Operator: Crossland Strategic Metals Ltd

Mount Harris North

Mount Harris North, Charley Creek Project
Annual Report for the period 26 July 2013 to 25 July 2014 EL 28965

Tenement Holders: Crossland Nickel Pty Ltd and Panconoz Pty Ltd

P Melville
August 2014

Summary

The licence is an integral part of Crossland's Charley Creek Rare Earth Element project. The project area comprises 20 granted licences, including 28965. During 2013 (and the current year), financial resources have been mainly focussed on environmental baseline studies and a scoping study encompassing engineering and metallurgical works by a variety of consultants. These activities have project wide implications.

Due to financial constraints, on ground exploration within EL 28965 has been limited to regional reconnaissance and preliminary assessment of prospectivity for alluvial REE concentrations.

EL 28965 was granted on 26 July 2012 for a period of six (6) years, covering 31 blocks or approximately 98.04 km^2. The title holders are Crossland Nickel Pty Ltd (56%) and Panconoz Pty Ltd (44%).

Bibliographic Data

Report Title	Mount Harris North – Annual Report for the period 26 July 2013 to 25 July 2014 EL 28965
Author	Melville P
Project Name	Charley Creek
Tenement Name	Mount Harris North
Tenement Number	EL 28965
Tenement Holder	Crossland Nickel Pty Ltd (56%) and Panconoz Pty Ltd (44%)
Operator	Crossland Strategic Metals Ltd
Commodities	Rare Earth Elements, Uranium
1:250 000 Map Sheets	Napperby (SF 53-09)
1:100 000 Map Sheets	Napperby (5452)

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1 Introduction

Background

EL 28965 is one of twenty Explorations Licences (ELs) that currently comprise the Charley Creek Project. The Project area was originally selected as a target for nickel-copper and PGE (Platinum Group Elements) associated with ultramafic phases of the Mt Hay granulite (+1780 Ma), a highly metamorphosed Palaeoproterozoic mafic intrusive complex. The exploration strategy evolved into several years of uranium exploration, centred on the radiometrically anomalous Teapot Granite. Rare Earths then became the focus in 2010 following a reassessment of aircore drill geochemical data, which showed anomalous Cerium and certain Rare Earth Elements (REE) in both alluvium and saprolite.

The Target Area

The uranium potential of the region was highlighted by historical exploration in both the Teapot Granite Complex and in the plains to the north of Mount Chapple. Exploration work by Esso in 1977 had shown the Teapot Granite (1140Ma) to be significantly elevated in uranium and thorium. This was confirmed by subsequent airborne radiometrics carried out by the Northern Territory Geological Survey. Based on the results of this work, Crossland applied for and was granted additional ground, which covered large areas of the exposed Teapot Granite Complex. The granite was considered the primary uranium target based on the initial reconnaissance and sampling; the company identified phases of the granite which contained up to 6 times the regional uranium background level. This mass of 'hot' granite could also supply sufficient uranium to form sedimentary deposits in channels underlying the plains to the north. Alluvial fans and buried paleochannels were considered prospective for secondary uranium deposits in both calcrete and in "redox" zones, which can concentrate uranium dissolved in ground water.

Exploration for REE followed the uranium exploration phase. It was established that the high grade metamorphic suite of rocks, which form the northern part of the West MacDonnell Ranges were the source of the alluvial deposits of the REE-bearing minerals, monazite (light REE) and xenotime (heavy REE). The deposits are contained primarily in the large outwash fans and buried channels located immediately north of the ranges. The higher elevation granite terrain has also produced alluvial hosted REE concentrations but the resource here is considerably smaller and more scattered in distribution. From a geological viewpoint, a regional mapping and sampling program is required to resolve the nature of the xenotime-bearing rock type(s) and their geographic distribution. This would aid in more effective exploration, targeting the areas where there is more likely to be heavy REE concentrations in the alluvial plains.

2 Location and General Description

EL 28965 is centred about 160 kilometres (kms) northwest of Alice Springs falling just north of Tanami Road. All of EL 28964 lies within Napperby Station (NT Por. 747). Access in gained via the Tanami Road then by station tracks. (See Figure 1.)

The EL is predominantly covered by Aeolian sands and red earth. Granite outcrops can be found in the western portion of the licence at Rembrandt Rock. Lake Lewis located to the west.

3 Tenure Details

Exploration Licence (EL) 28965 was granted on 26 July 2012 for a period of six (6) years, covering 31 blocks or approximately 98 km^2. Crossland Nickel is a fully owned subsidiary of Crossland Strategic Metals Ltd and Panconoz is a fully owned subsidiary of Pancontinental Uranium Corporation.

Crossland's is exploring EL 28965 as part of their Charley Creek Project. The Project includes 11 titles held by Crossland Nickel Pty Ltd and an additional eight tenements in which they and Panconoz Pty Ltd are registered as 50% title holders. Crossland has also entered into a joint venture with Western Desert Resources Limited on EL 25657 which is located directly to the south of EL 28434. In total Crossland is the operator of 20 ELs within the project area.

4 Geology

The majority of the Charley Creek Project and all of EL 28965 are located on the Hermannsburg 1:250000 scale geological map sheet (SF 53-13). The project area lies within the Central Province of the Arunta Block on the southern margin of the North Australian Craton. The southern margin is marked by a high strain zone, the Redbank Thrust Zone, which contains several mapped units. Most of the Central Province is granulite facies metamorphic grade with some retrograde zones of amphibolite facies.

A detailed account of the Regional Geology is contained in the Annual Report for Year 1. The tenement is mostly covered by Recent unconsolidated deposits. Some granitic rocks outcrop

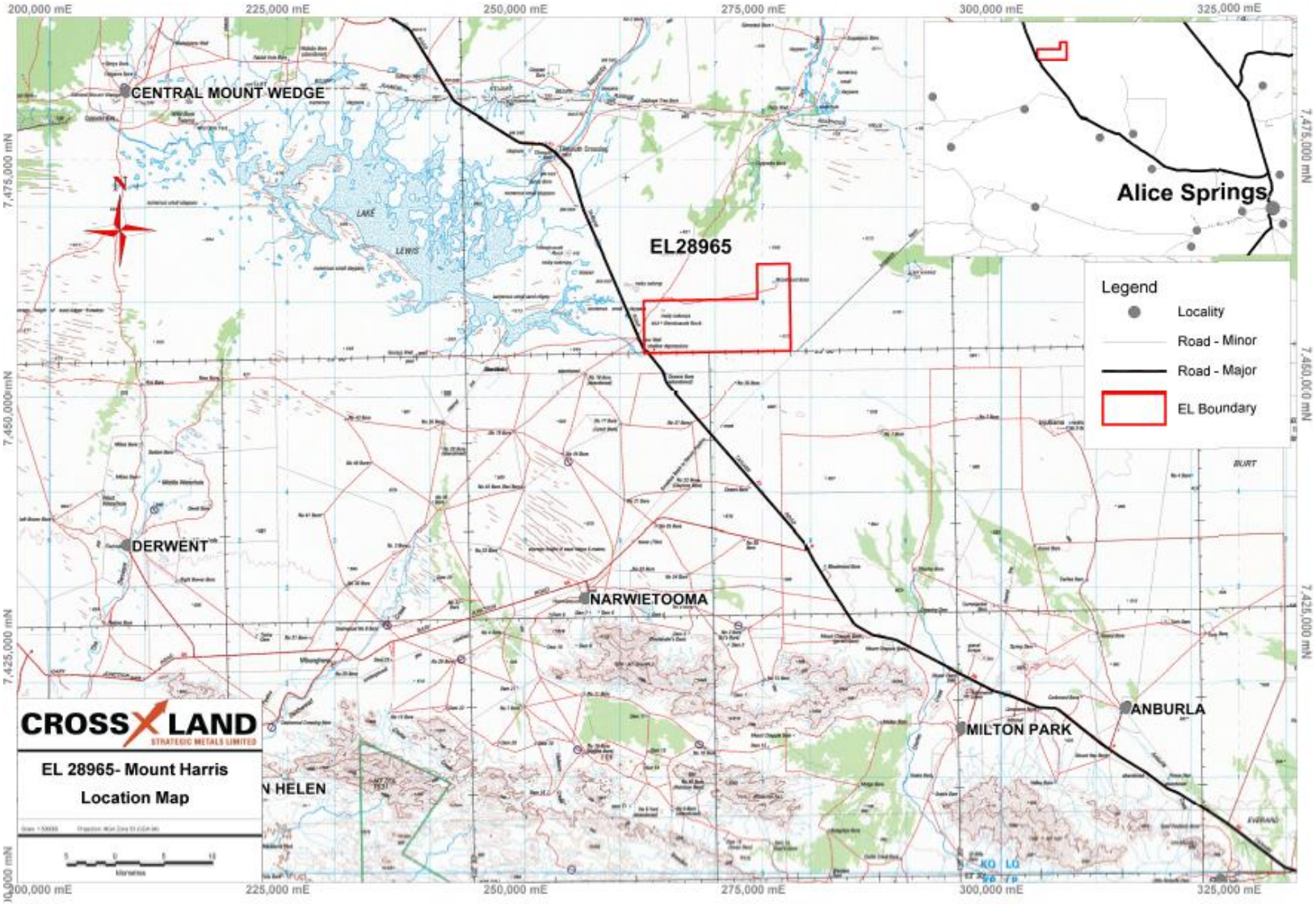

Figure 1 Location of EL 28965

5 Previous Exploration

5.1 Other Companies

The district has not been intensively explored for minerals. Uranium exploration was undertaken in the 1970s by Conzinc Rio Tinto (CRA), Horizon and Esso Minerals. CRA and Rio Tinto explored for Nickel / platinum in the early 1970s and mid 1990s.

5.2 Crossland

Only basic reconnaissance has been carried out on the licence – during Year 1.

6 Work Completed

As part of the overall assessment of the project area, Crossland had continued to engage GHD consultants in to conduct a Preliminary Environmental Impact Assessment (PEIA). The subject tenement was part of this study. The assessment was completed by the end of 2013.

7 Conclusions and Recommendations

Due to the continuing financial constraints, Crossland was again forced to delay exploration for year 2 of the licence. There are planned activities that include approximately 20 aircore holes to be drilled across alluvial fan targets. An airborne radiometric and magnetic survey is also being considered.

8 References

Buskas, A.J., 2008. Annual Report ELs 24281 & 25230 Charley Creek (NT) 9/11/2006 to 6/03/2008.

Buskas, A.J., 2009. Annual Report ELs 24281 & 25230 Charley Creek (NT) 9/11/2008 to 6/03/2009.

Buskas, A.J., 2010. Annual Report ELs 24281 & 25230 Charley Creek Project 7/02/2009 to 6/02/2010.

Buskas, A.J., Ainsley, P.J., & Porter, J., 2012. Combined Annual Report ELs 24281, 25230, 27283, 27284, 27358 & 27359 Charley Creek Project (NT) 7/02/2011 to 6/02/2012.

Buskas, M., and Melville, P., 2013. Combined Annual Report for the period 7 February 2012 to 6 February 2013 ELs 24281, 25230, 27283, 27284, 27358 & 27359.

Crossland Uranium Mines Limited. Prospectus. Initial Public Offering of Shares. 15 February 2007.

Edwards, D.C., 2007. Annual Report EL24281 Charley Creek (NT) 7/02/2006 to 6/02/2007.

Eupene, G.S., 2006. EL24281 – Charley Creek Target – Annual Report. 7 February 2005 to 6 February 2006. 10/05/2006.

Fraser, N., 1977. Annual Report for period 12 November 1976 to 11 November 1977. EL1323 Razorback, Esso Australia Ltd., CR78/27

Hoatson, D. M., 2001. Metallogenic potential of mafic-ultramafic intrusions in the Arunta Province, central Australia: Some new insights. AGSO Research Newsletter, May 2001.

Home D.P., Wilkinson D.L. & McCoy, A.D., 1997: Combined final report for period ending 14 Sept, 1997. Mount Hay-Sixteen Mile Project. ELs 9565/9566/8126/8988. CRAE, CR1988-008.

Hughes F.E. and O'Sullivan, K.N. 1973: Final Report – Milton Park EL519.CRAE. CR1973-0120.

O'Sullivan, F.R. and Tham, G.H.P, 1972. Final Report AP3384 and EL440 Mt Hay. CRAE, CR1972-0066.

Shaw, R.D., Warren, R.G., et al 1995; Hermannsburg (1:250000 Scale Map). Australian Geological Survey Organisation, Canberra.

Warren, R.G., Shaw, R.D. 1995, Hermannsburg NT – 1:250000 Geological Series. NTGS. Explanatory Notes SF53-13.

Wembenyui, E.W. and Buskas, A.J., 2011. Combined Annual Report ELs 24281, 25230, 27283, 27284, 27358 & 27359 Charley Creek Project 7/02/2010 to 6/02/2011.