



**PARTIAL FINAL REPORT FOR  
EXPLORATION LICENCE – EL 28169**

**Period Ending 9 October 2014**

<b>Titleholder</b>	Kronos Gold LLC ABN 92 139 504 411
<b>Operator</b>	Kronos Gold LLC ABN 92 139 504 411
<b>Titles / Tenements</b>	EL 28169
<b>Report Title</b>	Partial Final Report for the period 27 April 2011 – 9 October 2014
<b>Target Commodity</b>	Gold
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<b>Date of Report</b>	8 December 2014
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## Introduction and Overview

### SUMMARY

The *Mineral Titles Act 2010* (NT) requires the submission of a Partial Final Report prepared by the titleholder for partially cancelled exploration licences. This Partial Final Report for blocks surrendered from Exploration Licence (EL) 28169 provides a summary of the activities undertaken on the surrendered blocks since the grant of the tenure, including any results, reports or interpretive data produced by these activities.

EL 28169 was granted on 27 April 2011 for a term of 6 years. Kronos Gold LLC ARBN 139 504 411 (“Kronos”) is the sole titleholder of this tenure. On the 16<sup>th</sup> June 2014, Kronos applied for a variation of expenditure condition for EL28169 with respect to the third year of the term. This variation was accepted by the Department on Mines and Energy on 22<sup>nd</sup> July 2014. This was the second consecutive year that a Variation of Condition had been approved for EL28169 and as such, Kronos was subject to a ‘Loss of Block Penalty’. A Partial Cancellation Notice for 28 blocks was issued by the department on 31 July 2014. Kronos nominated 28 blocks for cancellation on 29 August 2014, which were accepted by the department on 09 October 2014.

## INTRODUCTION

### Location:

EL 28169 is located in the Northern Territory, south of Alice Springs. The tenure’s most southern border is approximately nine kilometres north of the Northern Territory and South Australia border as shown in Figure 1. The tenure is located approximately 60 kilometres south of Eralunda and approximately 250 kilometres south of Alice Springs. Access to the tenure is most easily achieved via the Stuart Highway or the Old Ghan Highway. EL 28169 is located on the Oodnadatta (SG53) 1:250,000 map sheet and its Kulgera (SG5305) and Finke (SG5306) 1:100,000 map sheets.

The topography of the permit area, shown in Figure 2, is varied with numerous rocky subcrops to the north. The elevation above sea level increases towards the south of the permit area, where the Ayres Range occurs.

The north western area of the tenure is traversed by north-trending sand dunes that are less than 10 metres in height. Geologically the tenure is located over Eromanga Basin and within the Musgrave Province as shown in Figure 3.

The tenure is traversed by few property access roads and tracks between dams and water bores, this can make access during the wet season more difficult. EL 28169 is generally isolated and covers an area that has had little previous exploration.

## **Exploration Rationale and Objectives:**

Kronos' exploration rationale and objectives for EL 28169 was to explore the intrusive zones within the Eromanga Basin and within the Musgrave Province. Kronos believes there may be mineral deposits within the intrusive areas and intends on carrying out field studies of those areas, particularly in respect of the central and southern sub-blocks.

Kronos' preliminary exploration process included literature research which reviewed all available literature from previous private and governmental basin studies, mineral exploration studies in relation to the geology of the Eromanga Basin and Musgrave Province. Kronos' database is continually updated to include previous and recently obtained literature and exploration data as it becomes publically available. This continual update of literature and data assists Kronos in its understanding of the mineral deposits within the intrusive areas of the Eromanga Basin and Musgrave Province.

Kronos has conducted a number of activities during the reporting period. All activities were office-based literature studies and desktop investigations. Kronos' activities included the interpretation of geological and geochemical studies in respect of the surrounding sediment, as well as geophysical studies.

## **Exploration Program:**

No exploration activities have taken place on the surrendered blocks.

## **HISTORY OF EL 28169**

EL 28169 was granted to Kronos Gold LLC for an initial period of 6 years commencing on 27 April 2011. Kronos is the sole titleholder and operator of this tenure. The permit initially comprised of 446 sub-blocks.

In accordance with the reduction requirements set out in the *Mineral Titles Act*, Kronos relinquished 223 sub-blocks by way of application to the Department of Mines and Energy ('DME'). This application was accepted by DME on 1 May 2013.

On 31 July 2014, a partial cancellation notice was issued for EL28169, requiring a surrender of 28 blocks. Kronos nominated 28 blocks for surrender on 29 August 2014, and these were accepted by the department on 9 October 2014.

Figure 4 shows a block map of the partial cancellation.

## REGIONAL GEOLOGY

The Eromanga Basin is a large Mesozoic sedimentary basin, located across the south-eastern corner of the Northern Territory and extends to cover areas of Queensland, South Australia and New South Wales. The Northern Territory geological units it contains are Jurassic-Cretaceous in age.

The Eromanga Basin section is predominately covered by a thin section of units of the Eyre Basin, which are tertiary in age. The Eyre Basin comprises of a shallow section of fluvial and aeolian units of the Eyre Basin which is found at the surface.

The Eromanga Basin unconformably overlies the Permo-Carboniferous Pedirka Basin. Both basins are unconformable on the metamorphic rocks of the Arunta Region and Musgrave Block.

Major unconformities such as a Late Triassic unconformity at the base and a Late Cretaceous unconformity at the top have resulted in the Eromanga Basin being bounded. All structuring within the Eromanga Basin is in effect, controlled by deposition over, and reactivation of, older tectonic trends.

The stratigraphic table compiled at Figure 5, illustrates the Eromanga Basin and the overlying Eyre Basin.

## PERMIT GEOLOGY

EL 28169 is geologically located west of the Pedirka Basin and is situated over the Eromanga Basin and within the Musgrave Province. The Musgrave Province consists of Mesoproterozoic basement with tectonic and locally unconformable contacts with the Amadeus Basin.

The topography is varied with numerous Mesoproterozoic granite and granitic gneiss outcrops to the north of the tenure, with scattered dolerite dykes. Figure 2 illustrates the topography of the permit area. EL 28169 also covers the Ayres Range, which consists of monzonite and granodiorite, to the east ending at Mount Cavenagh.

EL 28169 contains numerous tributaries which travel through the tenure area into Hamilton Creek to the east of the tenure area. Two of the tributaries which flow into Hamilton Creek and pass through the permit area include Outounya Creek and Wellmullinna Creek.

The tenure is traversed by a few tracks and has the Stuart Highway travelling through the middle. There are a number of Perpetual Pastoral Leases covering the tenure area, as shown in Figure 6

**ACTIVITIES DURING THE REPORTING PERIOD**

During the third year of the tenure, Kronos has carried out desktop investigations and a review of data compilations as well as further geological mapping. The office-based research and evaluation activities included engaging new structure mapping based on new data additions to identify the location of target areas.

No field activities were undertaken on the subject blocks during the reporting period.

## **REASONS FOR RELINQUISHMENT & CONCLUSIONS**

EL28169 was subject to a 'loss of blocks' penalty as result of receiving a variation of expenditure condition for two consecutive years. To comply with the partial cancellation notice issued by the department on 31 July 2014, Kronos nominated 28 blocks for cancellation.

Kronos' research into the available data for the permit area suggests that the most prospective areas of the tenure are the central and southern blocks. For this reason, Kronos selected sub blocks predominantly from the north western corner of the tenement, as well as some in the south west and one block in the north east for surrender.

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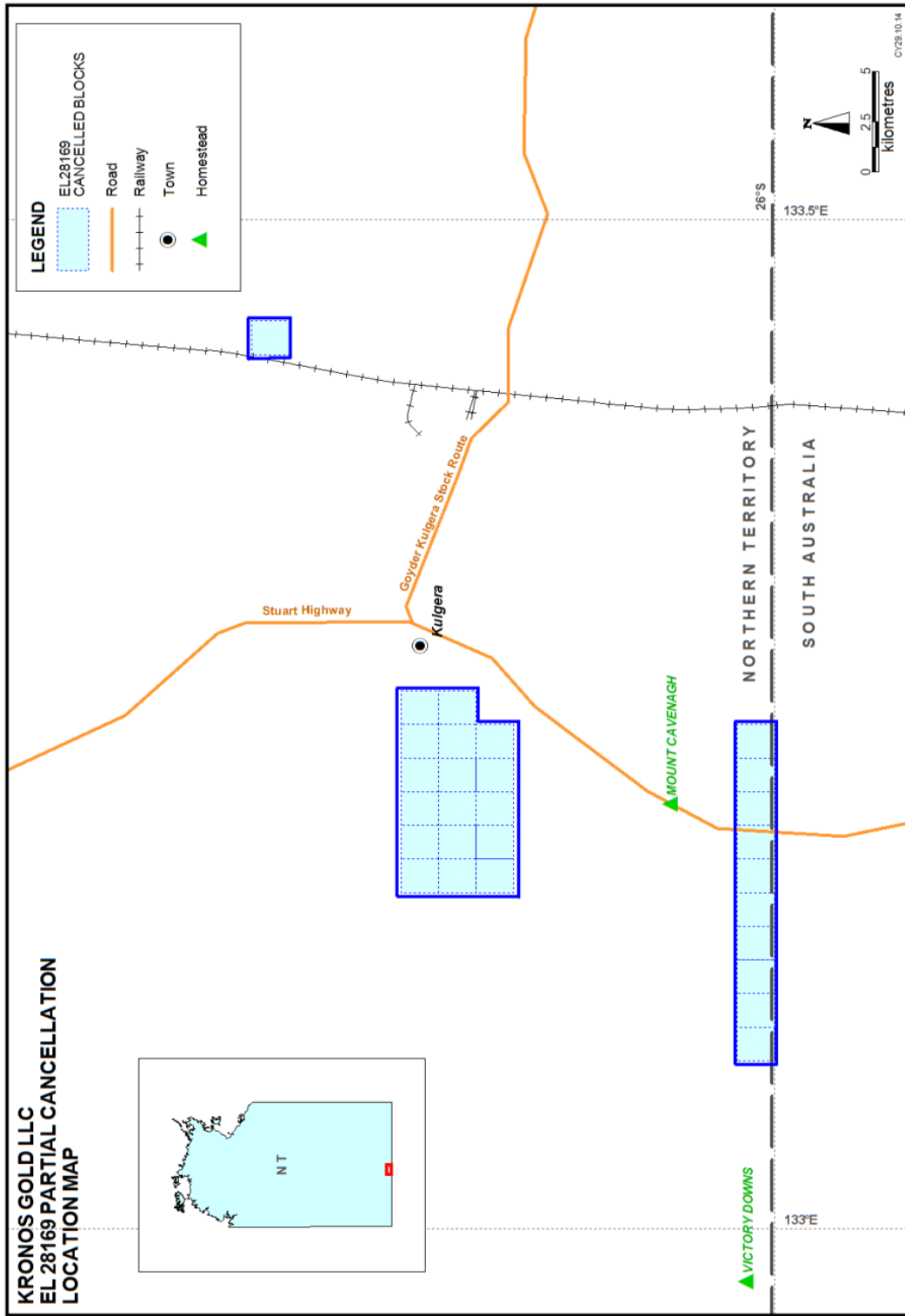
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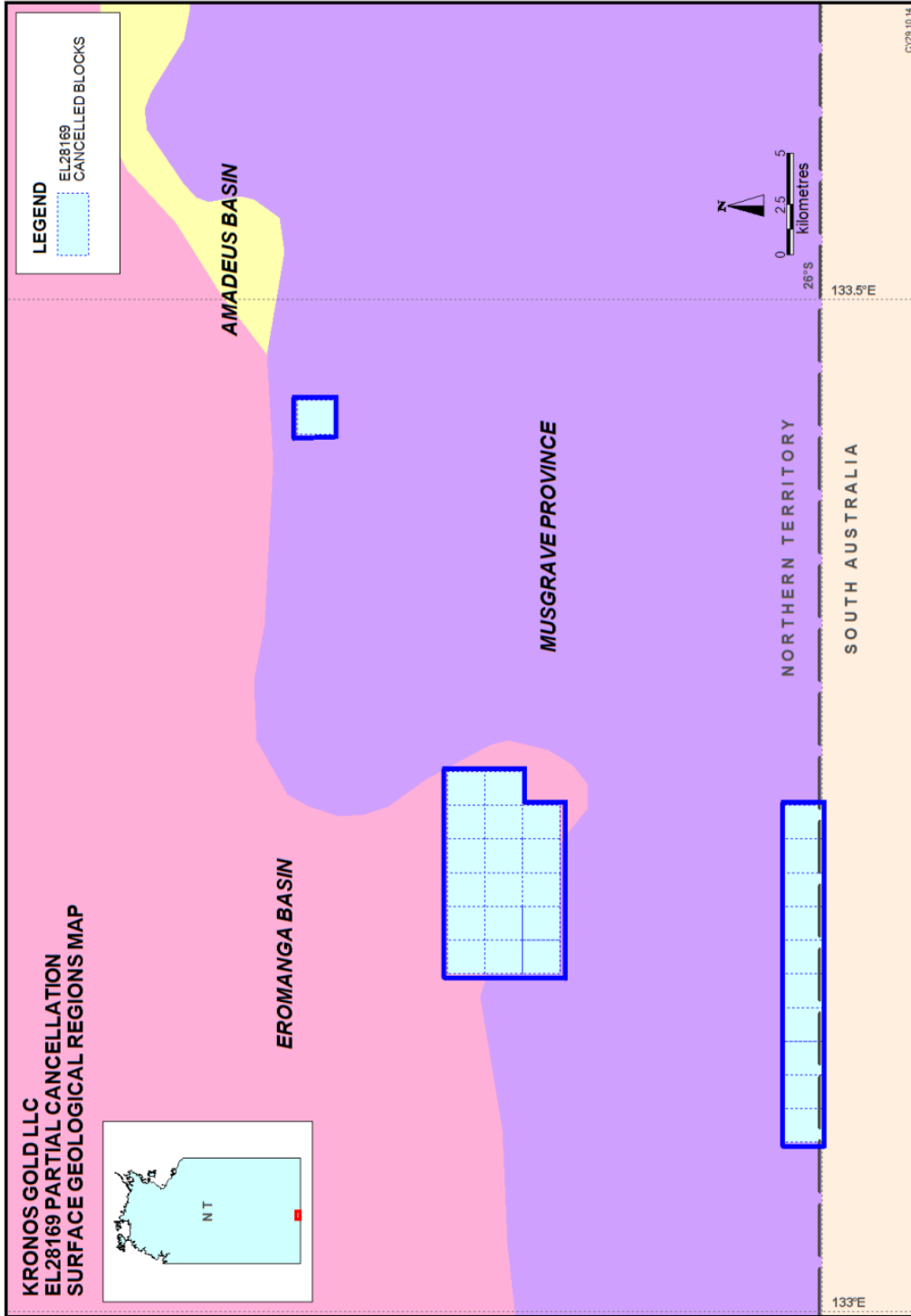


**FIGURE 1: LOCATION MAP**

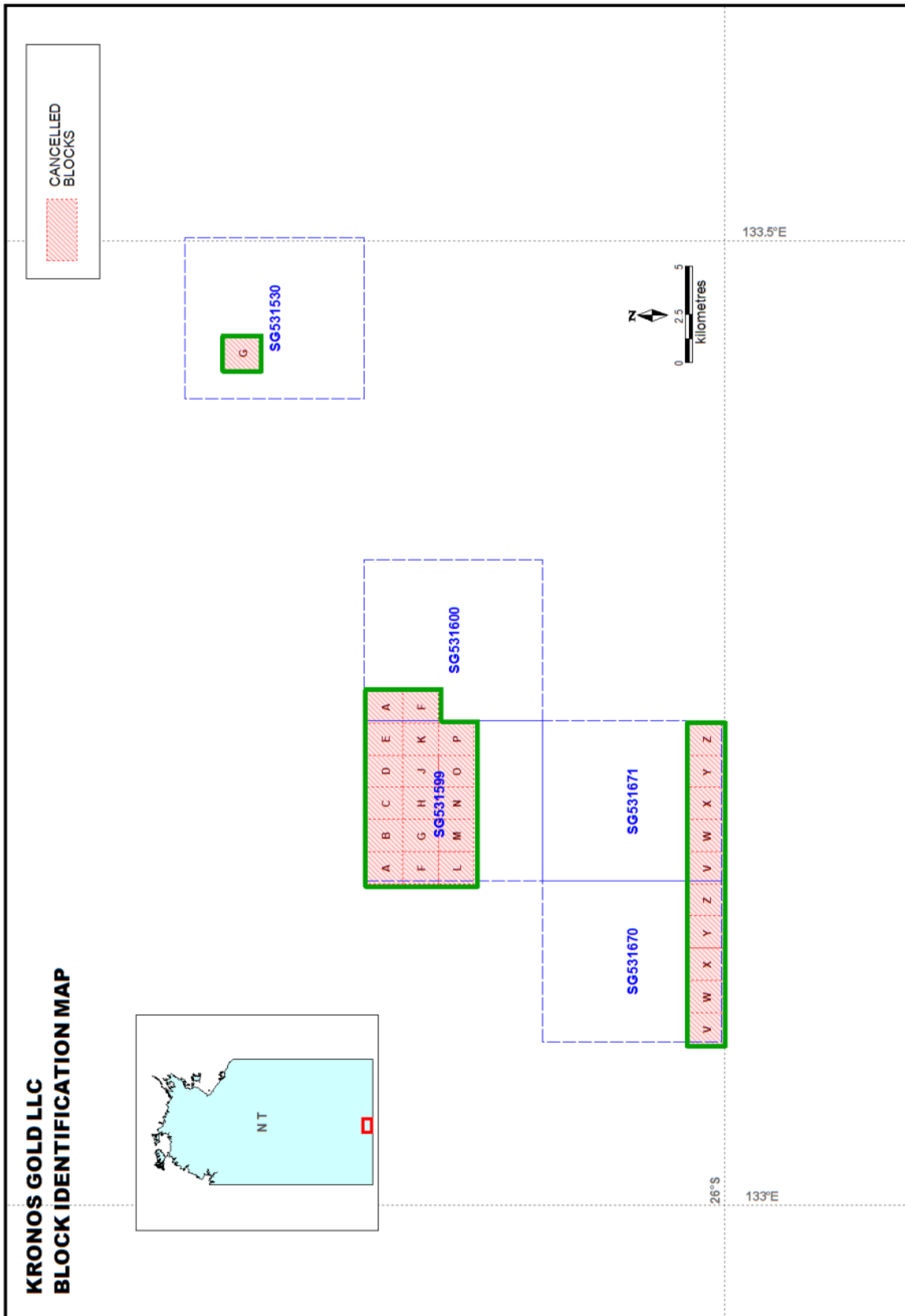




**FIGURE 3: GEOLOGICAL SURFACE REGIONS MAP**



**FIGURE 4: BLOCK IDENTIFICATION MAP**



**FIGURE 5: STRATIGRAPHIC TABLE 2014**

**Eromanga / Pedirka / Simpson Basins**

BASIN	AGE	STRATIGRAPHY
EYRE	TERTIARY	Recent sediments
		Eyre Formation
EROMANGA	CRETACEOUS	Winton Formation
		Allaru Mudstone
		Toolebuc Formation
		Cadna-owie Formation
	JURASSIC	Algebuckina Sandstone
		Poolowanna Sandstone
SIMPSON	TRIASSIC	Peera Peera Formation
		Walkandi Formation
PEDIRKA	PERMIAN	Purni Formation
		Crown Point Formation
	CARB.	
	PRE-CARB.	Undifferentiated

Modified after Middleton et al 2005

**FIGURE 6: CADASTRAL MAP**

