

ASX RELEASE
22nd February 2010

Mt Thirsty Co-Ni-Mn Oxide Project
Proceeding to Pre-Feasibility

Fission Energy Limited (ASX: FIS) and 50% Joint Venture partner Barra Resources Limited (ASX: BAR) are pleased to announce the go ahead of a prefeasibility study (PFS) into the development of Mt Thirsty nickel-cobalt-manganese oxide project. The Mt Thirsty Deposit, located 20km NNW of Norseman (Figure 1), has the potential to emerge as a significant world cobalt supplier.

Mt Thirsty has a current JORC compliant Indicated Resource of 14.8 million tonnes at 0.14% Cobalt, 0.59% Nickel and 0.99% Manganese and a JORC compliant Inferred Resource of 14.2 million tonnes at 0.11% Cobalt, 0.52% Nickel and 0.77% Manganese.

Metallurgical consultants Independent Metallurgical Operations Pty Ltd (IMO) have recently completed a process development study which has demonstrated that there are no significant impediments in the production of a nickel-cobalt mixed sulphide precipitate (MSP) and a separate manganese carbonate product from Mt Thirsty oxide ore using low temperature atmospheric leaching. Product samples recently produced from Mt Thirsty oxide ore in recent testwork based on IMO's proposed flowsheet are shown in Plate 1.

Based on the current flowsheet, approximately 27,000 tonnes of MSP and 33,000 tonnes of manganese carbonate could be produced from Mt Thirsty each year.

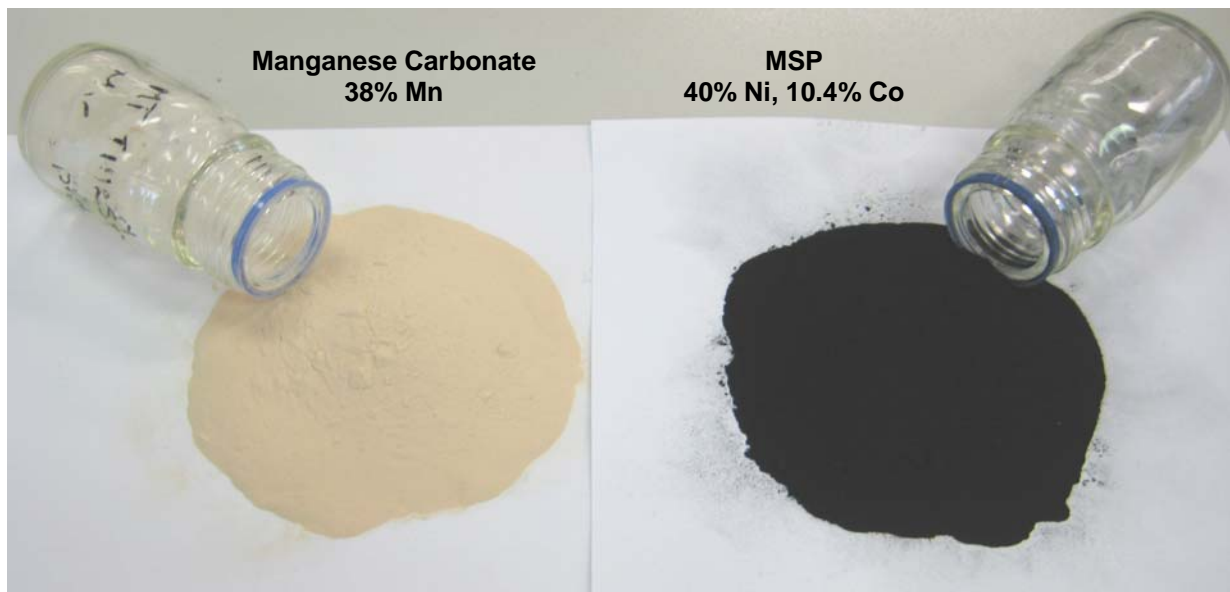


Plate 1: Mt Thirsty Testwork Products

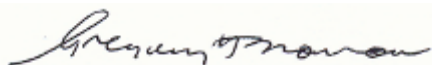
A process package to be distributed to selected globally recognised process engineering companies is currently being prepared by IMO. Following selection of the successful tenderer the PFS will commence in August and be completed by the end of 2010. Further infill drilling to upgrade resource categories and confirmatory metallurgical testwork to produce additional information and additional samples of the likely products will be completed prior to commencement of the PFS.

Compared to other nickel-cobalt oxide projects elsewhere in the world, Mt Thirsty has the following advantages:

- ✓ World class cobalt orebody, with
- ✓ Favourable metallurgy, single stage leach which requires no autoclaves for high recoveries and has low acid consumptions
- ✓ Large proportion of revenue from cobalt which is perceived to have strong future price fundamentals
- ✓ Located in a developed country with low sovereign risk
- ✓ Located in a mining friendly state with very significant experience in the operation of hydrometallurgical treatment plants for nickel laterites
- ✓ Low rainfall area which allows disposal of tailings without the requirement for ocean disposal of plant effluents (compared with many global laterite projects)
- ✓ Good infrastructure – close to main highway, railway, gas pipeline, Esperance port etc.
- ✓ Suitable water source available locally

Pending a favourable outcome to the PFS the joint venturer partners are confident the project has all of the necessary ingredients to attract a major international cobalt refiner/off-take partner to fund a final feasibility and project construction.

Fission is particularly pleased to see real progress in the exciting commercial development of its flagship Mt Thirsty asset.



Greg Solomon
Executive Chairman

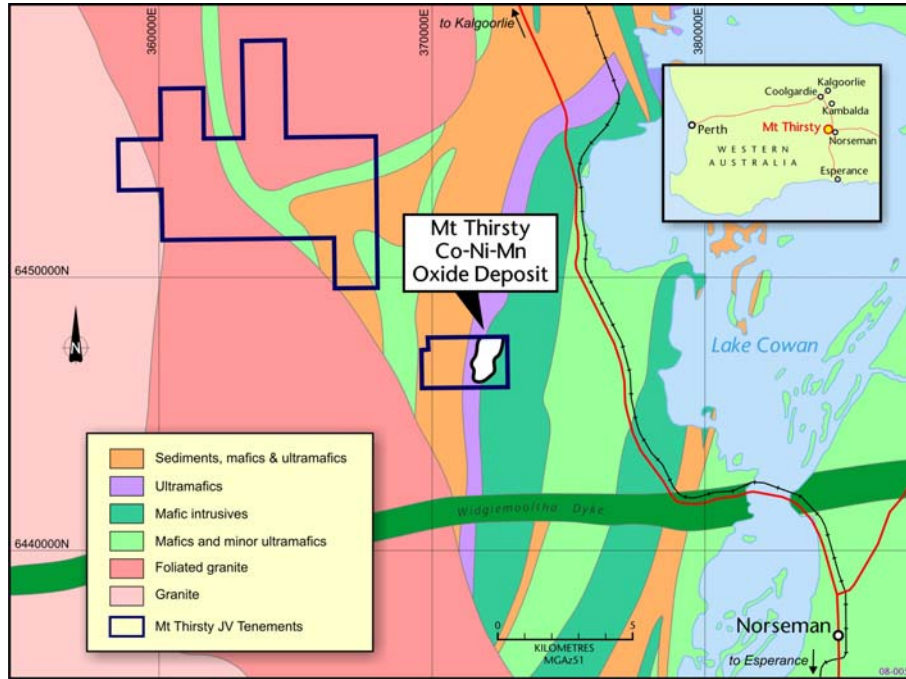


Figure 1: Mt Thirsty Project – Location

The information in this announcement, insofar as it relates to Mineral Exploration activities, Exploration Results or Ore Resources, is based on information compiled by 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.