

23rd October, 2009

**QUARTERLY REPORT  
FOR PERIOD ENDED 30 September, 2009**

**HIGHLIGHTS**

- **New Areas acquired – an additional application covering 1,046 square km has been applied for to complement earlier applications on the southern end of the Chilling Project area in the NT.**
- **Chilling Project (EL22738, EL23682, EL24557, EL25076, EL25077 and EL25078; ELa27440, ELa27441, ELa27442, ELa27525) – Drilling is in progress at the Buchanan Window in EL22738 at the southern end of the Chilling area. As announced on 1 October, similarities with Rum Jungle and the Alligator Rivers uranium fields have been noted.**
- **Core drilling at March Fly and additional exploration at MEMA and Fletchers Gully, all within the Chilling Project area, will commence in October.**
- **Charley Creek, NT, (EL24281, EL 25230 ELa27283, ELa27284, ELa27338, ELa27358, ELa27359)–detailed prospecting of the Cockroach Dam area in the Teapot Granite continued throughout the Quarter, and the ground spectrometer survey of the 42sq. km. anomalous area is around 80% complete. Follow up has commenced.**
- **Lake Woods, NT (EL23687, EL24520, EL25631, ELa27317, ELa27318)- Crossland has been successful in securing an NT Government subsidy to evaluate a conceptual nickel- platinoid target, and drilling will be completed in the December Quarter.**
- **Pancontinental Funding - As per the terms of the Joint Venture, the Company has been reimbursed circa \$350k from Pancontinental**
- **Crossland’s cash position at 30 September is circa \$3.9 million with some \$450k still due from Pancontinental.**

## OVERVIEW

Activities of Crossland Uranium Mines (ASX: "CUX") heightened in the latest September Quarter, with intensive field exploration commencing and continuing on the Chilling project in the Northern Territory throughout the Quarter. Steady progress also continued at the Company's Charley Creek project in Central Australia.

At the time of this report, the initial air core program at the Buchanan Window (within Chilling), following a discovery of Lower Proterozoic rocks favourable for both base metal and uranium deposits, is nearing completion, and follow-up drilling at March Fly is about to recommence. Work will soon start in the MEMA/ Fletchers Gully zone at Chilling, just to the north of Buchanan.

The Charley Creek work, which is concentrating on detailed radiometric surveys of the highly radioactive Teapot Granite at the Cockroach Dam prospect, is nearing completion. Some follow up of these results has commenced as personnel are available.

Given the current economic climate, Pancontinental and Crossland have moved to six-monthly reviews of exploration expenditure. Through its internal funds and the joint venture with Pancontinental, Crossland has access to ample funding to cover focused exploration programs for 2009 and beyond. The exploration effort continues to home in on those areas that are producing positive results, and will be confined to Lake Woods, Chilling and Charley Creek until additional projects are identified. While concentrating on a smaller number of prospects, the tenement holdings around these have been considerably expanded, which reflects Crossland's views that intensive exploration of these areas will continue to bring rewards.

## EXPLORATION DETAIL

Chilling Project, NT (EL22738, EL23682, EL24557, EL25076, EL25077 and EL25078: EL(a)27440, EL(a)27441, EL(a)27442, EL(a)27525

***At the Chilling Project, Crossland's primary targets are unconformity – related uranium deposits, the deposit style that hosts most of the world's high grade uranium. Other target commodities exist, such as gold, tin, copper, and cobalt. Other uranium deposit styles are also possible.***

Crossland commenced field activities on the Chilling Project in June and the focus through the quarter was on EL22738 (Buchanan). Following clearing of established but disused station tracks, work commenced in what has been named the Buchanan Window and the adjacent Soldiers Creek Granite. The window has been subjected to first pass geological mapping, as well as stream sediment sampling and an ongoing campaign of soil sampling. In addition, three observers have been engaged in collection of ground gamma ray spectrometer data throughout much of the Quarter.

Crossland announced the preliminary results from the field program in the Buchanan Window on October 1. The report noted that the area contains uranium channel radiometric anomalies and anomalous base metal results that follow certain stratigraphic horizons.

The Buchanan Window has been recognised through Crossland mapping as a block of Lower Proterozoic carbonate- rich sediments and silicified and brecciated carbonate rocks, accompanied

by siltstones, a sediment package typical of that found around the Rum Jungle Complex. The package is also similar to the sedimentary succession that hosts the uranium deposits of the Alligator Rivers Region. This basal stratigraphy of the Pine Creek Orogen hosts most of the known uranium resources and production from the region. Crossland considers these features to be favourable at the Buchanan Window, particularly when the most productive stratigraphy is accompanied by elevated geochemical and radiometric response. Drilling using a RAB/ aircore rig commenced in early October and is progressing satisfactorily at present. This limited program of 3,000m will produce valuable data on the geological setting and anomalies for a targeted drilling program during 2010.

Geoscience Australia has now delivered all of the Airborne EM data from the survey areas commissioned by subscribers to the project, including Crossland, as well as the regional Government- funded data. These will help to develop targets for unconformity- related uranium deposits in and below cover rocks. Crossland expects to review this over the wet season to develop these specific targets. Already there appears to be some obvious areas warranting detailed evaluation.

Crossland has increased its holdings in the project area by lodging one additional exploration licence application, covering 1,046 square kilometres.

Up to four diamond core holes will test the March Fly mineralisation, beginning in October. In addition, work in the MEMA/ Fletchers Gully sector of Chilling will also commence in October. More ground spectrometer work and geochemical sampling will be completed to prepare for drilling during 2010.

[Charley Creek Project, NT \(EL24281, EL 25230; ELa27283, ELa27284, ELa27338, ELa27358, ELa27359\)](#)

***At the Charley Creek Project, Crossland is targeting granite-related uranium; with calcrete and redox- related palaeodrainage uranium targets; and layered mafic intrusive- related copper, nickel and platinoids as secondary targets.***

Exploration at the Cockroach Dam anomalous zone in the Teapot Granite proceeded throughout the Quarter, with two geoscientists and support crews working on the 42 sq. km. zone. A program of 25m spaced ground spectrometer surveying, using backpack instruments with in-built GPS control proceeded throughout the Quarter. This has proved not only useful in identifying areas of surface uranium anomaly, but also in geological mapping in sometimes visually indistinguishable rock types. This is useful in identifying targets for follow up, areas of cover where further subsurface testing may be warranted, and other otherwise undetectable features. The work is about 80% complete at the time of writing, and it is planned to complete the areas this season. Further detailed studies designed to calibrate radiometric results in this terrain are in progress. The opportunity to do some follow – up of the widespread anomalous results being generated by this extensive survey arose during the Quarter, and results of this have recently become available. These are being compiled.

The Central Land Council (CLC) has processed Crossland's application for approval of a widespread aircore drill program, and though this is expected to be approved, it is doubtful this work will now be started during calendar 2009. This will cover the plains country throughout the project area, to follow up past results and to test new concepts and areas. A proposal to drill test the Teapot Granite prospects is being developed in

conjunction with Crossland's consultants on Indigenous Matters. .  
Kalabity, South Australia (EL3297)

***At Kalabity, Crossland's interest is through an agreement with PlatSearch NL and Eaglehawk Geological Prospecting Pty Ltd to earn a majority share in EL3297. Previous work has identified widespread elevated values of uranium and other metals. Recent work by Crossland has identified a new anomalous zone which has been named the Tabita Prospect.***

Work at Tabita has been suspended for 2009 in order to conserve expenditure. It is expected that detailed exploration of Tabita Prospect will proceed in early 2010.

Crossland Creek, West Kimberley, Western Australia (E80/3303, E80/3854)

***At Crossland Creek, Crossland is primarily targeting uranium and associated metals in conceptual settings.***

Crossland completed follow up of radiometric anomalies detected in our 2008 survey of E80/3854 in a reconnaissance campaign in the west Kimberley in the September Quarter. The results do not warrant further work and the title will be surrendered, as will the remains of E80/3303 at Crossland Creek. That will terminate the Crossland Creek Project.

Lake Woods, NT (EL23687, EL24520, EL25631, ELA27317, ELA27318)

***At Lake Woods NT, Crossland has identified outcropping basic intrusive rocks that have unusual properties that may indicate that the area has potential for commodities such as nickel copper and platinoids. This area is not included in the Joint Venture with Pancon.***

Preparation for the core drilling programme, which is receiving support from the NT Government, continued and this drilling will commence after completion of the March Fly programme.

#### New Projects

Crossland continues to examine opportunities to expand its project portfolio.

## CROSSCONTINENTAL JOINT VENTURE

Crossland and our joint venture partner, Pancontinental Uranium Corporation, have formed the jointly- owned company, Crosscontinental Uranium Ltd to explore for uranium outside Australia. Crosscontinental has evaluated several potential ventures during the quarter, but has yet to commit to participate in new ventures.

#### Burkina Faso, West Africa

The progress with the applications lodged on behalf of Crosscontinental is slow and it is difficult to allocate a priority to work on these at present.

#### **Geoff Eupene**

Exploration Director

The review of exploration activities and results contained in this report are based on information compiled by **Geoffrey S Eupene**, a Fellow of the Australasian Institute of Mining and Metallurgy. He is a director of the Company and a full time employee of Eupene Exploration Enterprises Pty Ltd. He has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration, and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2004 edition of the Australasian Code for Reporting of Exploration Results,

*Mineral Resources and Ore Reserves (the JORC Code). Geoffrey S Eupene has consented to the inclusion in this report of the matters based on his information in the form and context in which it appears.*