



Date 21<sup>st</sup> September 2009

## Drilling at Calvert Hills confirms uranium prospective geology

- Collaborative drilling completed at Calvert Hills, Northern Territory
- Prospective Westmoreland target geology confirmed under thin cover and over a large area
- Revitalises uranium exploration in the project area

**Southern Uranium Limited (ASX: SNU) announces the collaborative drilling in participation with the Northern Territory government has been completed at Calvert Hills. The drilling has confirmed the prospective geology of the Westmoreland Uranium Field extends across the Calvert Hills project area under generally thin younger cover that has hindered past explorers. The new core is being evaluated with NT Geological Survey geologists to fine tune future targeting and exploration of the project area.**

Exploration under Calvert Hills EL 24837 is managed by Southern Uranium in a Joint Venture with a subsidiary of Crescent Gold Limited (ASX Code: CRE). Both parties hold 50% interest with Southern Uranium earning to 75% by spending another \$400,000 on exploration by mid 2010. The Calvert Hills project adjoins the Murphy project being drilled by Bondi Mining Limited.

The Joint Venture used integrated geophysical surveying to remap the regional extensions of the geology from the Westmoreland uranium field and to predict prospective structural positions under extensive flat-lying cover. The astute interpretation was awarded collaborative drill funding by the Northern Territory Government for \$75,000 of direct drilling costs to investigate the geology and uranium potential.

Six holes were proposed to test three locations with a total of 1,200m of precollared diamond core drilling. The drilling commenced mid August.

The drill program was completed in mid September with four holes CH RCD001-004 totalling 1,218 metres (Figure 1; Table 1). The number of holes was reduced due to the greater than planned depth in hole CHRCD001. The hole depth was extended to investigate further into the upper Westmoreland Conglomerate that was pleasingly intersected in this first hole. Seigel Volcanics and a thin siltstone unit were also intersected at the top of the conglomerate, confirming the identical stratigraphic setting to the Westmoreland uranium field 100km to the east.

The next two holes CHRCD002 and CHRCD003 tested the two other target areas further down the stratigraphic sequence to the west. The holes successfully established the presence of Westmoreland Conglomerate directly under thin cover of younger Cenozoic, Cretaceous and/or Cambrian sediments.

The drill rig returned to the first target area to drill hole CHRCD004 1.2km southwest of CHRCD001. The aim was to seek local changes in cover thickness and evidence of a dolerite dyke interpreted from the geophysics. However, after the hole intersected Westmoreland Conglomerate under thin cover, it encountered catastrophic water flow and was abandoned short of the predicted depth of the target dyke. Not only was the extent of Westmoreland Conglomerate confirmed, the dramatic change in cover thickness and absence of Seigel Volcanics compared to the northern hole demonstrated the local potential for shallow fault-related targets in the area.

Holes CHRCD 001-003 were surveyed with downhole gamma logging. A slightly positive response was obtained from the siltstone unit at the top of the Westmoreland Conglomerate, however flat responses otherwise indicate no significant uranium was intersected in this early stage of drilling.

The preliminary drilling in collaboration with the NT Government has successfully revitalised uranium exploration in the project area. The interpreted geological framework for at least 200 sq km of the project area has been confirmed as prospective for Westmoreland style uranium deposits. The results give Southern Uranium confidence to plan ground surveys to target within the drilled areas and other areas of the tenement.

Table 1: Calvert Hills Project - Drill Hole Summary September 2009

Drill Hole	GDA N	GDA E	Azimuth	Young Cover	Seigel Volcanics	Westmoreland Conglomerate
CHRCD001	8051800	707112	Vertical	0-159.8m	159.8-354.1m	354.1 - 416.4m
CHRCD002	8056329	696013	Vertical	0-42m	-	42 - 342.3m
CHRCD003	8054307	702561	Vertical	0-86m	-	86 – 213.0m
CHRCD004	8051084	706058	-60 <sup>0</sup> to 128° mag	0-78m	-	78 – 246.3m



Diamond core drilling at Calvert Hills



Inspecting percussion precollar samples

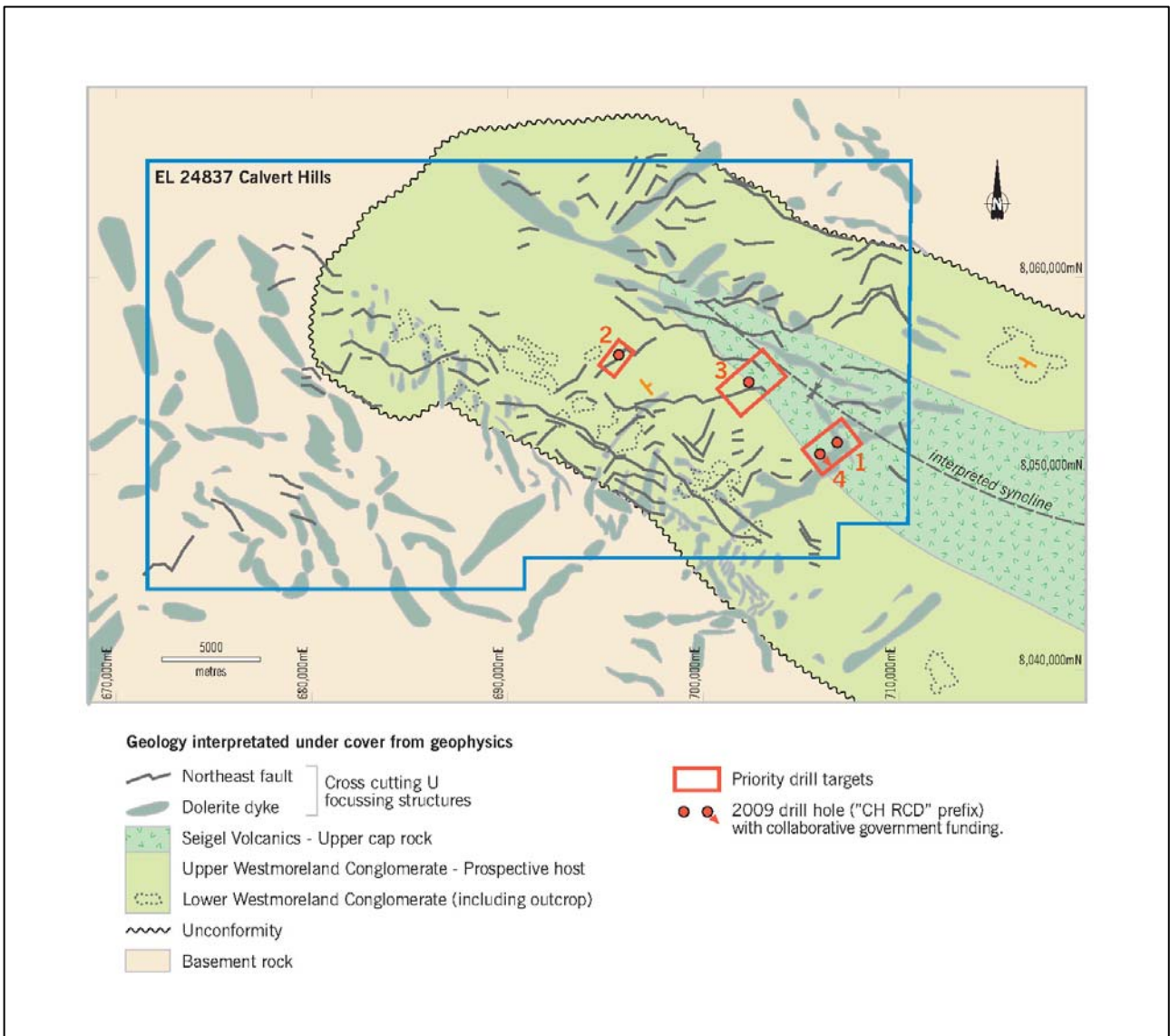


Retrieving core samples from the drill string



Geological logging of drill core

**Figure 1: Drill Location Plan – Calvert Hills Project**



**For further information contact:**

Mr John Anderson  
 Managing Director  
 Southern Uranium Limited  
 Phone: 07 3870 0357

Richard Owen  
 Principal Consultant, Three Plus Pty Ltd  
 Phone: 07 3503 5700  
 Mobile: 0412-869-937

**Competent Person Statement:** *The information in this report that relates to Exploration Results is based on information compiled by John Anderson (BSc(Hons)Geol) who is a member of the Australasian Institute of Mining and Metallurgy and is bound by and follows the Institute's codes and recommended practices. Mr Anderson is a full-time employee of Southern Uranium Limited. He has sufficient experience which is relevant to the styles of mineralisation and types of deposits under consideration and to the activities being undertaken to qualify as a Competent Person as defined in the 2004 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr. Anderson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*