

AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT**2nd September 2010****** High Grade Nickel in Third Hole at Mt Thirsty ******Highlights**

- ❑ Fission Energy Limited (ASX: FIS) and 50% Joint Venture partner Barra Resources Limited (ASX: BAR) are again pleased to announce that assays from hole **MTRC022** which intersected significant nickel sulphides (refer ASX Announcement 31 August 2010) has returned **2m @ 3.5% Nickel** from 118 to 120m down hole, including **1m @ 4.7% Nickel**.
- ❑ This intersection is very encouraging as the mineralisation is interpreted to have been affected by a pegmatite intrusion which has disrupted the footwall contact and has probably removed some of the nickel sulphides, as often occurs at Kambalda.
- ❑ Hole **MTRC022** is now the third hole drilled at Mt Thirsty which has returned high nickel grades. The other significant down hole intercepts include holes MTRC015 and MTRC020 with 6m @ 3.4% and 2m @ 5.9% Ni respectively (refer Figures 3 and 4).

Background

Mt Thirsty is located 20 kilometres north-northwest of Norseman in the southern goldfields of Western Australia a well endowed nickel terrain (see Figures 1 & 2). 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 ultramafic contact within an interpreted lava channel embayment. An initial six hole RC drilling program to follow up this intersection has now been completed. All holes were inclined at 60° towards magnetic west.

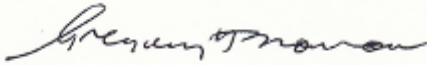
The following summarises the 2010 drilling to date:

- ❑ The first two holes (**MTRC018 & 019**) in the follow up program were drilled 25 and 50m respectively to the south of MTRC015 on the same easting and intersected only a weakly mineralised footwall contact at shallower depth, suggesting the channel has closed out in this direction and further potential lies to the north.
- ❑ **MTRC020** was drilled 50m to the north of MTRC015 on the same easting, and intersected nickel sulphide stringers over a 2m interval from 208 to 210m down hole averaging 5.9% nickel. This intersection occurs at the base of a 40m thick serpentinised cumulate ultramafic, immediately above a footwall pyroxenite contact, and is most likely on the same contact as the sulphides in hole MTRC015.
- ❑ **MTRC 021** was drilled midway between holes MTRC015 & 020 on the same easting, confirming the presence of the favourable lava channel environment, but intersected a barren footwall contact.
- ❑ **MTRC022**, as referred to above, also intersected significant nickel sulphide stringers between 118 and 120m down hole averaging 3.5% nickel. This intersection is about 100m up dip from the MTRC020 intersection and may be partly remobilised with some of the original mineralisation removed.

- **Hole MTRC023**, drilled 50m further to the north of hole MTRC020, also intersected the channel environment but was barren of sulphides on the footwall contact. This hole however indicates that the prospective channel environment is still open to the north and it is believed that structural complexity may be affecting local nickel sulphide distribution.

Future Program

Further RC drilling is planned later this month to follow up these extremely encouraging first pass results and further evaluate the potential of this new nickel sulphide discovery to host a significant nickel deposit.



Greg Solomon
Executive Chairman

#True width is currently uncertain but is less than down hole width (see Figure 3). Assays were based on 1m RC percussion samples with a 4kg split collected on site and analysed for Ni using ICP analysis.

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.

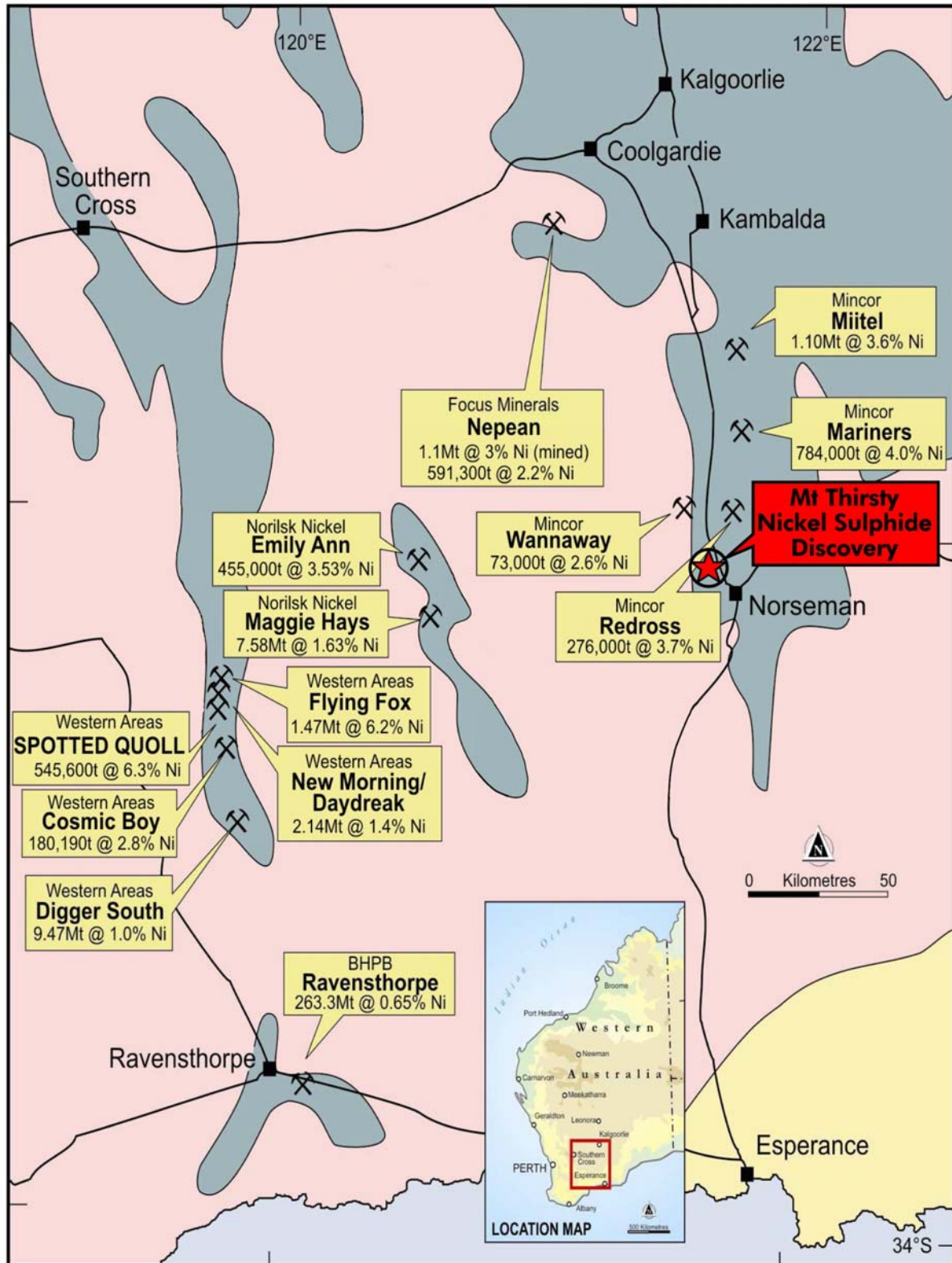


Figure 1: Southern Goldfields Nickel Deposits Showing Location of Mt Thirsty Nickel Sulphide Discovery

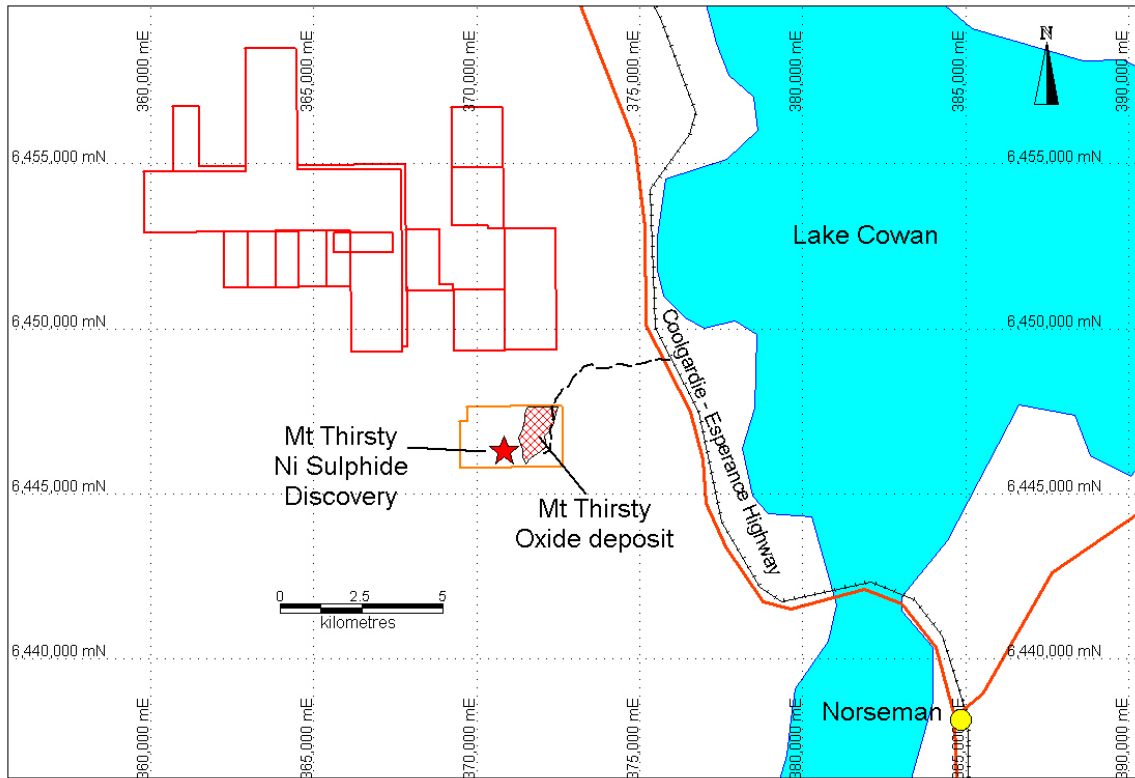


Figure 2: Location Plan Showing New Nickel Discovery, Mt Thirsty Oxide Deposit and Mt Thirsty Joint Venture Tenements

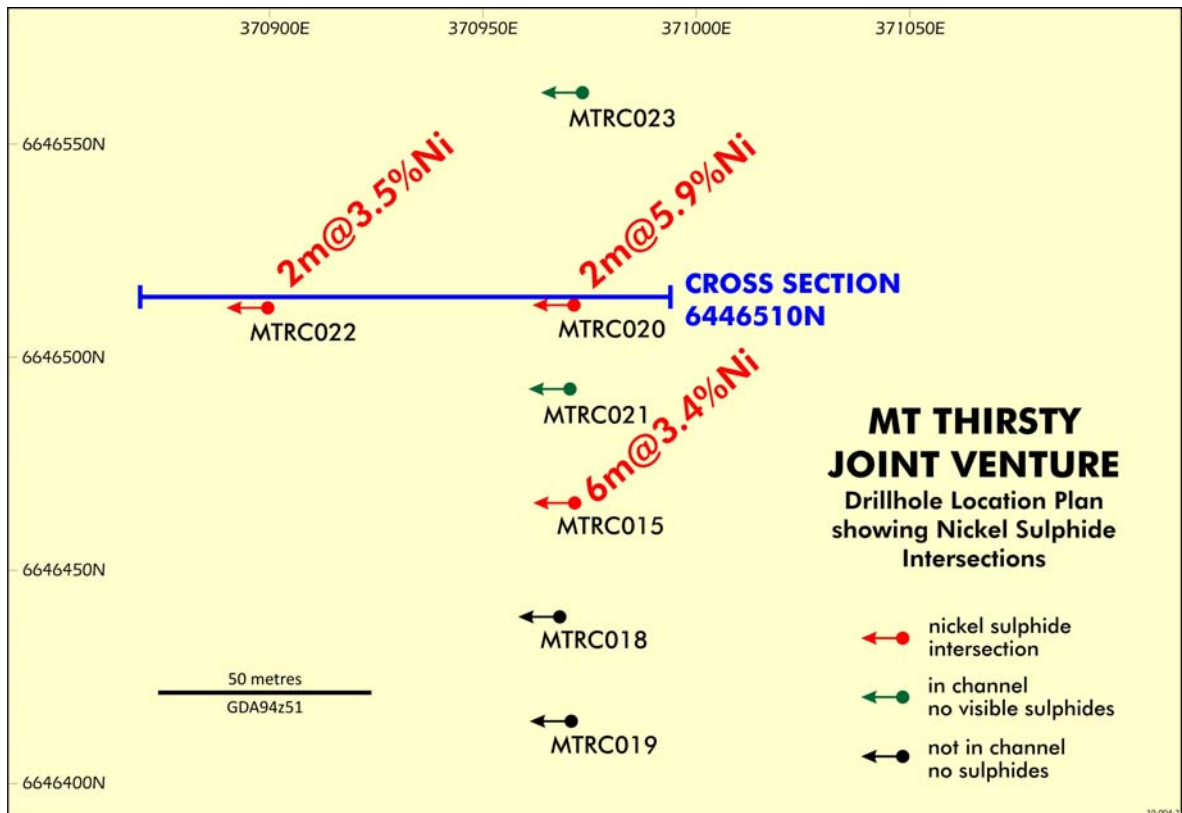


Figure 3: Drill Hole Location Plan Showing Nickel Assays

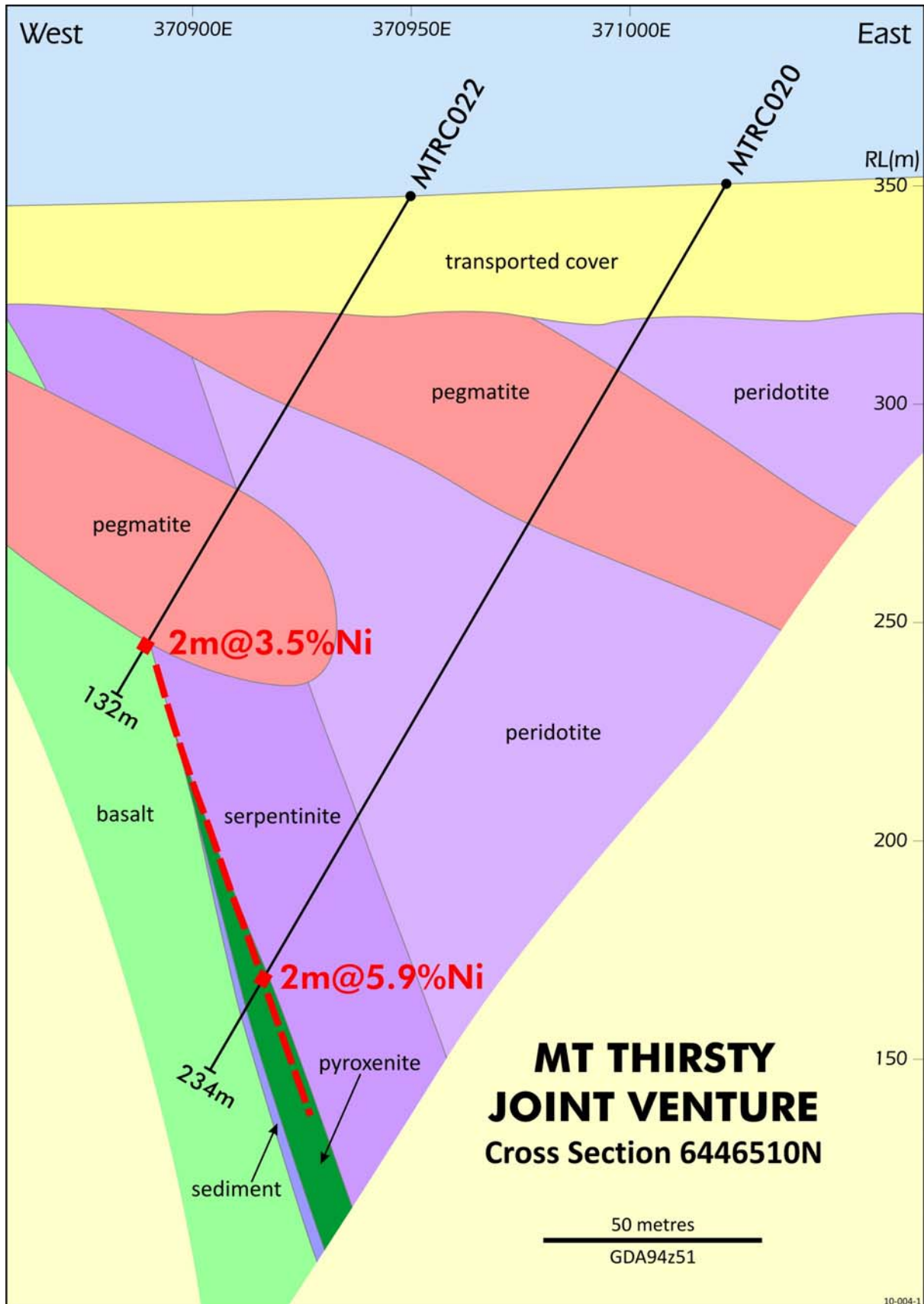


Figure 4: Drill Hole Cross Section 6446510N through Holes MTRC020 & 22 Showing Interpreted Geology and Ni Assays