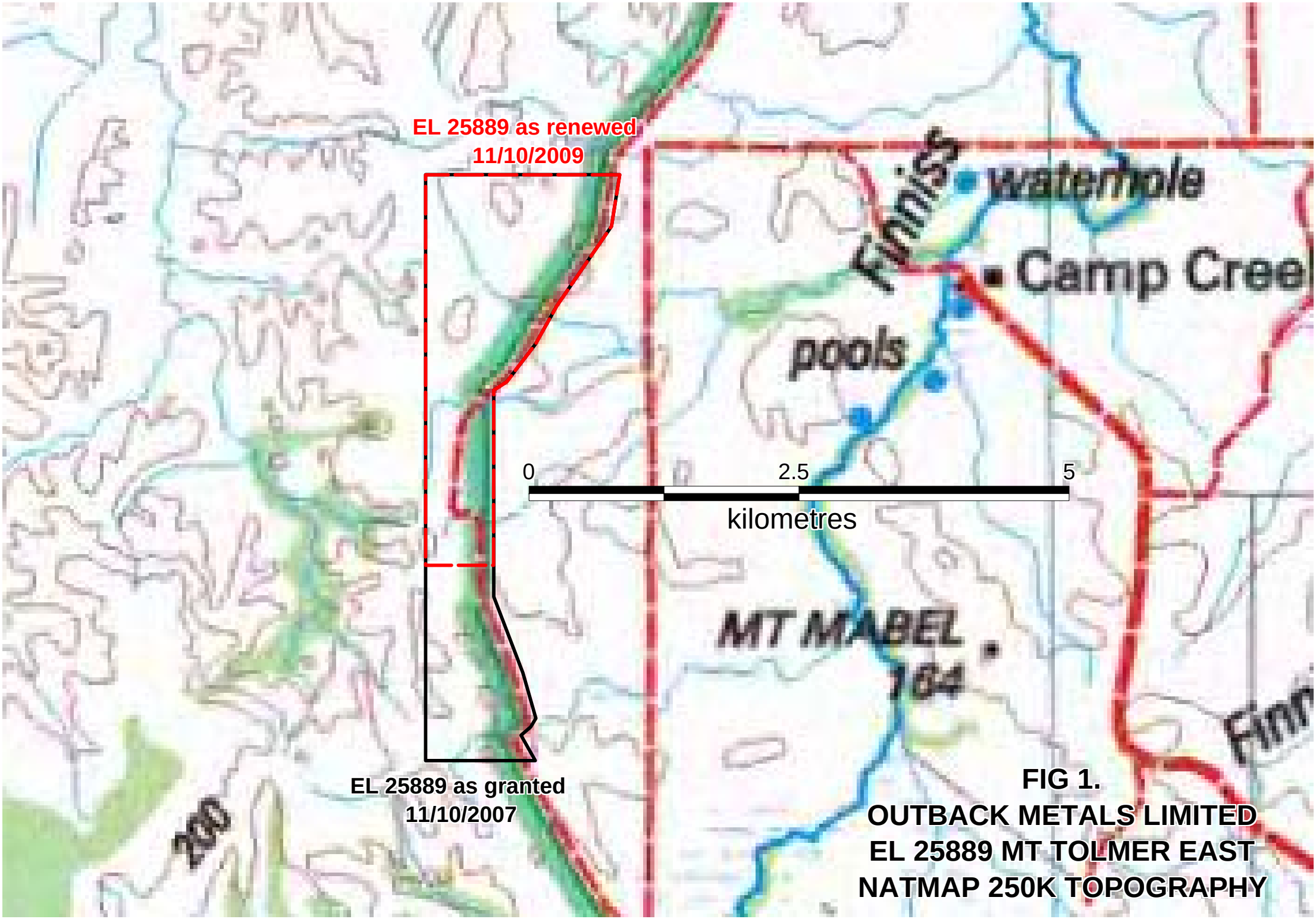

FIG 1.
OUTBACK METALS LIMITED
EL 25889 MT TOLMER EAST
NATMAP 250K TOPOGRAPHY

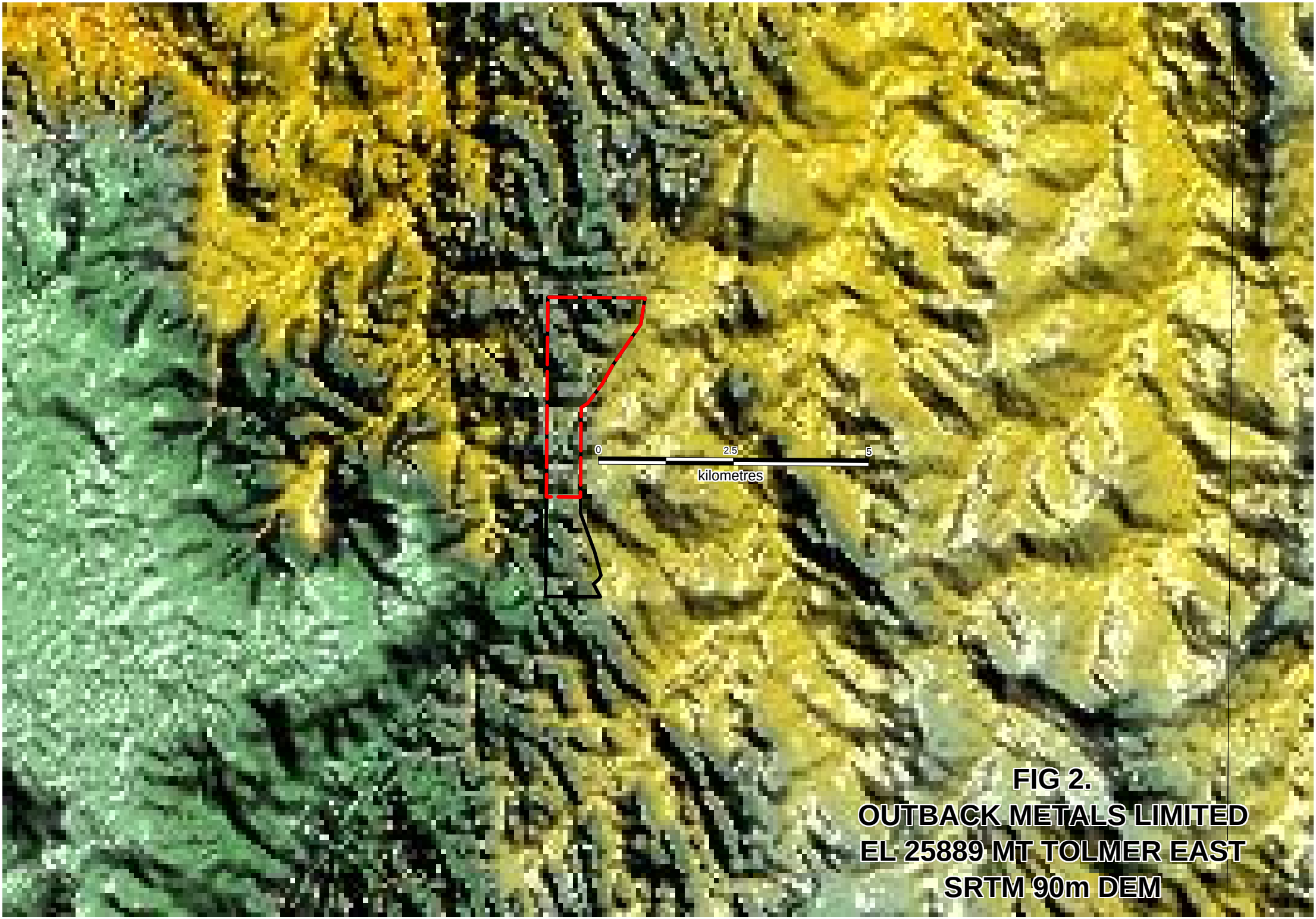

FIG 2.
OUTBACK METALS LIMITED
EL 25889 MT TOLMER EAST
SRTM 90m DEM

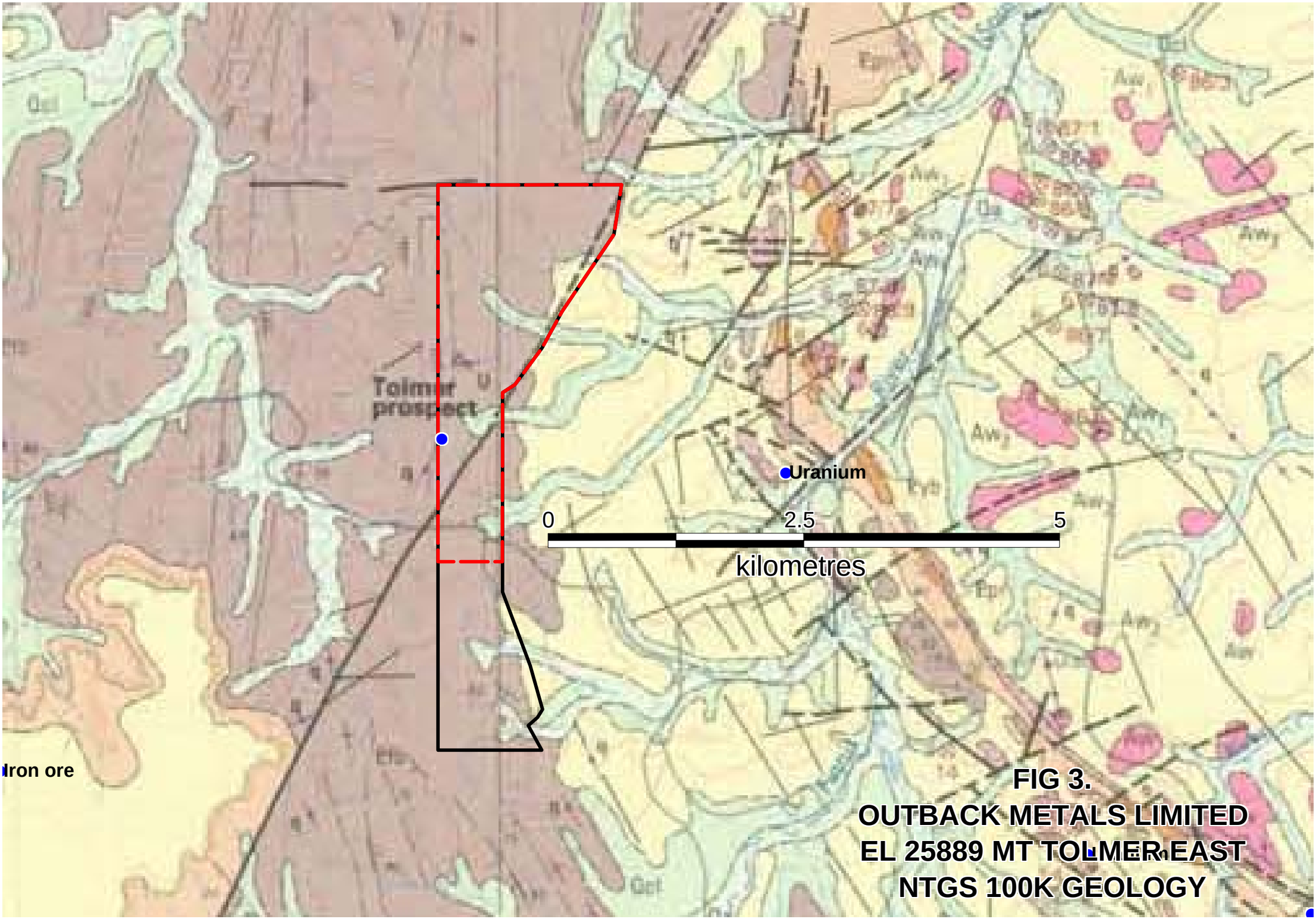

FIG 3.
OUTBACK METALS LIMITED
EL 25889 MT TOLMER EAST
NTGS 100K GEOLOGY

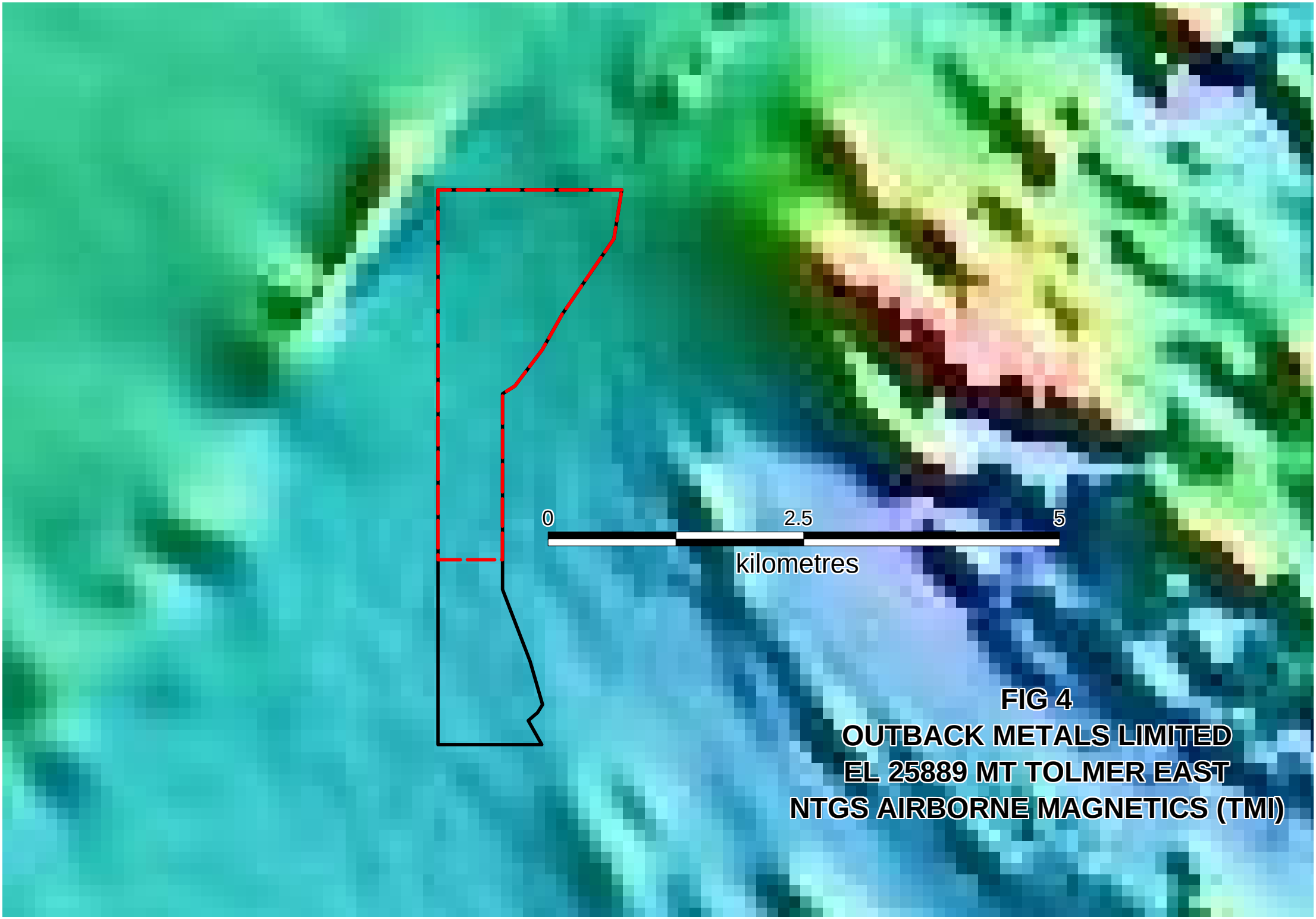

FIG 4
OUTBACK METALS LIMITED
EL 25889 MT TOLMER EAST
NTGS AIRBORNE MAGNETICS (TMI)

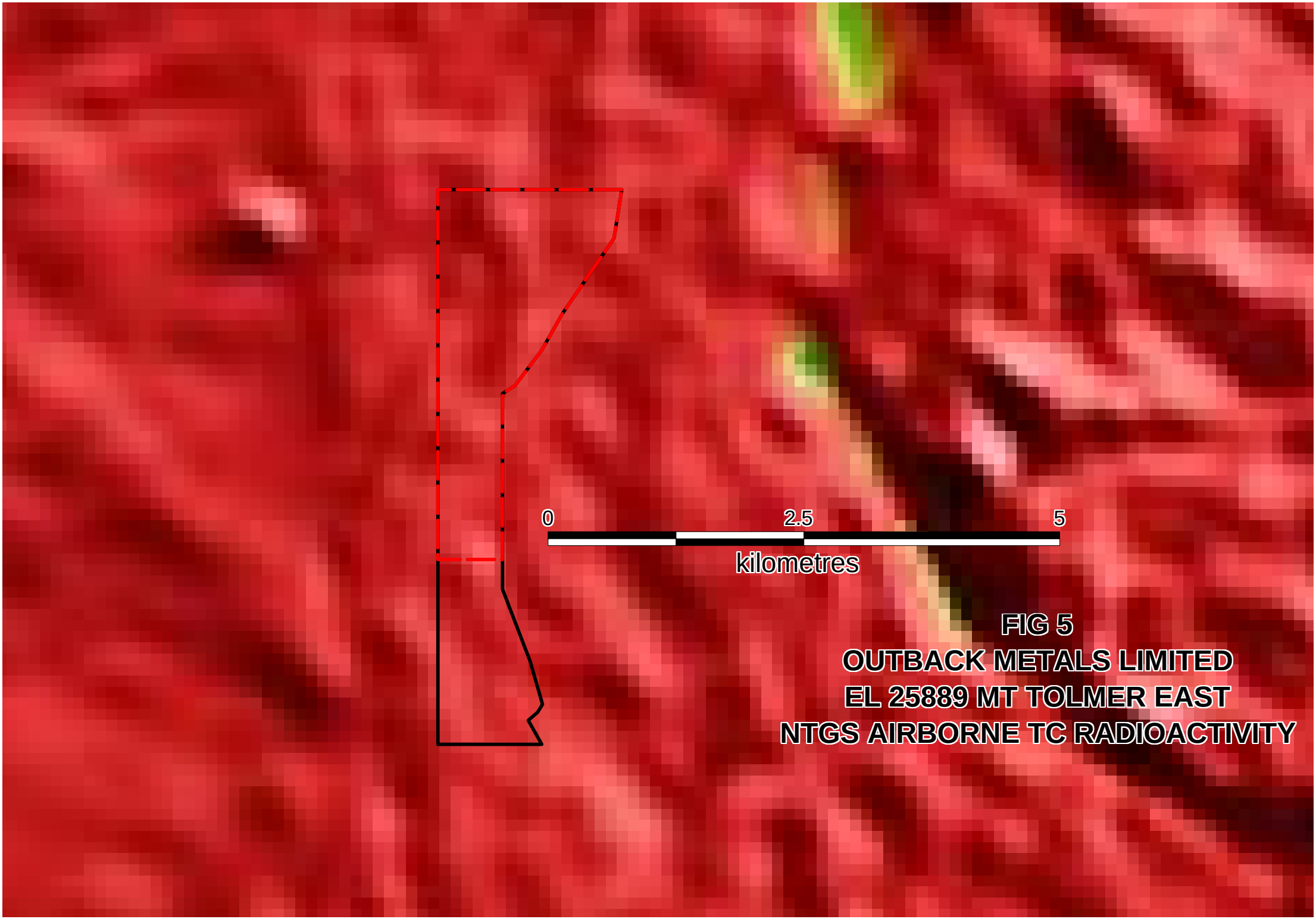

FIG 5
OUTBACK METALS LIMITED
EL 25889 MT TOLMER EAST
NTGS AIRBORNE TC RADIOACTIVITY

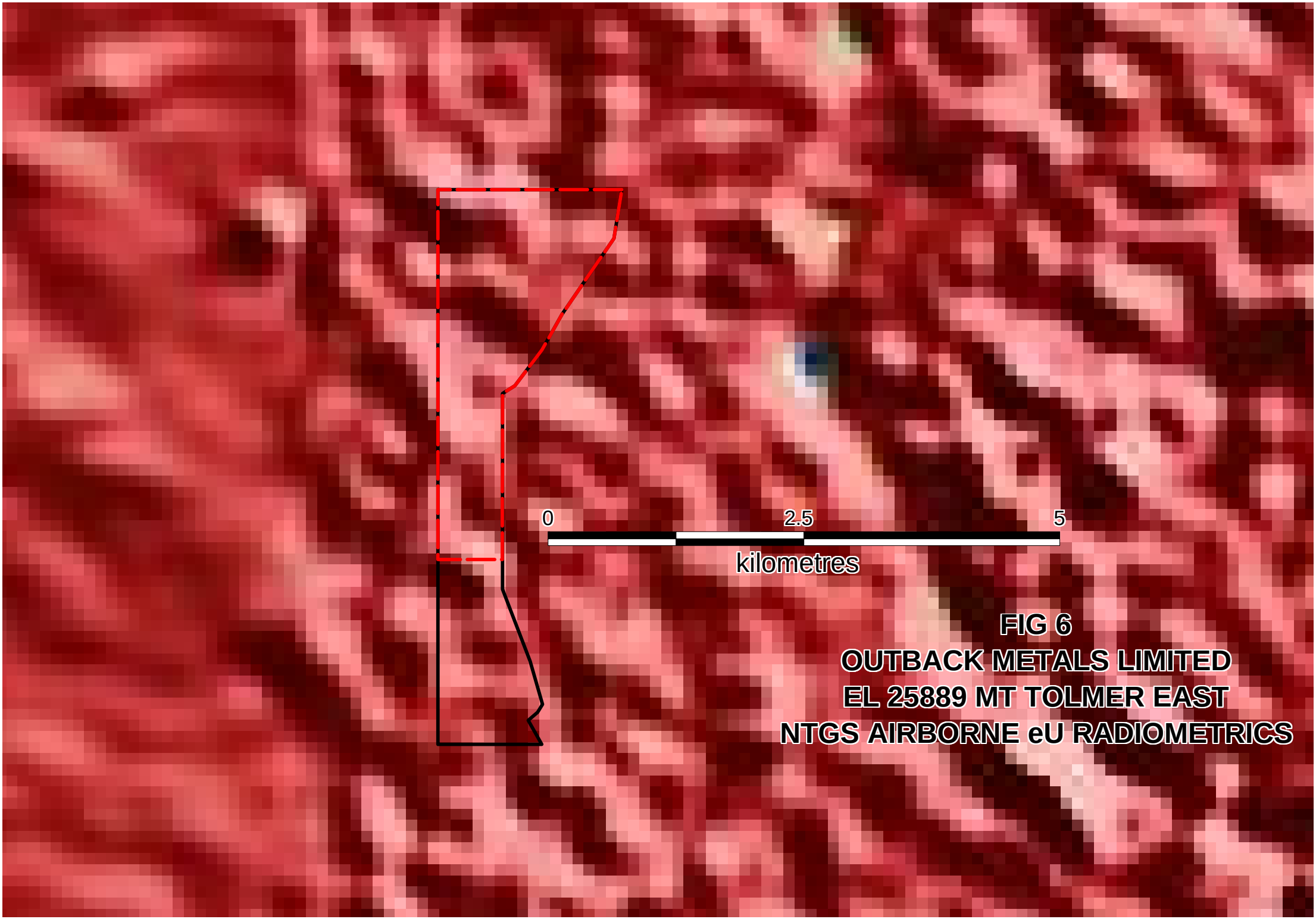

FIG 6
OUTBACK METALS LIMITED
EL 25889 MT TOLMER EAST
NTGS AIRBORNE eU RADIOMETRICS