



Operator: Crossland Strategic Metals Ltd

# Charley Creek

## EL 28155

Arunta Region

Final Report for EL 28155 for the period 2 February 2011 to 9 December 2019

Tenement Holders: Crossland Nickel Pty Ltd

## Summary

EL 28155 originally consisting of 14 blocks (32.68 km<sup>2</sup>) was granted to Crossland Nickel Pty Ltd (Crossland) on 2 February 2011 for a period of 6 years. A decision was made by Crossland in early December 2019 to surrender the tenement. DPIR stated December 9<sup>th</sup> as the licence cessation date.

Prior to surrender, the licence was one of 12 tenements that comprise the Charley Creek Rare Earth Element (REE) Project. Crossland Strategic Metals Limited is Operator of the project.

Activities carried out by Crossland within the include an Aircore Drilling, the collection of stream sediment samples and an Airborne Magnetic-Radiometric-DTM Survey.

## Bibliographic Data

<b>Report Title</b>	Final Report for EL 28155 for the period 2 February 2011 to 9 December 2019
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<b>Project Name</b>	Charley Creek
<b>Tenement Number</b>	EL 28155
<b>Tenement Holder</b>	Crossland Nickel Pty Ltd
<b>Operator</b>	Crossland Strategic Metals Limited
<b>Commodities</b>	Rare Earth Elements
<b>Tectonic Unit</b>	Arunta Region
<b>1:250 000 MapSheet</b>	Hermannsburg (SF53-13)
<b>1:100 000 MapSheet</b>	Macdonnell Ranges 5550
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## Appendices

**Appendix 1** : Aircore Data

**Appendix 2** : Stream Sediment Sample Data

## 1 Introduction

Exploration Licence (EL) 28155 is centred approximately 80 kilometres west northwest of Alice Springs. The tenement lies within the Macdonnell 1:100,000 and Hermannsburg 1:250,000 geological map sheets. The regional location is illustrated in **Figure 1**. Access is via the sealed Tanami Highway, which is located just south of the property. Off-road access is provided by Station tracks and fence lines.

The tenement was one of twelve (12) exploration licences that currently comprise Crossland's Charley Creek Rare Earth Project. The primary target has been Rare Earth Elements (REE).

This Final Report collates all exploration activities carried out on the licence.

## 2 Tenure Details

EL 28155 was granted to Crossland Nickel Pty Ltd on 2nd February 2011 for a period of six years. On grant the licence comprised 14 sub-blocks, an area of approximately 32.68 km<sup>2</sup>. Crossland is a wholly owned subsidiary of Crossland Strategic Metals Limited.

On 19 June 2016, Crossland received a Partial Cancellation Notice for the licence. The penalty was for six sub-blocks to be surrendered, however Crossland sought to have the penalty reduced to three sub-blocks, which was accepted by the department. On surrender in December 2019 the tenement comprised 11 sub-blocks. See **Figure 2**.

## 3 Tenement Geology

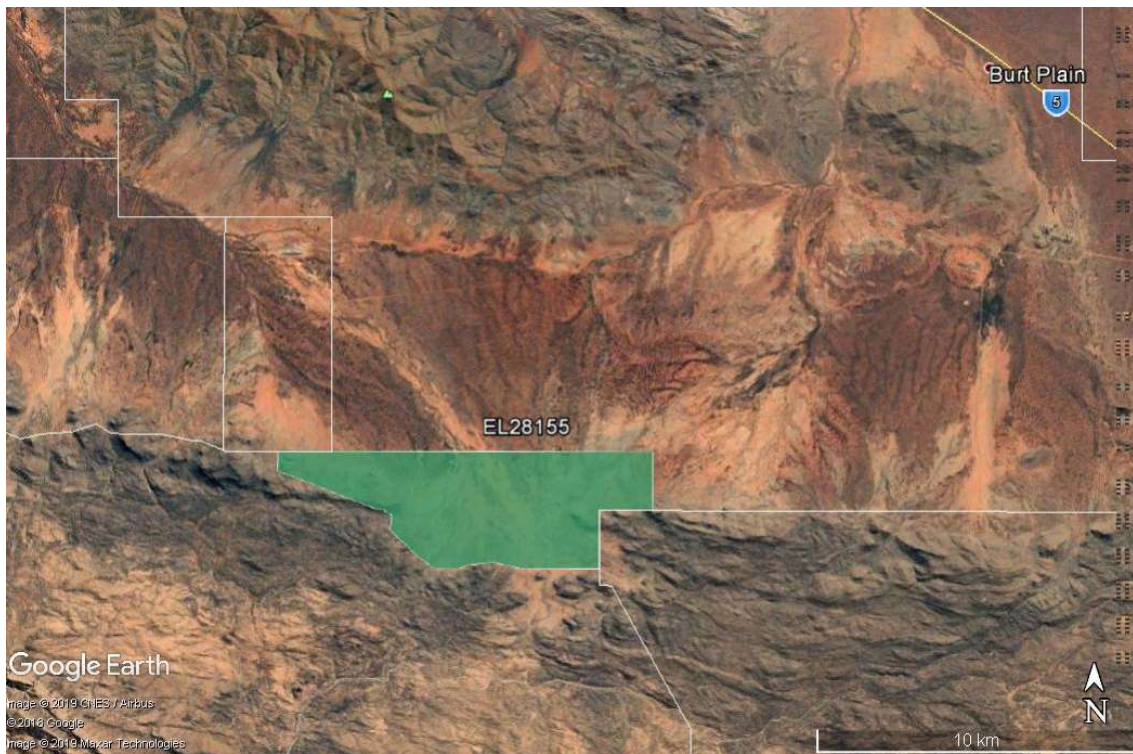
EL28155 lies on a large alluvial outwash fan located at the base of the West Macdonnell foothills. The material within the fan consists of coarse gravels, sand and clay. Several channels have developed and these grade northwards into sandy ephemeral streams. Some outcrop is located in places along the southern boundary of the licence; rock types include migmatitic quartzo-feldspathic gneiss, paragneiss and amphibolite. These rocks have been retrogressed and mylonitised where affected by the Redbank Thrust Zone.

## 4 Previous Exploration

There is no indication of any previous exploration activities on the area covered by the current licence area.



**Figure 1** Regional location of EL 28155.



**Figure 2** EL 28155 Location Detail

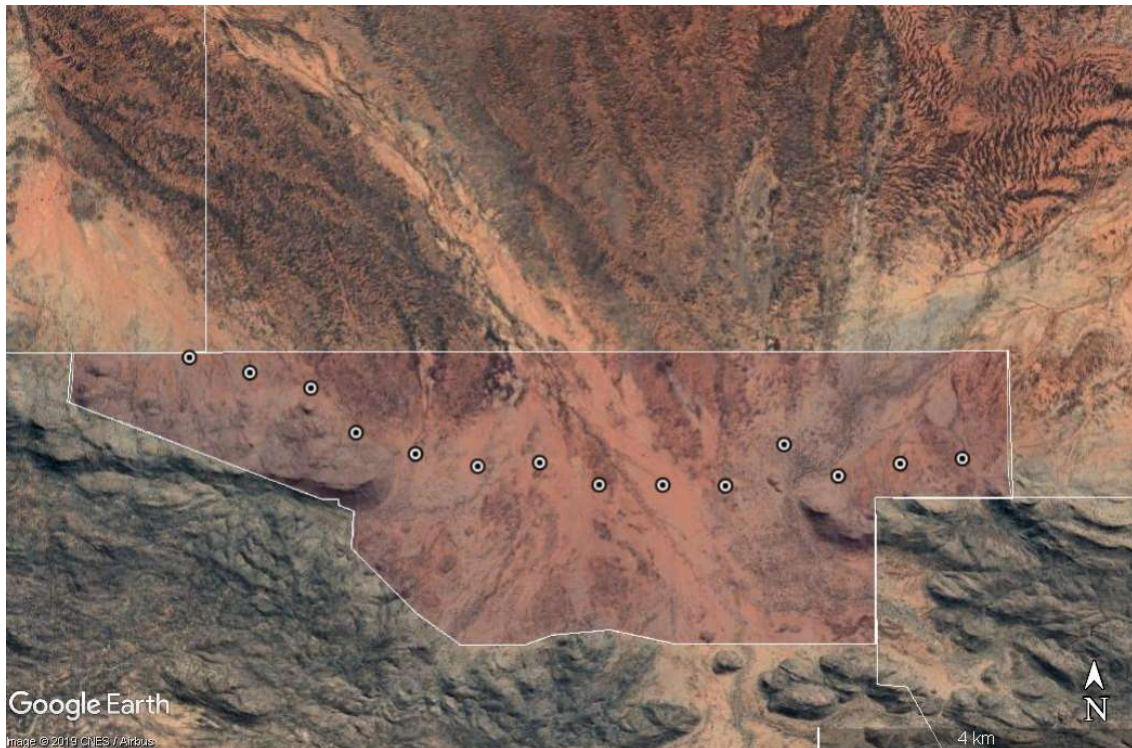
## 5 Work Completed

Activities carried out by Crossland between 2011 and 2013 comprised Aircore drilling, stream sediment sampling and an Airborne Magnetic-Radiometric-DTM survey.

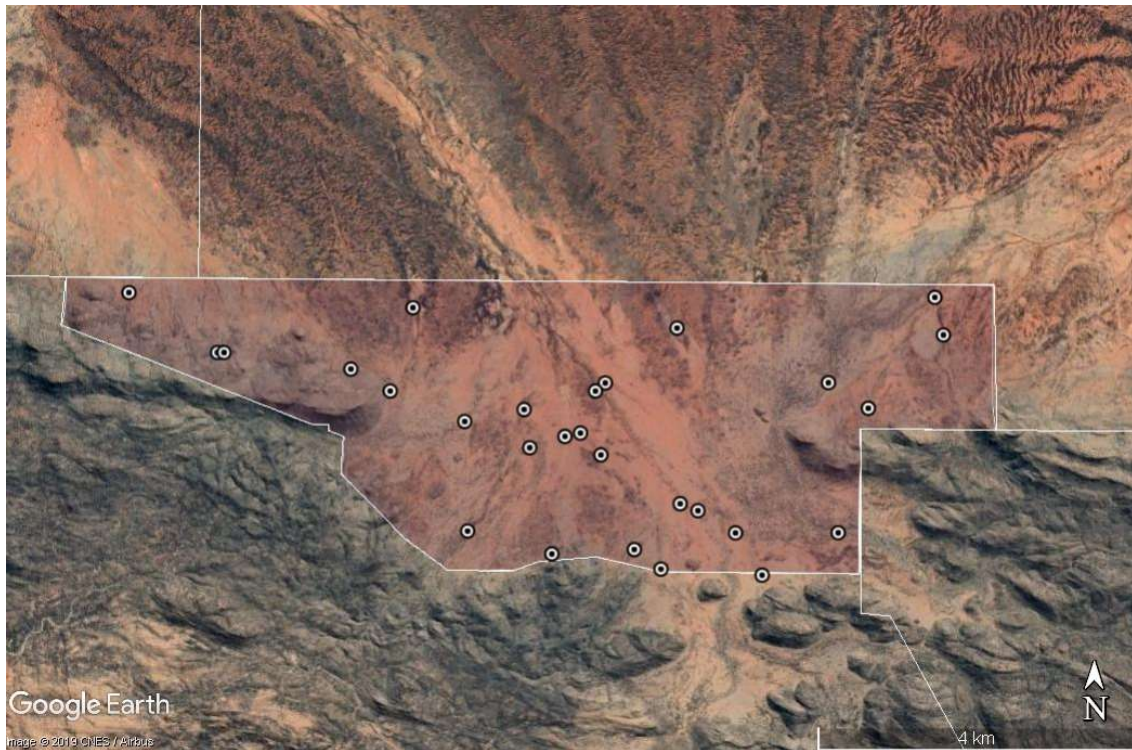
Aircore drilling consisted of 14 holes carried out by Underdale Drilling based in Adelaide. A total of 94 one-metre samples were collected. These samples were combined into 40 composites for the purpose of analytical work. Drillhole locations are illustrated in **Figure 3** and data is contained in **Appendix 1**.

Twenty-nine (29) sediment samples were collected. Sample locations are illustrated in **Figure 4** and data is contained within **Appendix 2**.

The airborne survey was carried out by UTS Perth and flown between November 2012 and January 2013. The survey area covered 196.8 line km within the licence. Data for this survey was presented in the 2012-2013 Annual Report, Appendices 4 and 5.



**Figure 3** EL 28155 Location of Drillhole Collars



**Figure 4** EL 28155 Stream Sediment Sample Locations

## 6 Conclusions

The surrendered ground contains minor alluvial REE mineralisation as outlined by a traverse of drillholes. Crossland considers this area as low priority hence the decision to surrender the licence. The company has been slowly reducing its landholdings at Charley Creek in order to concentrate resources on the two principal areas of REE mineralisation.



## 7 References

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