

BREMA RESOURCES PTY LTD

EL 32496

‘Buchanan Project’

Northern Territory

PARTIAL CANCELLATION REPORT

Reduction By:

30 Blocks (18% by area)

Partial Cancellation Date:

23 October 2023

Report Date:

18 December 2023

Project holders:	Brema Resources Pty Ltd
Project operator:	Brema Resources Pty Ltd
Target commodity:	Gold, copper, base metals
Standard NT map sheets:	Ranken (SE 53-16), Alroy (SE53-15), Lulu (6359), Alexandria (6259)
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ABSTRACT

This document reports on the work completed by the company specifically related to the portion of EL32496 which was recently approved for cancellation¹ on October 23rd, 2023 (refer Figure 1).

EL32496 was previously comprised of 196 blocks covering an area of 635.12 km², situated approximately 130 km northeast of the Barkly Homestead in the Northern Territory. The license was originally granted for a 6-year term on the 27th of May 2021. In October 2023, after receiving the partial cancellation notice from the Northern Territory government, Brema indicated an area to be considered for cancellation. The area included the required 30 blocks (18% by area). The cancelled blocks were along the east and south-east margins of the original tenement (refer Figure 1).

The original footprint of EL32496 was applied for following analysis of NTGS gravity data, partially infilled to 1km x 1km by the NTGS for Brema, which highlighted a series of gravity anomalies along this structural corridor, potentially indicative of Palaeoproterozoic basement highs, possibly associated with iron enrichment and prospective for IOCG systems of the Tennant Creek type.

Prior to the cancellation of the specified area the Company carried out the following work:

- Conducted field reconnaissance including assessing outcrops.
- Collated, reviewed and interpreted previously identified gravity anomalies in conjunction with magnetic data.
- Engaged with pastoral lease holders and progressed access consultation.

Total expenditure on EL32496 in the previous reporting period was \$44,844.35.

TENEMENT STATUS

Following the partial cancellation, EL32496 is now comprised of 166 blocks covering an area of 537.82 km² (Table 1, Figure 1). The original license was granted for a 6-year term on the 27th of May 2021.

Table 1: Tenement Status Summary EL32496

Tenement	Block No.	Area (km ²)	Granted	Expires	Holders
EL32496. (Original)	196	635.12	27 May 2021	26 May 2027	Brema Resources Pty Ltd (100%)
EL32496. (Retained)	166	537.82	27 May 2021	26 May 2027	Brema Resources Pty Ltd (100%)

¹ NTG Letter 36:MT2020/0205 – 23rd October 3023. (Refer Appendix 1)

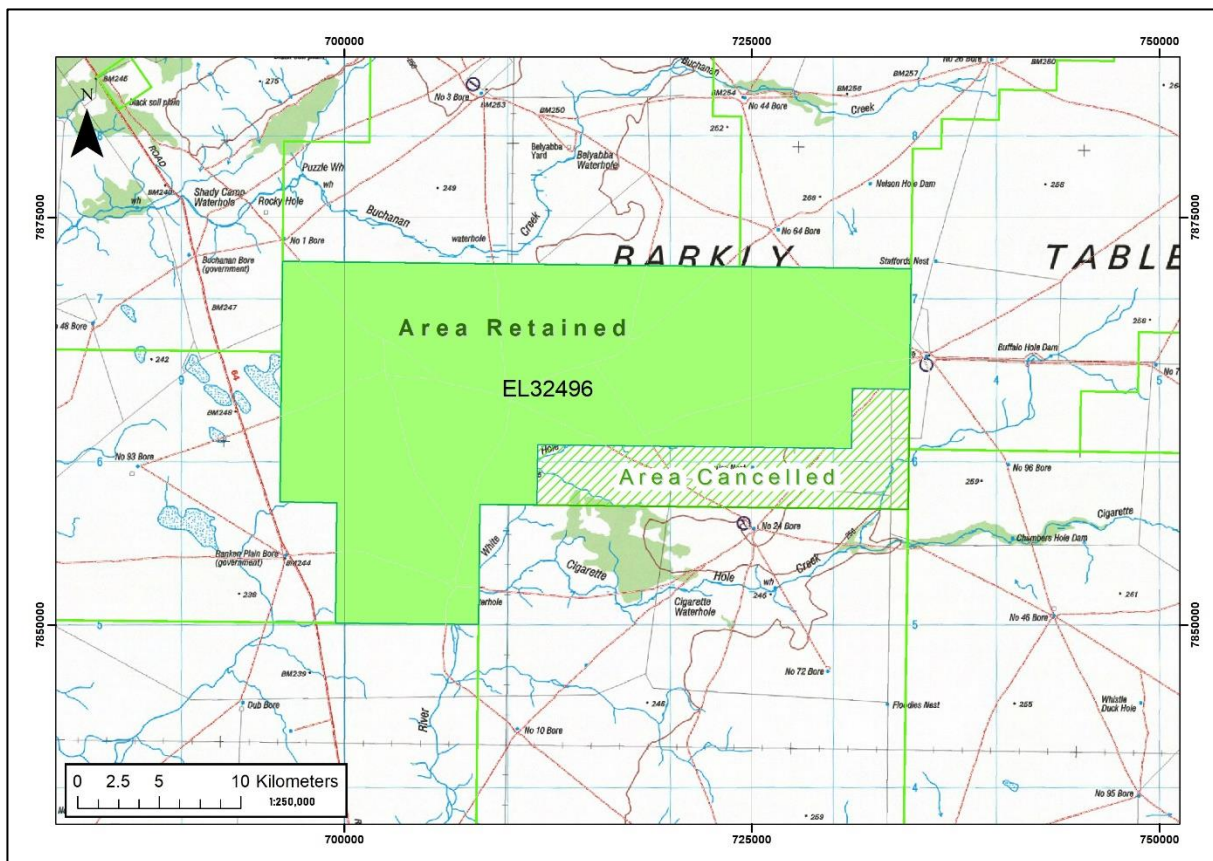


Figure 1: Location and tenement status map of EL 32496

LOCATION AND ACCESS

EL32496 is situated approximately 130 km northeast of the Barkly Homestead, north of the Barkly Highway in the Northern Territory (Figure 1). The license area falls within the Lulu (6359) and Alexandria (6259) 1:100 000-scale map sheets. The tenement is within the Alexandria Perpetual Pastoral Lease.

Access to the Licence area from the Tennant Creek Township is via the sealed Barkly Highway to the Ranken Rd intersection and then via the unsealed Ranken Road for approximately 90km north. A network of unsealed tracks provides reasonable vehicle access to the remainder of the tenement.

The climate of the project area is semi-arid with a mean annual rainfall of about 460 mm, with rain falling mostly in the period November to March. Temperatures are moderate to high in the summer months with an average of 18.8 days per year over 40°C between October and March and the winters are mild with the lowest temperature recorded being 4.5°C during the month of July.

The Barkly Tableland rises to more than 300 metres near the Queensland and Northern Territory border. Black soil plains cover much of the Barkly Tableland. The Tableland drains into the Gulf of Carpentaria via the Flinders River while the southwestern plains drain into Lake Eyre via the Diamantina River or into the Simpson Desert via the Georgina River which has its source on the Tableland.

The dominant flora of the Tableland is semi-arid savanna of Mitchell grass. The Tableland forms the western portion of the Mitchell Grass Downs ecoregion, which covers an area running 1,500 km to the southeast into the Channel Country of Queensland. The Carpentaria tropical savanna ecoregion lies to the north in the

lowlands around the Gulf of Carpentaria. The Victoria Plains tropical savanna lies to the west. The central Australian desert lies south of these savannas and grasslands.

GEOLOGICAL SETTING

The surficial geology of the area covered by EL 32496 is dominated by Cenozoic unconsolidated colluvial sand and Quaternary alluvium and claypans (Figure 2). The tenement contains outcrops (coloured pink in Figure 2) of Cambrian mudstones and dolograins of the Georgina Basin. Approximately 6 km north-west of EL32496 is an outcropping NE-SW trending antiformal ridge of Proterozoic Mittiebah Sandstone of the South Nicholson Group.

The total magnetic intensity image of the area covered by EL32496 shows that the tenement is overlying an ENE-WSW trending magnetic high feature (refer to Figure 3). It is most likely that the magnetic high feature is related to either the Cambrian basalt at the base of the Georgina Basin or basement lithologies. The magnetic response for the area covered by EL32496 is subdued and smoothed, which may relate to either a deeper source or wider grid spacing.

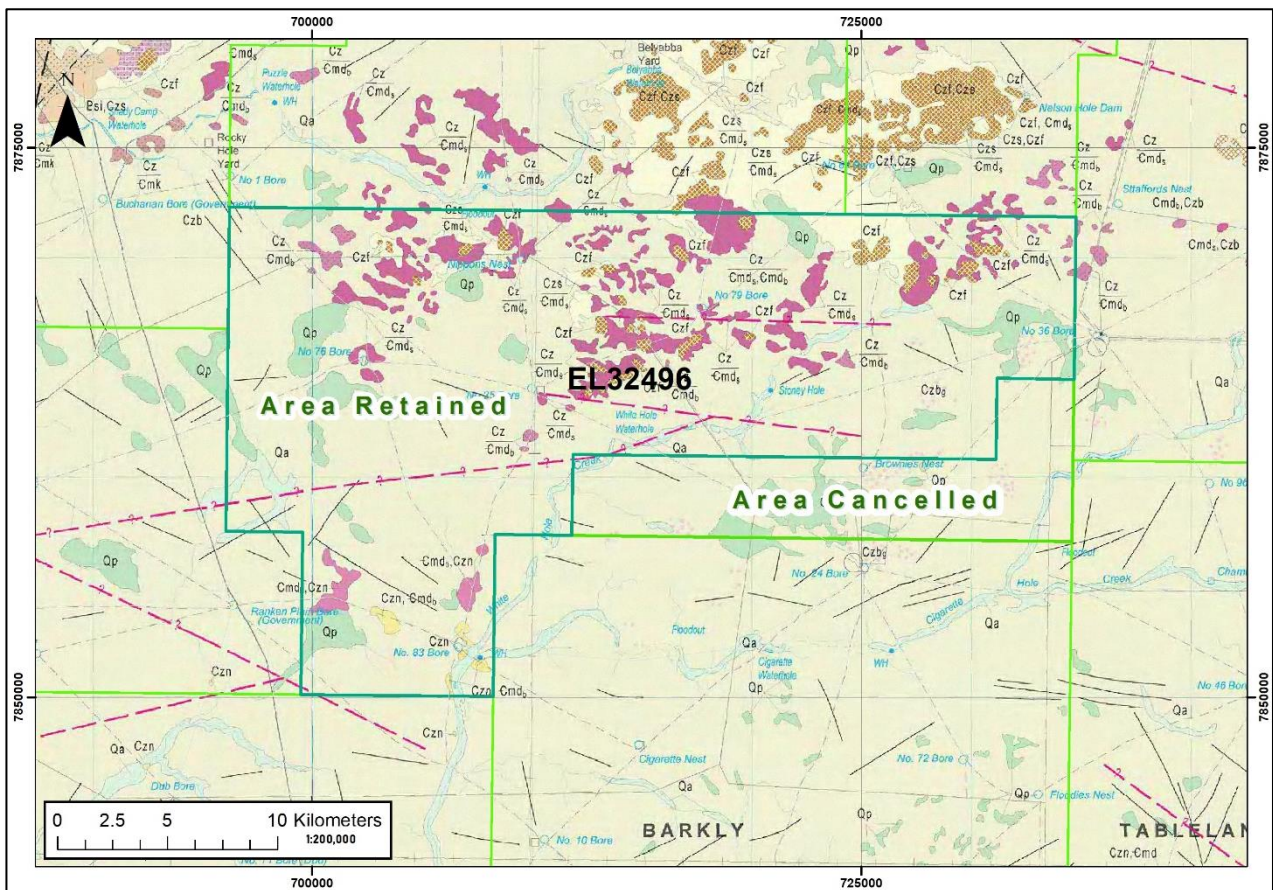


Figure 2. Surficial geology of EL 32496. Taken from 1:250,000 geological maps of Ranken (Kruse et al. 2005) and Alroy (Kruse and Maier, 2010b).

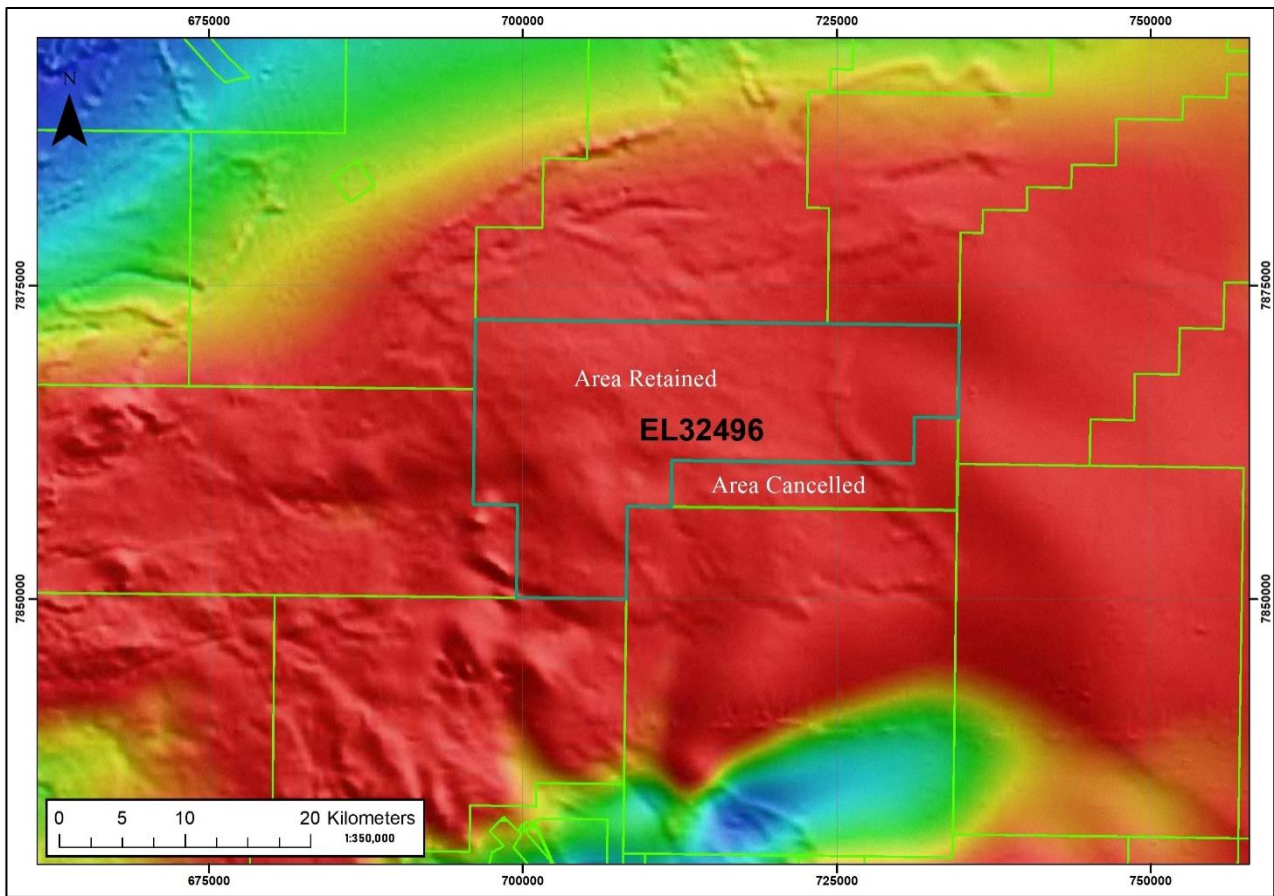


Figure 3. Magnetics - Total Magnetic Intensity (TMI).

SUMMARY OF PREVIOUS EXPLORATION

HISTORICAL EXPLORATION

Historic exploration in the area covered by EL32496 focussed on the search for phosphate, diamonds and uranium. Minor desktop exploration was conducted for base metals.

The MinEx CRC National Drilling Initiative (NDI) conducted a 10-hole diamond drilling campaign in the East Tennant area during 2020. Two of these diamond drill holes (NDIBK04 and NDIBK07) are located west of EL32496 and intersected basement lithologies at depths of approximately 160m and 85m, respectively. In NDIBK04 basement comprised the strongly deformed Proterozoic Alroy Formation (interpreted to be similar to the Warramunga Formation) that contained anomalous copper, lead and zinc, which is interpreted to be skarn-related, with pyrrhotite, pyrite and arsenopyrite veins (Clark et al. 2021). In addition, hematite alteration is evident (information derived from NDI Campaign 1: East Tennant - Minex (minexcrc.com.au)).

The intersection in NDIBK04 of the equivalent to the Warramunga Formation, with anomalous copper, lead and zinc as well as hematite alteration, immediately along strike of the structural corridor that passes into EL32496 is highly significant. This highlights the prospectivity of this basement target and the associated gravity high features for Tennant Creek style IOCG deposits in the Buchanan tenements.

The Government Gravity Survey

The 2021 Brunette Downs Ground gravity survey was funded under the Northern Territory Government's Resourcing the Territory 2018–2022 Initiative and the project was managed by Geoscience Australia. The survey covered an area of around 57,000 square kilometres located just north of Tennant Creek and extending to the Northern Territory - Queensland border. The survey infills existing 4 km gravity coverage to 2 km coverage. NTGS partnered with industry to acquire higher resolution data at 1 km x 1 km and 500 m x 500 m spacing over smaller areas within the survey.

As a result of the success of the programs carried out by Brema recently, but mainly in EL32497, the methodology will be extended into the remaining part of EL32496 in the following period.

DATA COMPILATION

Ongoing throughout the tenure period data investigation programmes were continued with both government data bases and other historical exploration databases, with relevant information contributing to GIS database compilations.

All exploration data is reviewed including peer comparisons in the East Tennant region, to develop planning, exploration activities and targeting of the exploration licence, on an ongoing basis.

EXPLORATION DURING REPORTING PERIOD

During the period – Brema conducted the following field-based exploration activities at EL32496:

- Consultant field visit

Followed by desktop analysis and studies including:

- Consultant data analysis and reporting
- Tenement scale exploration model development and targeting

CONCLUSION

The portion of EL32496 which has been cancelled has an elevated magnetic signal and features while the SeeBASE data suggest that the basement is deepening to the east. The prospectivity of the remainder EL32496 within the East Tennant corridor for copper gold IOCG or Tennant Creek style copper gold mineralisation is considered high with current peer exploration highlighting anomalous sulphides and structures within the Proterozoic basement.

Further detailed geophysical testing including detailed ground gravity, drone magnetics and IP to fully define basement depth and determine initial drill testing targets is warranted.

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