Operator: Crossland Strategic Metals Ltd

Charley Creek

Mount Harris 2, Charley Creek Project
First Annual Report for the period 26 July 2012 to 25 July 2013 EL 28965

Tenement Holders: Crossland Nickel Pty Ltd and Panconoz Pty Ltd

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Summary

EL 28965 is one of twenty Explorations Licences (ELs) that currently comprise the Charley Creek Alluvial Rare Earth Project. Due to financial constraints, on ground exploration within EL 28965 was limited to reconnaissance and management of contractors, as Crossland solicited both, a Preliminary Environmental Impact Assessment and Scoping Study during the period. EL 28965 was granted on 26 July 2012 for a period of six (6) years, covering 31 blocks or approximately 98 km^2.

Bibliographic Data

Report Title	Mount Harris 2 – First Annual Report for the period 26 July 2012 to 25 July 2013 EL 28965
Author	Buskas M
Project Name	Charley Creek
Tenement Name	Mount Harris 2
Tenement Number	EL 28965
Tenement Holder	Crossland Nickel Pty Ltd (50%) and Panconoz Pty Ltd (50%)
Operator	Crossland Strategic Metals Ltd
Commodities	REE, 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 selected as a target based on confidential research carried out by Paradigm Geoscience Pty Ltd., renamed Global Geoscience Limited in 2007. Paradigm Geoscience considered the region prospective for nickel-copper and PGE (Platinum Group Elements) accumulations associated with ultramafic phases of the Mt Hay granulite (+1780 Ma), a highly metamorphosed Palaeoproterozoic mafic intrusive complex. This initial 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 geochemical data, which showed anomalous Cerium and other 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 regionally significantly elevated in uranium and thorium. This was confirmed by subsequent radiometric surveys carried out by the Northern Territory Geological Survey. Based on this work, Crossland applied for and was granted additional ELs, which cover large areas of the exposed Teapot Granite Complex. The Teapot Granite was considered to be the primary uranium target based on the initial reconnaissance by Crossland; the company identified phases of the granite which contained up to 6 times the regional uranium background level. As part of its uranium exploration strategy, Crossland considered this mass of 'hot' granite could also supply sufficient uranium to form sedimentary deposits underlying the plains to the north. The alluvial fans and buried paleochannels were considered prospective for secondary uranium deposits in both calcrete hosts and in "redox" zones, which can concentrate uranium dissolved in ground water.

Exploration for REE followed the uranium exploration phase, once it was established that the high grade metamorphic suite of rocks, which are present within the project area, were the primary source of the REE-bearing minerals, monazite (light REE) and xenotime (heavy REE). These two minerals are the principal constituents of the company's alluvium-hosted resource. The resource is 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 of 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 Tanami Road then station Track. (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 Rembrant 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. Each title holder has a 50% stake in the licence. 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.

Joint Venture Details

Pancontinental and Crossland currently have an agreement whereby Pancontinetal has a 45% interest in Crossland held EL's within the Northern Territory where uranium and/or rare earth elements are the target commodity.

4 Geology

The majority of the Charley Creek Project is located within the Hermannsburg 1:250000 scale geological map sheet (SF 53-13). An exception to this is EL 28965 which is located in the southern portion of Napperby 1:250000 scale geological map sheet (SF53-09).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.

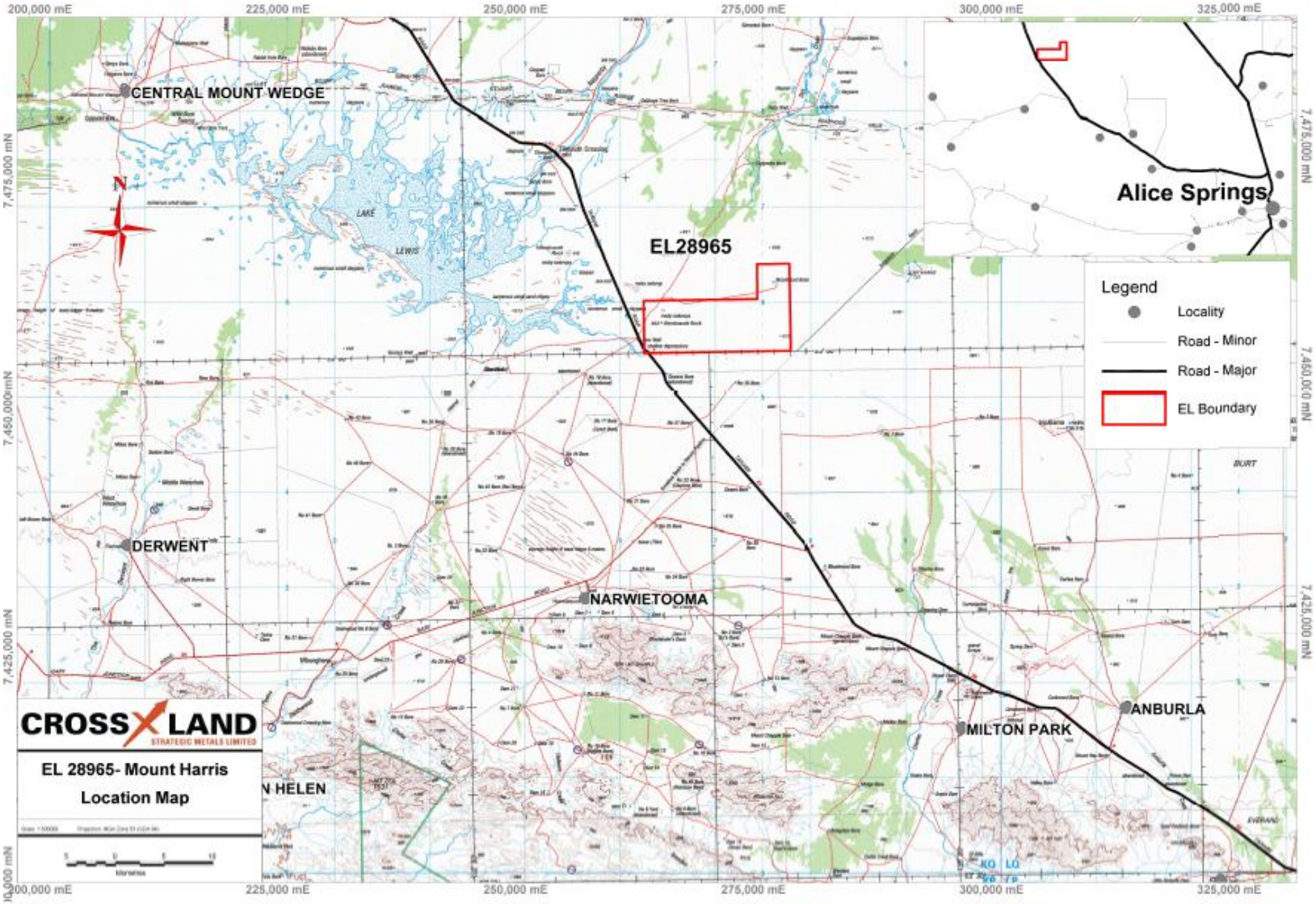

Figure 1 Location of EL 28965

The oldest rocks exposed in the project area are the Adla Granulite which belongs to the Strangways Metamorphic Complex (1820 – 1780 Ma).

Also present are units of the Narwietooma Metamorphic Complex, which includes the Mt Hay Granulite and the laterally equivalent Bunghara Metamorphics and Illyabba Metamorphics (+1780 Ma). The Mt Hay Granulite is located centrally within the project area where it forms the topographic high of the Mount Hay massif. The Amburla Anorthosite, which forms part of the layered complex outcrops on the northeast side of Mount Hay. The Bunghara Metamorphics are present further to the west and the Illyabba Metamorphics outcrop to the east of Mount Hay. An arcuate hill near Blackhill Dam is composed of Amburla Anorthosite.

In the southeast, outcrops of orthoquartzite belonging to the Chewings Range Quartzite (+1600 Ma) are present. Mylonites of the Redbank High Strain Zone (1500 – 1400 Ma) traverse the area from roughly west to east.

The Teapot Granite Complex (1140 Ma) outcrops in the western section of the project area, forming part of the foothills of the MacDonnell Ranges. The complex intrudes the older mesoproterozoic gneissic basement of the Madderns Yard Metamorphic Complex (1650-1680 Ma), which is represented in this location by the Glen Helen Metamorphics. The granite has numerous late pegmatite and aplite phases as well as a younger biotite-feldspar-quartz phase. Dolerite dykes are common, intruding the granite discordantly in an east-west orientation. To the east, an unnamed granite equivalent to the Teapot, intrudes migmatites, gneisses, metasediments and amphibolites belonging to the Madderns Yard Metamorphic Complex.

Present throughout the project and specifically within EL 28965 are Quaternary and to a lesser degree Tertiary sediments. The Tertiary sediments comprise sands, clays, siltstone, and conglomerate with some lignitic horizons. The Quaternary sediments are characterised by shallow alluvial fans of coarse gravels, sandy ephemeral creek deposits, sand and clay with a surficial covering of Aeolian silts and sand with minor calcrete and carbonate deposits. The degree of cover formed by these sediments is highly variable.

Undifferentiated Proterozoic Granite is known to outcrop in the eastern portion of the licence at a location know as Rembrant Rock.

5 Previous Exploration

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

Crossland has greatly expanded its landholdings in the region. As of the end of August 2013, the company has 20 granted licences. Crossland also has a joint venture (and is Operator) with Western Desert Resources on EL 25657. Crossland's licence package now covers over 5000 km^2, across a distance of approximately 200 km from east to west.

Exploration activities by Crossland commenced in 2005 with a first pass reconnaissance survey. As part of the next phase of exploration, the company undertook an airborne Radiometric and Magnetic survey in two phases between August and December 2007 and January 2008. For the 2008 season, an aircore drilling program was completed and several months were spent conducting regional radiometric prospecting, geological mapping and rock sampling. The latter activities increased in intensity and continued throughout 2009 and 2010.

In 2010 a regional diamond drilling program was undertaken on the Teapot Granite and additional airborne Magnetics-Radiometrics survey was completed. The aim of the drilling was to determine the uranium potential of the granite.

The Rare Earth potential of the region was realised in 2010 and exploration activities for these commodities commenced in the latter part of that year. Both a regional stream sediment sampling programme and sampling of sub-surface alluvium deposits involving the use of a portable hand-held motorised auger were carried out.

Activities for the 2011 season concentrated solely on the alluvial rare earth potential and included an Air Core drilling programme, which was originally proposed for 2010. Drilling planned for other parts of the project area did not eventuate.

In 2012 exploration work carried out included Air Core drilling and the collection of alluvium samples.

6 Work Completed

On ground exploration work within EL 28965 was limited to reconnaissance and management of contractors during the period. Crossland has engaged GHD Consulting firm of Darwin, NT to conduct a Preliminary Environmental Impact Assessment (PEIA) for the Charley Creek Project. It is anticipated the PEIA will be completed within the first quarter of the next reporting period. Crossland also contracted MSP Engineering Pty Ltd of Balcatta, WA to complete a scoping study which has now been completed.

7 Conclusions and Recommendations

Due to financial constraints Crossland was forced to delay exploration for year 1 of the licence. It is recommended to proceed with previously planned activities that include approximately 20 aircore holes to be drilled across alluvial fan targets along with an airborne radiometric and magnetic survey.

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