

1 September 2010

**Media ASX Announcement**

**To:** Company Announcements Office  
Australian Securities Exchange  
Exchange Plaza  
2 The Esplanade  
Perth WA 6000



**ASX: FCR**

**Update**

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**HIGHLIGHTS**

**Turquoise Moon Iron Project**

- Positive results from Turquoise Moon Iron Project scoping study.
- Planned operating capacity of 1 Mtpa merchant pig iron.
- Total Mineral Resource confirmed at approximately 300 Mt @ 30% Fe, comprising approximately 225 Mt @ 29% Fe in the Inferred category and approximately 74 Mt @ 33% Fe in the Indicated category.
- Mine optimization planning completed with stripping ratio of 1:1.
- Rotary hearth and melter selected as preferred processing route.
- Estimated capital cost of USD\$770m and operating costs of USD\$228 per tonne of production of merchant pig iron FOB.
- Financial modelling gives an internal rate of return of 20.8% and a net present value of USD\$817 million (using a 10% discount rate) on an ungeared and post-tax basis assuming a sale price of USD\$450 per tonne of merchant pig iron.
- The Company is proceeding to carry out the studies and other activities that will be required for the grant of a mining right over the Moonlight Deposit.
- Ferrum also has an interest in the De Loskop prospect lying east of Moonlight which contains an exploration target\* of 200 to 1000 Mt of iron ore at a grade of 30% to 40% Fe. Exploration will commence following completion of the AIM listing (see last highlight below).

**Board changes**

- Adrian Griffin resigns as Director but remains as a consultant to the Company.
- Klaus Borowski joins Ferrum board.

**Capital raising**

- Company plans to raise up to \$1.2 million by private placements and to carry out further capital raising in conjunction with London AIM listing.

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*\* The term "target" should not be misunderstood or misconstrued as an estimate of Mineral Resources and Reserves as defined by the JORC Code (2004), and therefore the terms have not been used in this context. It is uncertain if further exploration or feasibility study will result in the determination of a Mineral Resource or Mining Reserve*



## Turquoise Moon Iron Project

Ferrum Crescent Limited (“Ferrum” or the “Company”) has previously announced that it had engaged ProMet Engineers Pty Ltd (“ProMet”) to carry out a scoping study in relation to the Company’s Turquoise Moon Iron Project, which is located in the Limpopo Province of the Republic of South Africa. For the last several weeks, ProMet and Continental Resource Management Pty Ltd (“CRM”) have been carrying out that study, in conjunction with the Company and several other consultants, and the Company is pleased to announce the positive outcome of this study which covers Phase 1 of production being the first 24 years of production. Sufficient resources presently exist to extend Phase 2 operations to almost 50 years.

### Background

Ferrum, through its 74%-owned South African subsidiary, Turquoise Moon Trading 157 (Pty) Ltd (“TMT”), controls the “Moonlight Deposit” located in the Limpopo Province of South Africa. Ferrum aims to develop a Merchant Pig Iron (“MPI”) business based on this resource. ProMet and CRM were engaged to assist the Company by completing a scoping study (“the Report”).

For the purpose of the study, CRM’s scope of work included the geology and resource section, whilst ProMet’s scope of work included ore processing, ironmaking, infrastructure, capital and operating cost estimation as well as compiling the Report. As part of Ferrum’s evaluation of the Project, additional expert studies were also undertaken and the results of these studies are included in the Report.

The Report’s focus is Phase 1 development of the Moonlight Deposit, called the Moonlight Pig Iron Project (the “Project”) situated approximately 320 km north of Johannesburg.

The Moonlight resource occurs within multiple banded iron formation (“BIF”) units. The BIFs have been recrystallized under high-grade metamorphic conditions to produce coarse-grained magnetite-quartz rocks. Within the area of the deposit, the BIFs are present over an east-west distance of 3 km and a north-south distance of 2 km. The BIF units vary from a few metres to 40 m in thickness. In general, they have a flat to shallow dip and are subject to gentle folding. The resource outcrops in the south and central portions of the area.

As has been previously announced, CRM completed a JORC compliant resource estimate for the Moonlight Deposit in April 2010. The ore block model (“OBM”) used for the mining study is estimated to contain a total Mineral Resource of 300 Mt at 30% Fe, with a lower block cut-off of 15%, of which 79 Mt is a near surface, partially oxidized zone. The OBM is estimated to contain an **Indicated Mineral Resource of 74 Mt @ 33% Fe, comprised of 34**

**Mt of oxide mineralization @ 30% Fe and 40 Mt of fresh mineralization @ 35% Fe.** Much of the Inferred Mineral Resource of 225 Mt @ 29% Fe can be elevated with confidence by increasing the drill density.

The BIF units extend to the west onto adjacent farms within the Project area. Due to lack of drill data and other information, estimates of this mineralization cannot be included in the current resource estimate. Ferrum has plans to undertake drilling in these areas and is confident that the results of these investigations will contribute significantly to the overall total resource.

The Resource estimate employed geostatistical Inverse Distance Squared modelling to produce ore block models of the mineralization within the deposit. The magnetite grains within the BIF are partly altered to hematite within the oxidized zone and CRM therefore reported the Resource in two zones, an upper Oxidized Zone and a lower Fresh Zone.

### **Summary of results**

The Report has built upon the work undertaken by CRM in April, and results may be summarized as follows.

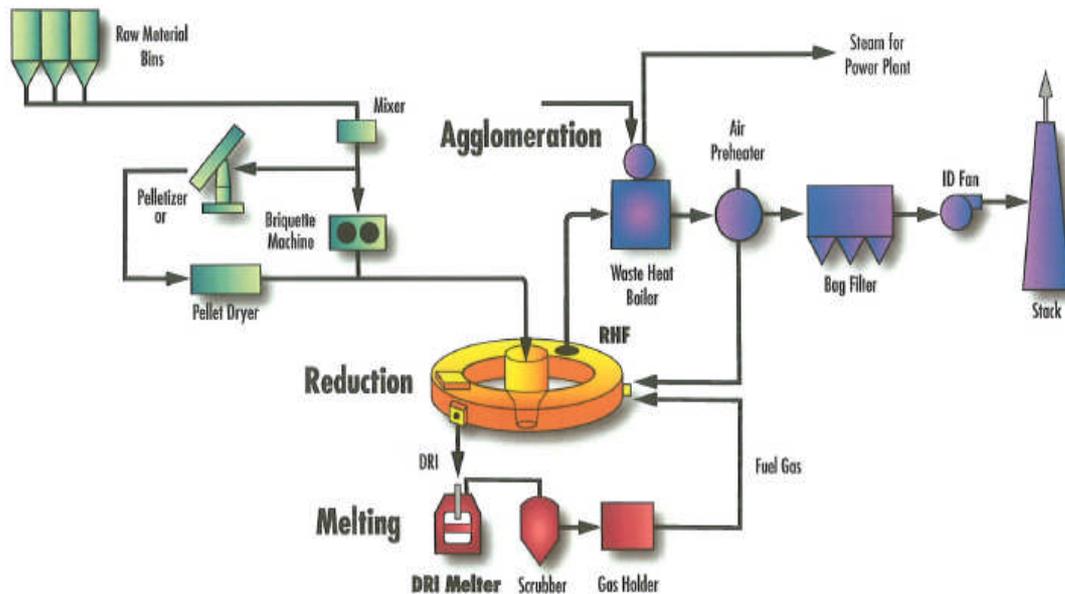
### **Mining and processing:**

Mine pit optimization work based on utilizing the Oxidized Zone indicates an average strip ratio of 1:1 for the Phase 1 operation, which is planned for 24 years of mine production. Optimizations beyond this limit have not been undertaken and will require additional drilling and constitute Phase 2 which will extend the operating life towards 50 years.

It is intended that the deposit would be mined by conventional open pit methods followed by crushing, grinding and magnetic separation to produce a concentrate comparable to the best in the world. A metallurgical testwork program has been conducted under ProMet's supervision to provide initial estimates of the final grind size, grade, recovery and grinding characteristics of the concentrate from the Moonlight Deposit.

Mining, crushing and beneficiation processes will be conventional and conform to common practice in the magnetite industry. The choice of iron-making process has undergone an analysis of the available technologies to maximize project value. Rotary hearth furnace and melter (refer Figure 1) has been chosen as the preferred iron-making technology, and rotary hearth furnaces are available from a number of internationally recognized steel plant suppliers.

**Figure 1 Design route**



**Infrastructure, consumables and logistics:**

The production of MPI requires additional raw materials to the magnetite concentrate and the location of the Project is such that a ready supply of these materials can be accessed locally. To illustrate this point:

- Good quality bituminous coal is available from current coal mining ventures in the Waterberg and Highveld coal fields, both in close proximity to the Project, and could also be available from future coal projects in neighbouring Botswana and in South Africa.
- Recent discoveries of substantial resources of coal bed methane (“CBM”) gas in the Waterberg coal field and north-eastern Botswana, both within 100 km from the Project, mean that the Project is ideally situated to exploit this energy source in addition to coal.
- The Project would furthermore be self-sufficient for its flux requirements from a nearby marble deposit (metamorphosed limestone) that is within the tenement boundary.

For transport requirements, the Project is serviced by South Africa’s mature road and rail transport network and the local rail authority, Transnet, has committed substantial investment over the near term to upgrade and maintain the rail network and rolling stock. There is access to a sealed national highway within 10 km and rail within 170 km of the Project.

The chosen iron-making process lends itself to co-generation of electricity from the waste heat from the process. The level of co-generation (65 MW) will make the plant substantially self-sufficient and hence only 30 MW additional power generation is required. Given the prevailing shortage of electricity in Southern Africa, the Project's ability to be self-sufficient for its electricity requirements is seen as a prerequisite for a successful project.

#### **Conclusions from financial modelling:**

The Project strategy divorces the revenue stream from the iron ore/coking coal influence creating an environment of stable input cost for the MPI production and a great competitive advantage over MPI producers that are subject to escalating ore prices. The chosen iron-making process can use cheap thermal coal (in contrast to expensive coking coal used in other processes). The ability to mine its own ore will allow the Project to continue in a profitable production mode even when other producers are operating at a loss or have temporarily had to cease operations.

Phase 1 of the Project can be summarized as follows:

**Capital Cost: US\$770M including US\$67M contingency**

**Operating Cost: US\$228/t MPI (FOB)**

Based on these costs, the Project generates, on a post tax and ungeared basis using a product price of US\$450/t, an:

**Internal Rate of Return ("IRR") of 20.8%; and**

**Net Present Value ("NPV") of US\$817M at a discount rate of 10%.**

In addition, a number of up-side potentials exist for the Project and include:

- an ore body that supports a mine life greater than the Phase 1 operation.
- selling the product at a premium price because of its high quality;
- increased throughput/incremental capacity expansion and hence increased returns.

As previously announced, the Company has had enough information to prepare for mining right application over the Moonlight Deposit, and this was accepted by the relevant authorities.

#### **Feasibility program and AIM listing**

The Company intends to build upon the work already carried out with a view to embarking upon a detailed feasibility study late in the calendar year 2010.

As previously announced, it is also planned to carry out a capital raising in conjunction with listing on the London Stock Exchange's AIM board in the near future. In the meantime, an interim capital raising by issuing 10 million shares for \$1.2 million (at \$0.12 per share) is currently being planned, and the results will be announced when this is completed.

## **De Loskop Prospect**

Located approximately 150 km east of Moonlight and only 50 km north of Polokwane, the regional service centre, the De Loskop prospect contains an exploration target\* within the range of 200 to 1,000 Mt of iron mineralization at a grade of between 30% Fe and 40% Fe. Being close to Polokwane, the De Loskop prospect has good infrastructure nearby and will be explored in greater detail in the coming months.

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## **Changes to Board**

The Directors also wish to announce that effective immediately Mr Adrian Griffin has resigned as a Director of the Company and that Mr Klaus Borowski will join the Board as a Non-Executive Director.

Mr Griffin, who has been overseeing the scoping study and associated activities in relation to the Company's Turquoise Moon Iron Project, is resigning as Technical Director to pursue other business opportunities. He will remain available as a consultant to the Company.

Mr Borowski is a metallurgical engineer with extensive experience in the minerals processing industry, specifically in the processing of iron including in South Africa. His previous positions include Managing Director of Krupp in South Africa, and he was on the steering committee at Saldhana Steel.

Mr Ed Nealon, the Chairman of the Ferrum Board, expressed his appreciation for Mr Griffin's efforts and for the high quality technical work that he has done for Ferrum, adding that the management of the Turquoise Moon Project will be based from now in the Republic of South Africa. "We look forward", Mr Nealon said, "to progressing this project and to this end are finalizing the Company's preparations to be in a position to carry out a full feasibility study and satisfy the relevant requirements for the grant of a mining right in respect of the Moonlight Deposit. Klaus will undoubtedly be a valuable contributor to the Company going forward".

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For more information on the Company visit [www.ferrumcrescent.com](http://www.ferrumcrescent.com)

**Competent Person's Statement:**

*The information in this report is based on information compiled by John Doepel, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Doepel has sufficient experience relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Doepel is a consultant to the mining industry. This report is issued with Mr Doepel's consent as to the form and context in which the exploration results appear.*