



**GRANGE**  
RESOURCES LIMITED  
A.C.N. 009 132 405

**STOCK EXCHANGE ANNOUNCEMENT**

**SOUTHDOWN MAGNETITE PROJECT PROGRESS REPORT**

**HIGHLIGHTS**

- 100 diamond drill holes aggregating 28,723 metres have been completed, representing approximately 80% of the planned resource drilling.
- Drilling results indicate that the target global resource for the project will be achievable.
- Analytical results indicate that a uniform and high-grade concentrate can be produced with a magnetite recovery close to 40%.
- Results show the mineralisation is consistent both in thickness and quality over the 6km strike length of the deposit.
- Progress with discussions for provision of infrastructure required for the development of the Southdown Project.
- Commencement of environmental approval process for the proposed pellet plant at Kemaman on the east coast of Malaysia.
- Burnvoir Corporate Finance appointed to advise on structuring and financing of the Southdown Project.

## **PROJECT OVERVIEW**

The Southdown Magnetite Project is located 90km northeast of the Port of Albany on the south coast of Western Australia. The project comprises three granted mining leases covering an area of approximately 1700 hectares on freehold farming property. Grange Resources is undertaking a bankable feasibility on the development of the Southdown magnetite resource to produce iron ore pellets.

The project scope being studied is as follows:

### **Mining and Concentration**

Magnetite ore would be mined at Southdown at an annual rate of approximately 17 million tonnes per year with a stripping ratio of about 2.6:1.0. The grade of the magnetite ore was assumed to be 36.6% based on 1986/7 drilling and Davis Tube test work, however initial 2004/05 drilling results indicate that this grade may be marginally higher. Annual production of magnetite concentrate at 69% Fe would be approximately 6.5 million tonnes produced via two stages of magnetic separation. Due to the nature of the Southdown magnetite mineralization, primary separation is expected to be made at a relatively coarse particle size (0.2mm), which significantly reduces fine grinding requirements.

Based on target resources contained in the Southdown mining leases, the project life is expected to be in excess of 20 years

### **Transport**

The magnetite concentrate would be transported to the Port of Albany through a buried slurry pipeline. At the Port, the magnetite concentrate would be dewatered and stockpiled in an enclosed shed awaiting shipment overseas. Recovered water would be returned to the mine site through a return water pipe, also included in the slurry pipeline trench.

### **Pelletisation**

Magnetite concentrate is the most suitable feed for the production of iron ore pellets due to the exothermic properties of magnetite in conversion to hematite during the pelletisation process. Pelletisation would be undertaken in a new plant to be constructed at Kemaman on the East coast of peninsular Malaysia.

## **SOUTHDOWN BANKABLE FEASIBILITY STUDY (BFS)**

The Southdown BFS commenced in February 2005 and is progressing with work being undertaken on most aspects of the project. The technical aspects of the BFS are scheduled to be completed by the end of 2005 with environmental and project approvals expected by mid 2006.

### **Exploration and Resource Evaluation**

Diamond drilling to determine the size and grade of the magnetite deposit is continuing with four rigs working double shifts. During the June quarter a further 43 holes aggregating 12,676 metres were drilled. To date 100 holes aggregating 28,723 metres have been completed. A further 37 holes aggregating approximately 8,500

metres remain to be drilled to complete the current resource drilling programme and this is expected to be finished during the third quarter of 2005. The location of the resource drill holes and the surface geological interpretation are shown on figure 1. In addition to the resource drilling further holes have been planned for metallurgical samples and geotechnical data. This drilling will be undertaken immediately following the completion of the resource drilling programme and is expected to be completed by October 2005.

Interpretation of drilling data received to date indicates that the Southdown deposit consists of a gently east-plunging, overturned tightly folded syncline that is offset by northwest and northeast trending faults (figure 1). The core of the syncline is complexly folded and occupied by intensely metamorphosed quartz-magnetite-clinopyroxene gneiss and garnet-biotite gneiss. An interim geological model was completed during June and will assist in targeting future drilling. The vertical depth to the keel of the syncline is approximately 300 metres in the western end of the deposit and increases to a vertical depth in excess of 400 metres in the eastern portion of the deposit. Additional drilling is being planned to determine the depth extent of the deposit in the eastern zone. The thickness of the magnetite mineralisation ranges from 70 to 100 metres and averages 85 metres. Typical cross sections of the deposit are shown in figures 2 and 3 and the locations of the sections are shown on figure 1.

The drilling results received to date indicate that the target global resource for the project will be achievable. It is planned to have a preliminary resource statement for the deposit by the September quarter of 2005.

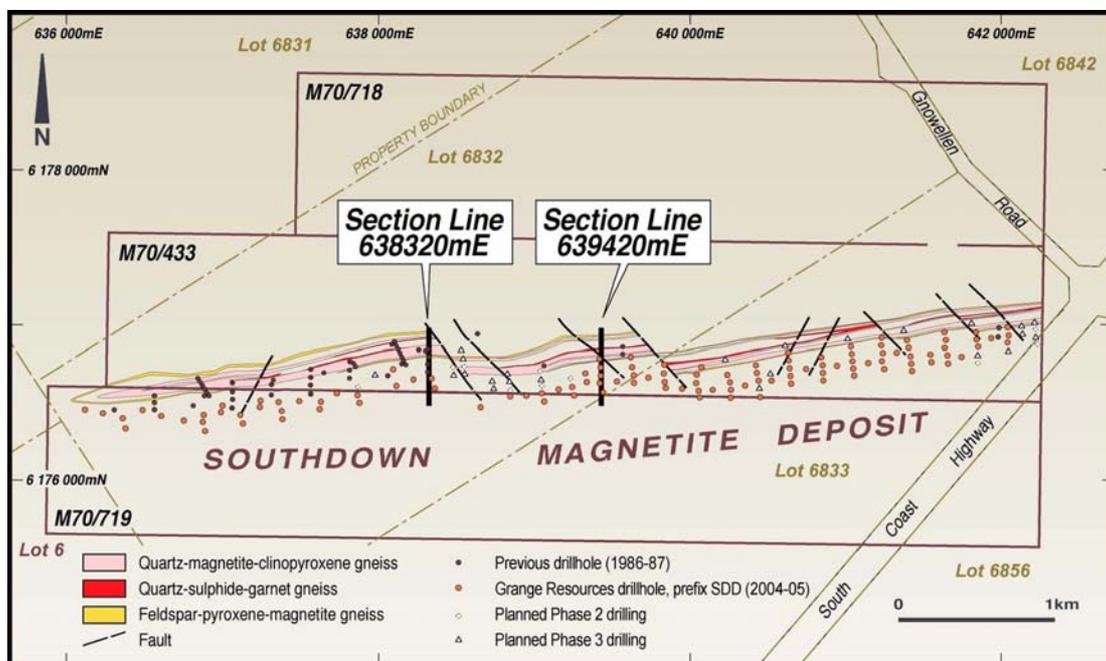


Figure 1: Interpreted Geology and Drill Hole Location Plan

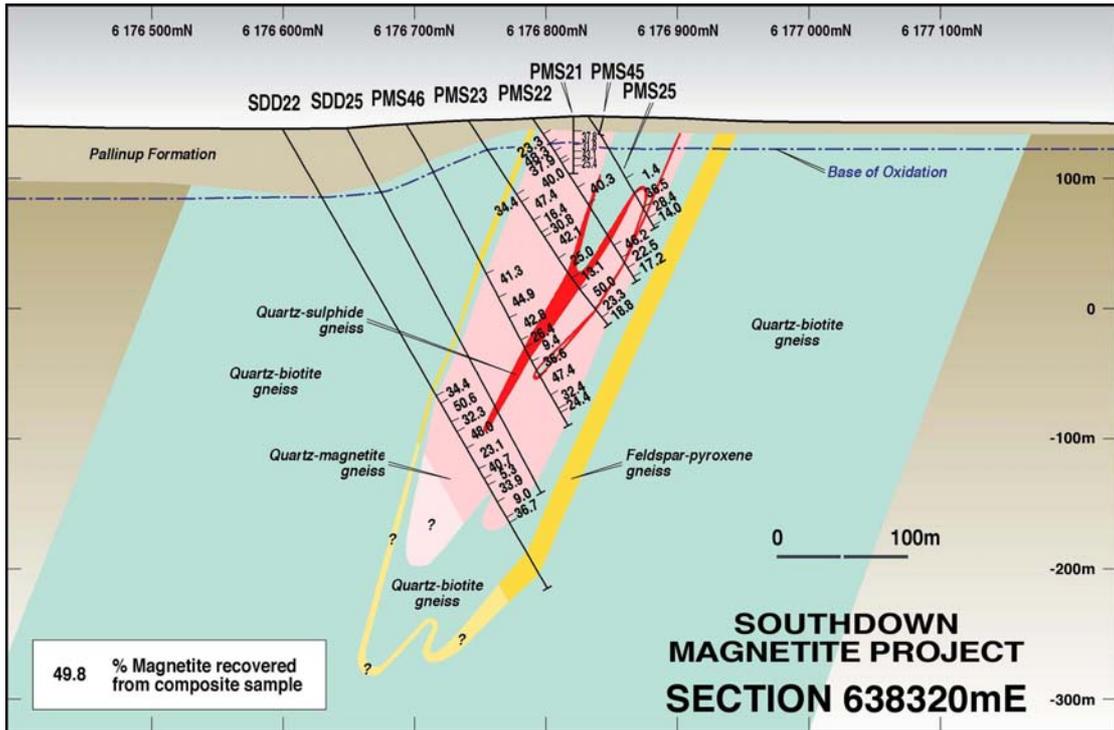


Figure 2: Interpreted Cross Section 638320mE

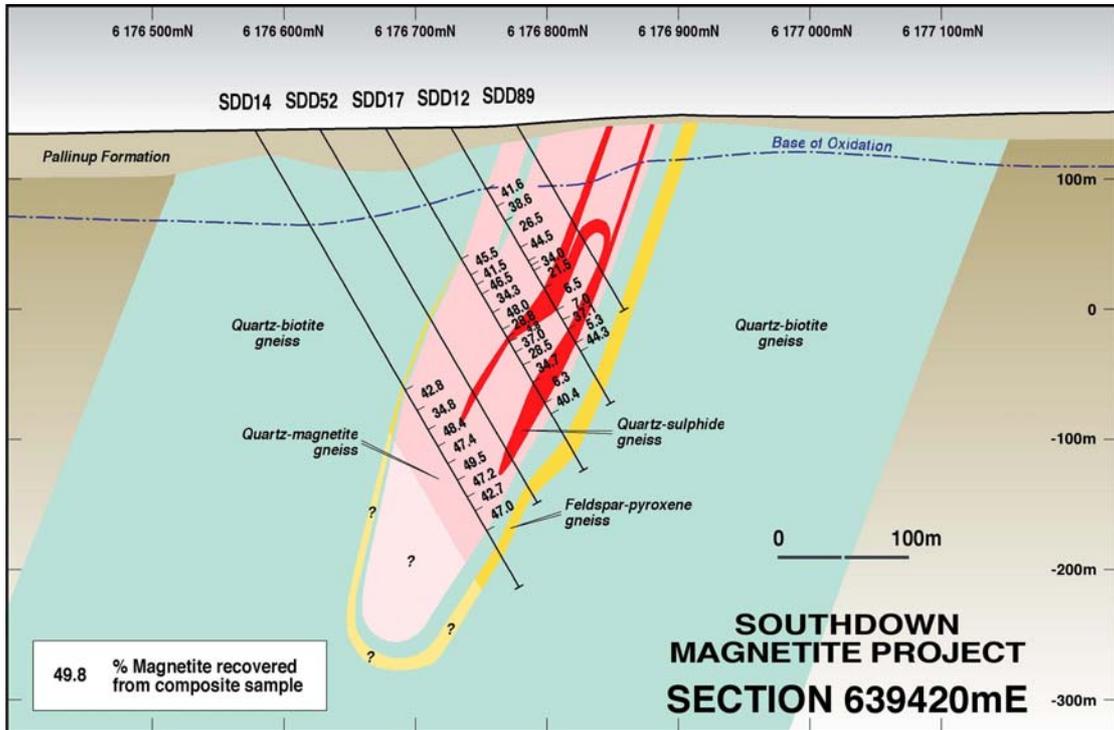


Figure 3: Interpreted Cross Section 639420mE

## **Magnetite Content and Analyses**

Drill core is being cut on site and submitted to the laboratory for sample preparation and test work (Davis Tube Recovery) to determine the magnetite content. The magnetic fraction is then assayed by X-ray Fluorescence Spectroscopy to determine its iron content and quality. To date approximately 4,000 samples from 85 drill holes have been submitted to the laboratory for analysis. Approximately 1800 Davis Tube Recovery (DTR) and assays have been received for the first 34 diamond drill holes in the 2004/05 programme and these are summarised in Table 1.

<b>TABLE 1 SOUTHDOWN MAGNETITE PROJECT DAVIS TUBE RECOVERY AND ASSAY DATA</b>							
<b>Number of Drill Holes.</b>	<b>Number of Samples</b>	<b>% Magnetic Weight Recovery</b>	<b>Fe %</b>	<b>SiO<sub>2</sub> %</b>	<b>Al<sub>2</sub>O<sub>3</sub> %</b>	<b>P %</b>	<b>S %</b>
<b>34</b>	<b>1778</b>	<b>39.7</b>	<b>68.9</b>	<b>1.99</b>	<b>1.42</b>	<b>0.002</b>	<b>0.51</b>

These early results indicate a relatively uniform and high concentrate grade can be produced at a magnetite recovery of approximately 40%. Further grinding tests are being undertaken to determine the optimum concentrate grade.

Processing options to reduce the sulphur content in the final pellet product are being assessed as part of the feasibility study and include selective mining, finer grinding and flotation to remove sulphur minerals from the magnetite concentrate and oxidation in the pelletisation process.

## **Southdown Infrastructure**

### **Slurry Pipeline Alignment**

Two alternative alignments have been identified for the concentrate slurry pipeline between the Southdown concentrator and the port of Albany. Most landowners along these alignments have been contacted and met on site. Follow up meetings and negotiations are planned.

### **Power Supply**

Western Power Networks have completed a study to evaluate the optimum transmission line alignment and technical requirements for the supply of electricity to the Southdown mine and concentrator. A new 132kV transmission line from Muja to Kojonup and then to Southdown is proposed. The Southdown Project will be classed as a contestable customer so Grange will be able to negotiate electricity supply terms and price from market participants. Negotiations in respect to the transmission line with Western Power Networks are ongoing.

## **Water Supply**

The Water Corporation is considering a proposal from Grange Resources Ltd to use wastewater generated at Albany to meet the majority of the project's water requirements for Southdown. The project is estimated to need approximately 2.3Gl per year, of which the wastewater could provide up to 1.8Gl per year. While the generation of wastewater is expected to increase as Albany expands, the initial water requirements for Southdown will need to be supplemented by ground water. Ground water investigations have been commenced and negotiations with the Water Corporation are ongoing.

## **Albany Port**

Following the completion of the initial berth and channel probing study in February 2005, which established that it was feasible to dredge without encountering rock, a number of studies have been initiated to evaluate berth and channel dredging options and to establish vessel under keel clearance requirements. Wave rider buoys have been installed in King George Sound along with tidal current meters. A seismic survey of the harbour and channel has also been completed. Preliminary layouts for Southdown facilities at the Port have been prepared, including the storage shed, filter plant, thickener and tanks.

## **Kemaman Infrastructure**

### **Kemaman West Wharf**

In February, Grange Resources entered into a Heads of Agreement with subsidiaries of Road Builder (M) Holdings Bhd to secure the future use of infrastructure in Malaysia comprising a wharf for future ship unloading/loading and up to 60 hectares of land for the pellet plant at Kemaman on the East coast of peninsular Malaysia.

## **Power Supply**

Tenaga Nasional Berhad (TNB) is the national electricity provider for Malaysia. High voltage power is available from a TNB substation immediately next to the pellet plant site. Discussions have been held with TNB regarding the Project's power requirements. TNB have indicated that they would be able to supply power to an agreed location within the pellet plant site via a 132kV line.

## **Natural Gas Supply**

Natural Gas for the pellet plant is available from the national supplier, Petronas Gas via a pipeline that runs along a road adjacent to the pellet plant site. Meetings have been held with Petronas to discuss the project's requirements. Petronas Gas would supply the gas to the pellet plant site via a new lateral from the pipeline to a designated supply point on the pellet plant site. In order for to commence the supply process, the Project will need to make an application for supply to Petronas Gas.

## **Conveyor Corridor**

A meeting was attended with the State Government of Terengganu together with the various authorities and infrastructure groups with services in or around the services corridor. It was agreed that the Project would commission a survey of the corridor, with the surveyor to liaise with the authorities to determine the exact location of any services currently in place on the corridor.

Accordingly a detailed scope of work was prepared for the survey and submitted through Road Builder to a survey group based in Kuala Terengganu. As well as the corridor it is proposed to fully survey the West Wharf and the pellet plant site.

## **Southdown Environmental Approvals**

The first round of environmental surveys at Southdown and along the possible pipeline routes have been undertaken. These surveys have involved flora and fauna assessments of the potentially impacted areas of development. The second round of environmental surveys will be conducted in the October-November 2005 period.

Grange has agreed to progress the approvals for the Southdown Project via the Department of Industry and Resources' new Project Approvals Coordination Unit ("PACU"). The Project Definition Document ("PDD") will be lodged with PACU in July 2005 for circulation amongst all relevant government agencies.

## **Kemaman Environmental Approvals**

Perunding Utama Sdn Bhd (PU) have been appointed as the environmental consultants for the Project in Malaysia. An initial meeting and a site inspection was held with PU to commence the environmental work for the Kemaman site during June 2005.

A meeting has been held with the Malaysian Government's Department of the Environment for an initial project briefing. The approvals process should take 7 months unless there are substantial issues arise that were not adequately addressed during the assessment process.

## **Burnvoir Corporate Finance**

Burnvoir Corporate Finance have been appointed by Grange to advise on the structuring and financing of the Southdown Project. Grange anticipates new participants will be introduced into the project in due course.

For further information in relation to this announcement or the Company, visit the Grange Resources Limited website at [www.grangeresources.com.au](http://www.grangeresources.com.au) or alternatively contact Mr Alec Pismiris on (+618) 9321 1118.

## **ALEC PISMIRIS**

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