



ACN 119 057 457

AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT

9 June 2009

Nickel Sulphide Drilling to commence adjacent to the Mt Thirsty Cobalt-Nickel-Manganese Deposit

Highlights

- **Substantial Electromagnetic anomaly identified adjacent to the Mt Thirsty Co-Ni-Mn oxide deposit may be indicating the presence of a primary nickel sulphide source.**
- **Previously identified nickel-sulphide gossans within the vicinity of the electromagnetic anomaly.**
- **Gossans have returned up to 7,500ppm Nickel (0.75% Ni) and 728ppb Palladium.**
- **Mineralisation style may be comparable to Kambalda nickel deposits**
- **Follow-up diamond drilling to commence later on this week.**

Large Electromagnetic (EM) anomaly Identified

Fission Energy Limited ("Fission" or "the Company") and joint venture partner Barra Resources Limited ("Barra") are pleased to announce the commencement of a diamond drilling program to test a substantial Electromagnetic anomaly (EM) adjacent to the Mt Thirsty Co-Ni-Mn oxide deposit. Mt Thirsty is located 20 kilometres north-northwest of Norseman in southern Western Australia.

A surface EM survey was completed late last week to follow-up on several gossanous rock-chip samples representing possible massive to disseminated nickel sulphide mineralisation associated with a basalt-ultramafic contact adjacent to the Mt Thirsty oxide deposit (See Figure 1). The large EM anomaly may be indicating the presence of primary nickel sulphide mineralisation at depth beneath the Mt Thirsty deposit. Several diamond holes have been designed to test the EM anomaly to a depth of some 350 metres. Drilling will commence later this week.

The exploration strategy is based on a geological model similar to basal lava channel embayment type structures observed at Kambalda. Basal lava channel embayments located on ultramafic-basalt contacts are a preferred location for nickel sulphide accumulation in the Kambalda region. Several of these basal embayment type structures have been identified and were recently field evaluated by the Company.

The gossan samples located adjacent to the Mt Thirsty Co-Ni-Mn oxide deposit could be surface expressions of deeper hanging wall nickel sulphide mineralisation. The rock-chip gossan results are set out below (Table 1).

TABLE 1: Gossan rock-chip assay results.

Sample	North	East	Nickel (ppm)	Copper (ppm)	Zinc (ppm)	Palladium (ppb)	Iron (%)
MTROCK017	6447010	372582	2,820	141	347	64	53.2
MTROCK018	6447011	372581	2,223	203	302	116	49.9
MTROCK019	6447010	372581	3,217	194	309	60	52.1
MTROCK020	6447008	372582	2,724	140	290	79	46.1
MTROCK022	6447581	372564	7,537	41	351	32	48.7
MTROCK026	6447000	372568	4,079	153	432	54	53.3
MTROCK027	6447022	372570	3,488	111	400	62	56.3
MTROCK028	6446999	372524	5,280	56	320	88	54.7
MTROCK029	6446980	372511	6,728	20	560	728	29.7

About the Mt Thirsty Cobalt-Nickel-Manganese Project

The Mt Thirsty Project is located 20 kilometres north-northwest of Norseman, Western Australia. The project is under a 50/50 joint venture between Fission subsidiary Meteore Metals Limited and Barra. The project contains JORC Inferred Resources of 14,800,000 tonnes at 0.14% Cobalt, 0.59% Nickel and 0.99% Manganese and a JORC Indicated Resource of 14,230,000 at 0.11% Cobalt, 0.52% Nickel and 0.77% Manganese over an apparent strike of 1.3 kilometres and a width of around 800 metres. The Joint Venture parties are currently working on a pre-feasibility study due for completion during the second half of 2009.



Guy T. Le Page
Director

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 and Mineral Resources is based on information compiled by Guy T Le Page, who is a member of the Australasian Institute of Mining and Metallurgy, and who has more than five years experience in the field of activity being reported on. Mr Le Page is a Director of the Company. Mr Le Page has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Le Page consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.

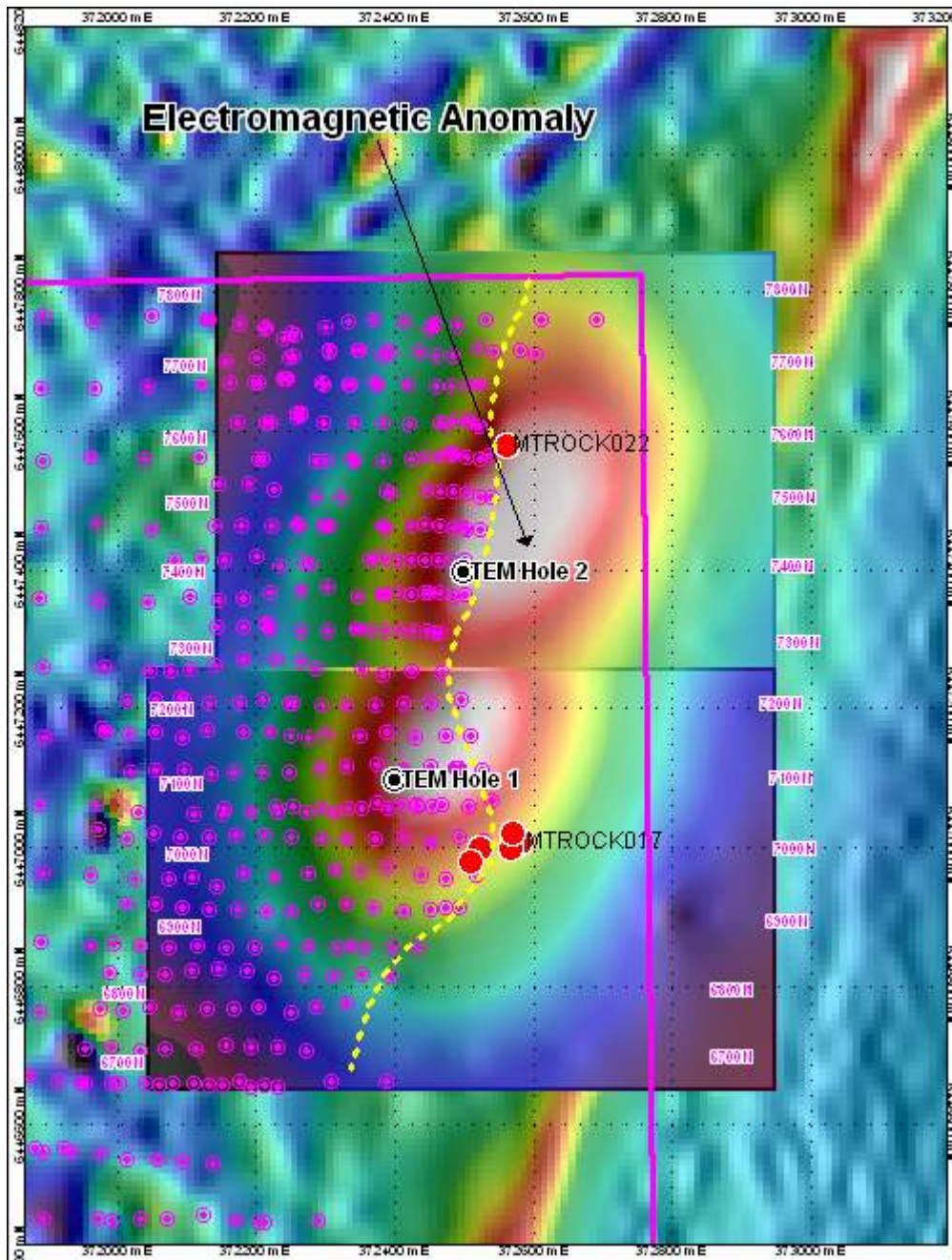


FIGURE 1: Electromagnetic anomaly showing planned diamond holes, Fission-Barra previous aircore drilling (pink dots) and nickel sulphide gossan locations.