

AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT**21st September 2010****Mt Thirsty Nickel Sulphide Drilling to Resume**

Fission Energy Limited (ASX: FIS) and 50% Joint Venture partner Barra Resources Limited (ASX: BAR) are pleased to announce that RC drilling to follow up the recent high grade nickel sulphide intersections at Mt Thirsty is scheduled to resume later this week.

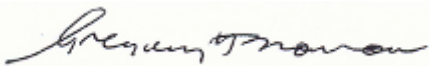
10 holes are currently planned to test for continuations of the nickel sulphide mineralisation at shallow depths of around 100m. This shallow drilling should also help determine the likely plunge direction of the mineralisation which will aid siting of deeper diamond drill holes.

Background

Mt Thirsty is located 20 kilometres north-northwest of Norseman (Figure 1) in the southern goldfields of Western Australia, a well endowed nickel sulphide province.

In May this year RC hole MTRC015 intersected a thick zone of nickel sulphides assaying 3.4% nickel over 6m from a down hole depth of 201 metres, adjacent to the footwall basalt contact within an interpreted lava channel embayment. An initial six hole RC drilling program completed last month intersected the prospective lava channel embayment in four of these holes and two returned high grade nickel sulphide assays including 2m @ 5.9% and 2m at 3.5% Ni respectively (refer previous ASX Announcement 2 September 2010).

This latest RC drilling program is one further step in the evaluation of the potential of the recent Mt Thirsty nickel sulphide discovery to host a significant nickel deposit.



Greg Solomon
Executive Chairman

The interpretations and conclusions reached in this report are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for complete certainty. Any economic decisions that might be taken on the basis of interpretations or conclusions contained in this report will therefore carry an element of risk.

The information in this announcement, insofar as it relates to Mineral Exploration activities, is based on information compiled Michael J. Glasson and Robert N Smith, who are members of the Australian Institute of Geoscientists, both of whom have more than five years experience in the field of activity being reported on. Mr Glasson and Mr Smith are consultants. Mr Glasson and Mr Smith have sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Glasson and Mr Smith consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

It should not be assumed that the reported Exploration Results will result, with further exploration, in the definition of a Mineral Resource.

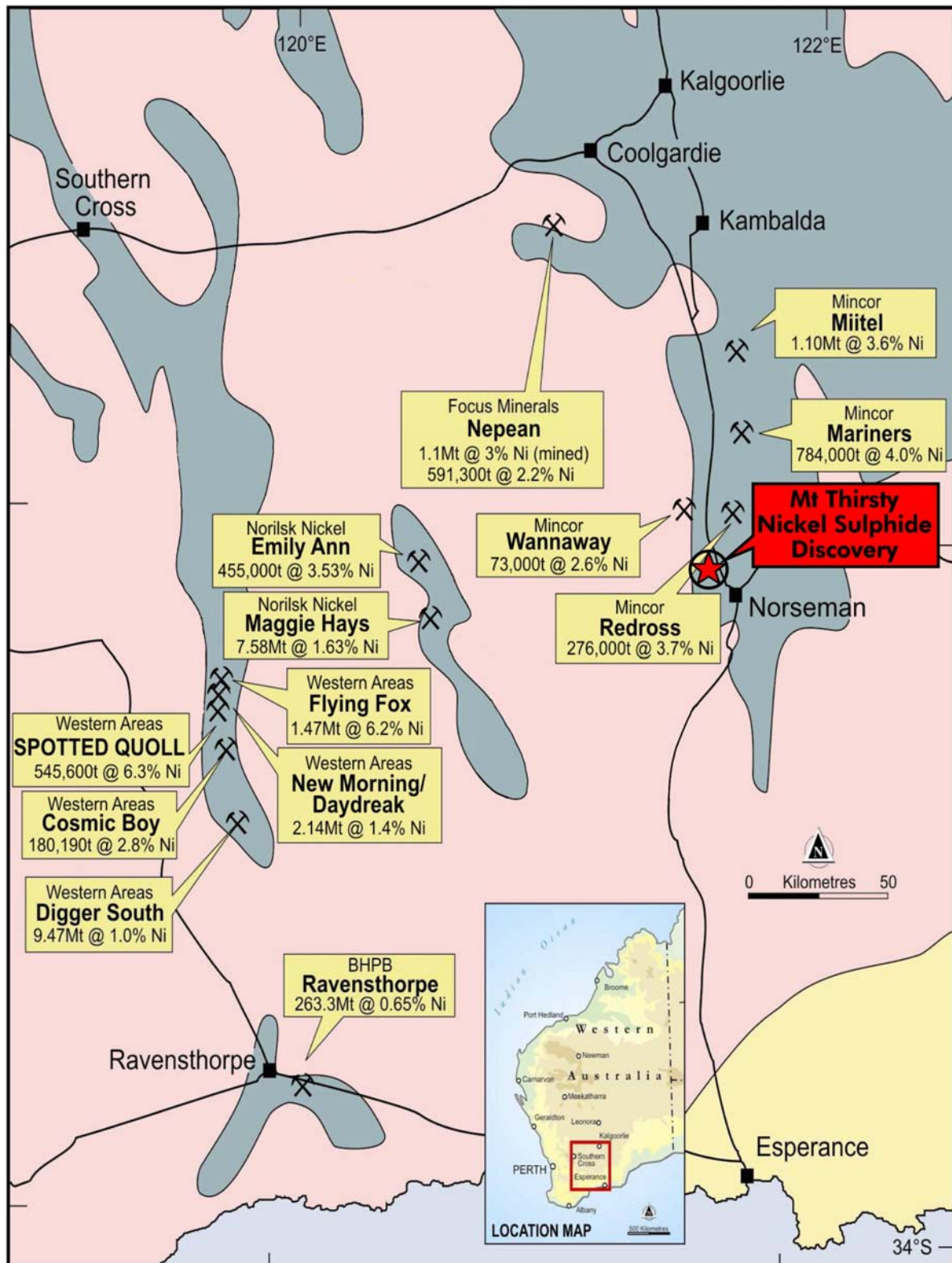


Figure 1: Southern Goldfields Nickel Deposits Showing Location of Mt Thirsty Nickel Sulphide Discovery