Deep Yellow Limited

ASX Announcement **ASX Code: DYL**

14 February 2011

SHIYELA IRON PROJECT

RESULTS OF PRELIMINARY ASSESSMENT AND TESTWORK

Deep Yellow Limited (ASX Code: **DYL**) is pleased to announce that it has received the results of a review of the preliminary testwork conducted on its **Shiyela Iron Project** in Namibia from ProMet Engineers Pty Ltd (ProMet). ProMet has specialist expertise in the beneficiation, agglomeration and pelletising of all types of iron ores and has intimate knowledge of all aspects of iron and steel making technologies.

DYL's Managing Director, Greg Cochran welcomed the encouraging results. "We are becoming increasingly optimistic that DYL has discovered a magnetite deposit that undoubtedly has development potential. Given the project's inherent infrastructural advantages, it may offer an aspiring producer an early and rapid entry into the iron ore market."

Currently, the Shiyela project, which is operated by DYL's wholly-owned Namibian subsidiary **Reptile Uranium Namibia (Pty) Ltd (RUN)**, comprises two shallow, extensive magnetite bodies (M62 and M63) with magnetite content of between 15% and 75%. A drill programme is underway for an initial Mineral Resource estimate due for completion in the second quarter of 2011. From the testwork to date it has been determined that Shiyela magnetite has:

- Excellent metallurgical characteristics with extremely low silica and low deleterious elements;
- Three ore types that are all considered to be coarse grained with the potential to produce excellent quality products; and
- Ore that could be beneficiated at the mine site by Dry Magnetic Separation (DMS) requiring no chemicals thus minimising the potential environmental impact.

INTRODUCTION

The Shiyela project comprises an aeromagnetic anomaly some 18 kilometres in extent with two extensive magnetite bodies (M62 and M63) with magnetite content of between 15% and 75%. Mineralisation was discovered in 2008 when a prospect hole made a 340 metre magnetite intercept. Recently three 50 kilogram magnetite samples were submitted to AMMTEC (Perth) for laboratory testwork.

The samples, which consisted of a coarse grained ore type, a finer grained ore type and an oxidised hematite ore type with a grain size between the coarse and the fine, were subject to the following testwork:

- Optimum grinding curve and tailings rejection assessment;
- Coarse Dry Magnetic Separation on each of the samples;
- Crushing Work Index, Bond Work Index, Abrasion Index and Unconfined Compressive Strength; and
- Davis Tube Recovery Testwork.

ProMet conducted a review of the preliminary results to determine if there were any potential metallurgical issues with the deposit that may raise processing concerns. The testwork demonstrated that the three samples:

- Had excellent metallurgical characteristics with extremely low silica and low deleterious elements;
- Are all considered to be coarse grained with the potential to produce excellent quality products;
- Could generate ore that could be beneficiated at the mine site by Dry Magnetic Separation (DMS) requiring no chemicals thus minimising the potential environmental impact of the operation; and
- Had a relatively high abrasion index and that the Bond Work Index (BWI) is trending to high at 18 to 21 kWh/t (although fine grinding should not be required).

The coarse grained nature of the samples and relatively easy upgrading indicate that ore derived from these deposits will likely be very viable – depending on the cost of transport and providing infrastructure to site. The current preference would be to fully process ore at the mine site unless transport costs are very low. However this will be influenced by the cost of providing water and power to the site. The relatively high abrasion index results could result in higher operating costs in the High-Pressure Grinding Rolls circuit (HPGR). It was also noted that DMS of the hematite sample was not particularly successful and that it may have to by-pass the circuit.

Note: A glossary of terminology used in the forthcoming section which covers the crushing, grinding and recovery testwork has been included as Appendix 1.

PRELIMINARY RESULTS

Iron Versus Silica

The first analysis that ProMet undertook was plotting iron (Fe) versus silica (SiO_2) on all the data provided (head and concentrate grades). This determines if there are any immediate unusual features or different types of ore.

The data shows that essentially there is only one Fe v SiO_2 relationship which is linear for all three ore types tested. A graph for the coarse ore sample is given in Figure 1.

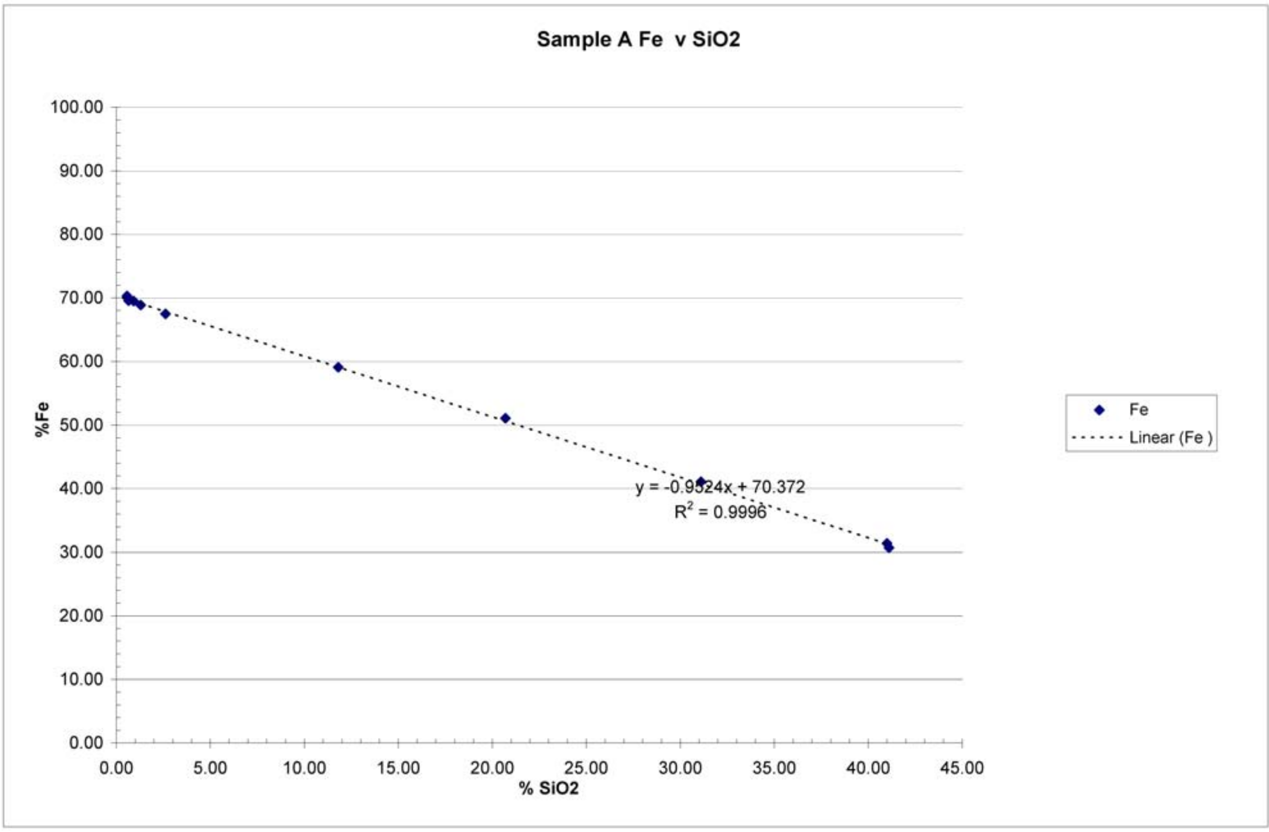

Figure 1: Plot of Iron versus Silica – Coarse Magnetite Sample

Optimum Grind Tests

Three samples were tested – Sample A representing a coarse grained ore type, Sample B is a finer grained ore type – the precise ore split of these two types is currently being investigated. The third sample Sample C, was an oxidised hematite ore type – with a grain size between A and B.

Results for Sample A showed that a 4.5% silica content can be obtained at 80% passing 330 micron – a very coarse result – which has very positive implications for grinding costs. A Direct Reduction (DR) grade (<1.5% SiO_2) can be obtained at a coarse size of 80% passing 180 micron

Results for Sample A (Figure 2) show a very sharp drop in silica between 500 and 300 micron – a feature of very coarse grained magnetite.

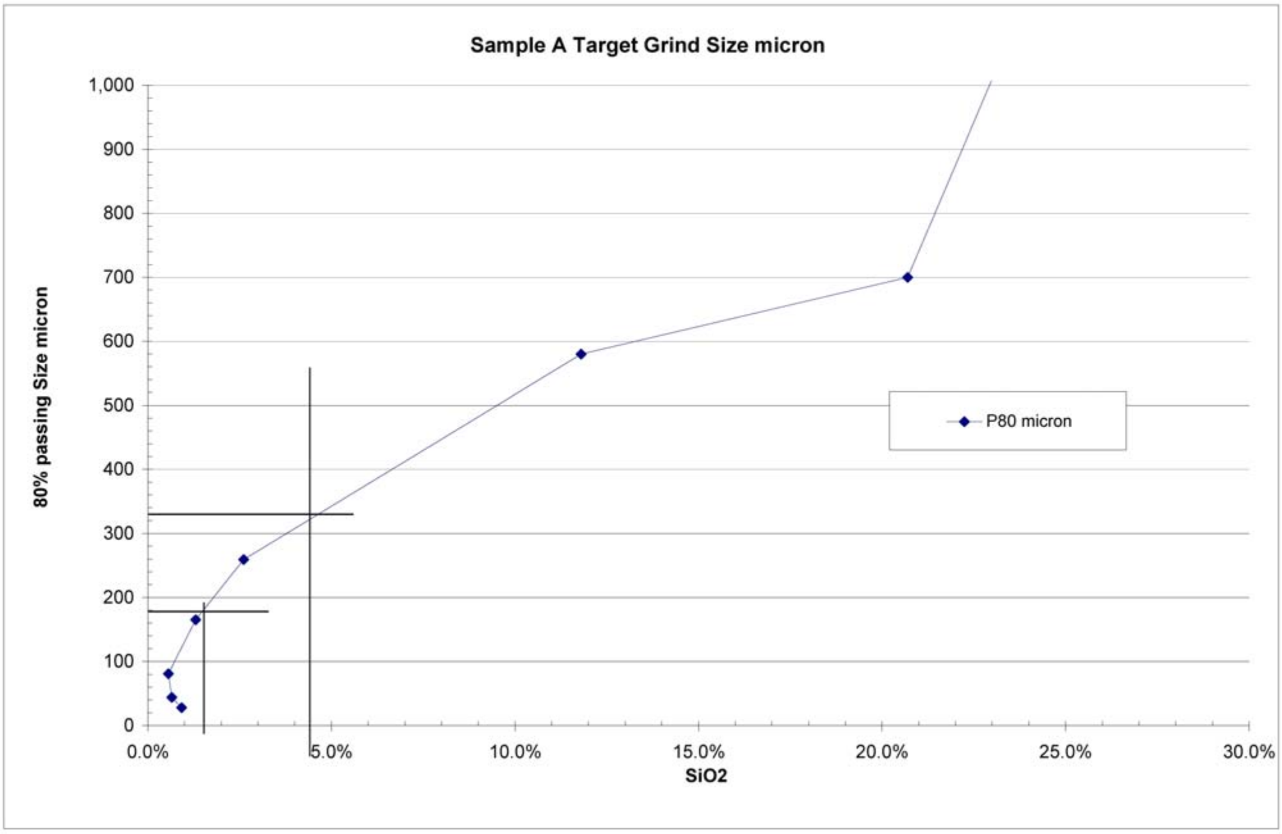

Figure 2: Silica Content versus Grind Size Plot

With Sample B the liberation size is much finer. Blast Furnace (BF) grade is obtained at 80% passing 100 micron while the DR grade is not reached just by grinding, even at 80% -35 micron.

The hematite sample, Sample C, shows that at 80% passing 150 μm fraction the silica content will be 1.15%. The magnetite in the hematite sample is coarser than Sample B, but is finer than Sample A. A DR grade can be obtained from Sample C at ~200 μm.

Tailing Rejection

This data shows the size fraction at which significant tailings can be rejected.

For Sample A roughly 50% of the tailings is produced at 80% passing 6 mm indicating the potential for processing by dry magnetic separation only and then transporting the pre-concentrate for final processing. The ore weight would be reduced by 35% at this size and the weight recovery increased from 20% to 34%.

A reduction to 1 mm would reject 65% of the feed weight and increase the weight recovery to 60%.

Both Sample A and B DMS upgrades seem to be achieved with little loss of magnetic Fe.

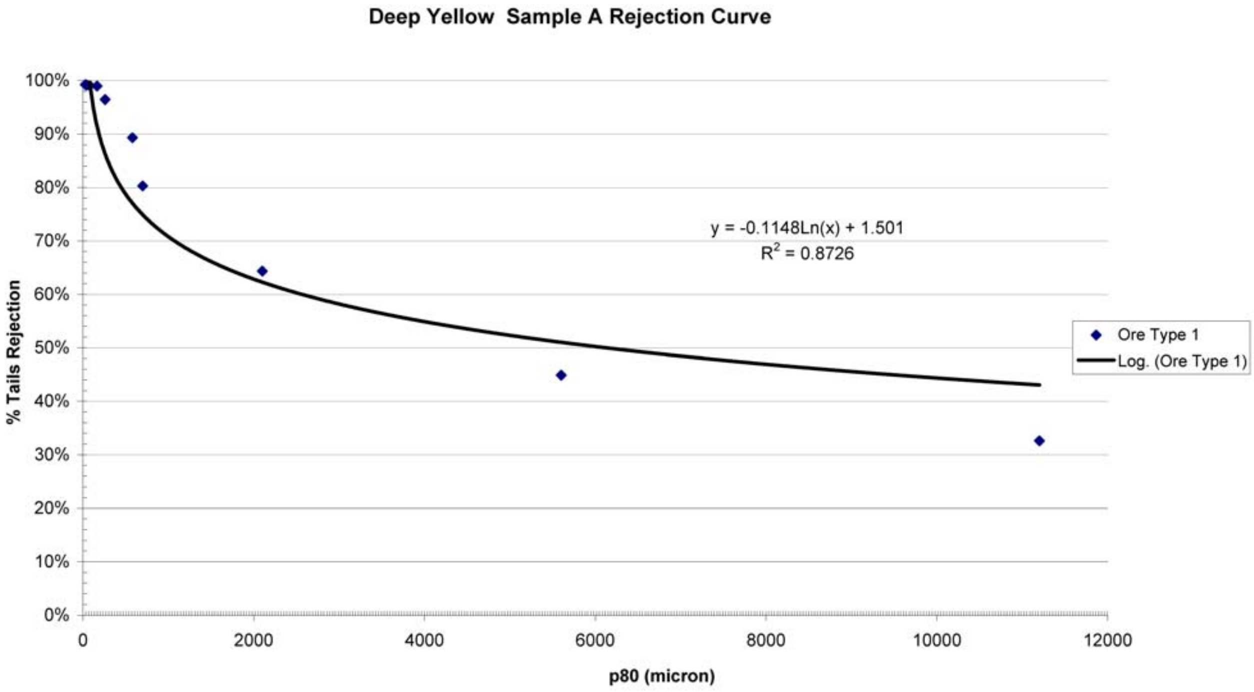

Figure 3: Coarse Sample Rejection Curve

A review of the Fe yield to magnetics (Figure 4) shows that the dry magnetic results and wet magnetic results are on different curves. At 1 mm and 3 mm the Fe yield dropped dramatically yet in the wet environment it picked up again. This is probably a function of the effective gauss level on the surface of the wet drum and the dry drum.

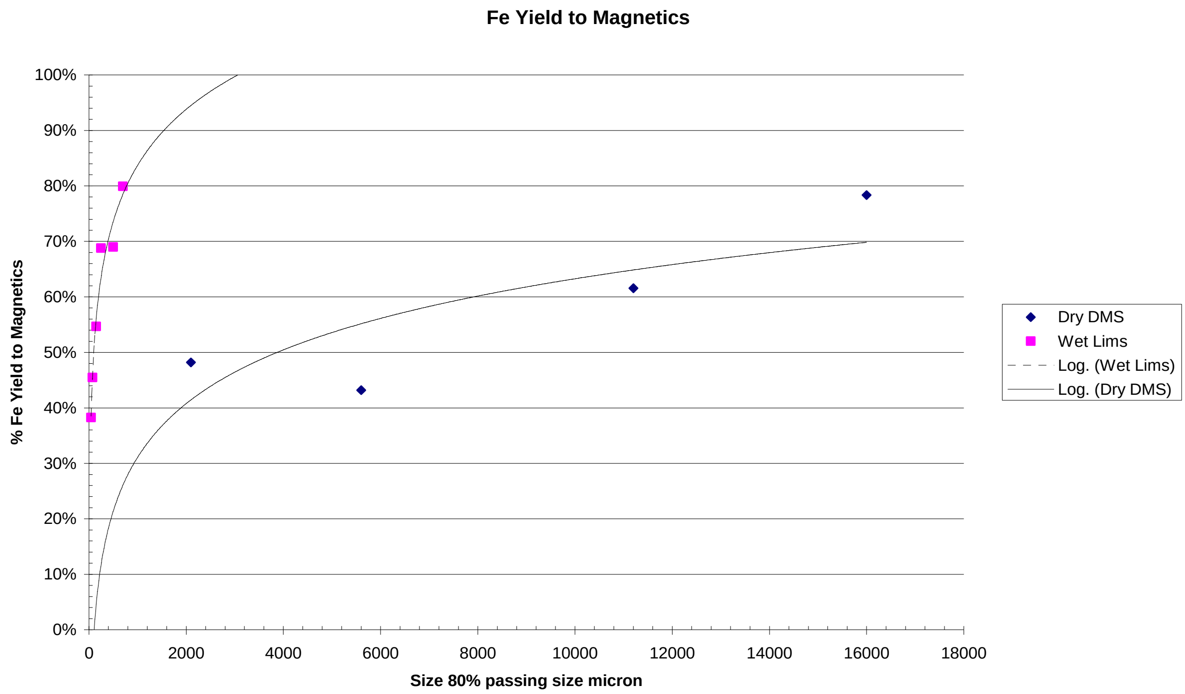

Figure 4: Iron Yield to Magnetite

A risk with the hematite ore is that there would be high Fe losses with a dry magnetic separation at 5 to 8 mm and any dry magnetic separation would have to be bypassed to maintain yield when treating such material.

Patchy surface oxidation of magnetite resulting in hematitic alteration is more common at M62 where hematite has been noted in drilling to depths of 40 metres. At M63 hematite development is less prevalent and rarely occurs below 15 metres.

RWI, BWI and UCS Results

All samples had slightly different Rod Mill Work Index (RWI), Bond Work Index (BWI) and Abrasion Index (AI) results.

The RWI results varied from 10 to 12.2 kwh/t, with the hematite (Sample C) at 10.1, Sample B with 10.2 and Sample A with 12.2 kwh/t.

The BWI results varied from 18 - 21.2 kwh/t, with Sample B having a value of 18.2 kwh/t, Sample C 19.7 and Sample A 21.3 kwh/t.

The AI results varied from 0.19 to 0.40, with the hematite at 0.19, Sample A at 0.24 and Sample B at 0.40.

The Unconfined Compressive Strength (UCS) values range from 50 to 74 MPa. Sample B had the lowest values ranging from 50 to 68 MPa. Samples A and C were similar, ranging from 63-74 MPa. The material could thus be classified as medium-strong to strong, with a bias towards strong.

Davis Tube Recovery Testwork

A summary of the Davis Tube Recovery (DTR) testwork is given in a table in Appendix 2. As with previous testwork the results highlight the excellent metallurgical characteristics of Shiyela magnetite with extremely low silica and low deleterious elements. It should be noted that testwork to date has been carried out on relatively low magnetite content samples. The next phase of DTR work will comprise 5 metre composite samples made up from two diamond holes drilled through the mineralised bodies at M62 and M63. This will allow DTR analysis for the complete range of magnetite content from low to high.

PROGRAMME

- Complete the drill out of the M63 deposit.
- DTR testwork and analysis of five metre composites from two diamond drill holes from M62 and M63.
- Establish a JORC Compliant Mineral Resource estimate – work being conducted by Golder Associates.

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Further information relating to the Company and its various exploration projects can be found on the Company's website at www.deepyellow.com.au.

Compliance Statement:

The information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr Leon Pretorius a Fellow of The Australasian Institute of Mining and Metallurgy. Dr Pretorius has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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'. Dr Pretorius consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Deep Yellow Limited (DYL) is an ASX-listed advanced stage uranium exploration Company with extensive operations in the southern African nation of Namibia and in Australia. It also has a listing on the NSX.

DYL's primary focus is in Namibia where its operations are conducted by its 100% owned subsidiary Reptile Uranium Namibia (Pty) Ltd (RUN). Its flag ship is the Omahola Project currently under Pre-Feasibility Study with concurrent resource drill-outs on the high grade Ongolo Alaskite project and on secondary uranium mineralisation in the Tumas-Tubas palaeochannel/fluviatile sheetwash systems.

In Australia the Company is focused on resource delineation of mid to high grade discoveries in the Mount Isa district in Queensland, including the Queens Gift, Conquest, Slance, Eldorado, Thanksgiving, Bambino and Turpentine Prospects. The Company also owns the Napperby Uranium Project and numerous exploration tenements in the Northern Territory.

APPENDIX 1: DESCRIPTION OF TESTWORK PROCEDURES

1. Background

Deep Yellow Ltd, via its wholly owned subsidiary Reptile Uranium Limited, has a magnetite project which is located in Namibia in Southern Africa.

Three different samples consisting of coarse, fines and hematite fractions were submitted for laboratory test work. The test work program investigated the crushability, the grindability and the recoverability of the ore and magnetite recoveries by utilising different test methods.

Brief descriptions of the different methods used are described below.

2. Description of the different procedures

2.1 Davis Tube

The Davis Tube test is used to evaluate the ideal weight recovery that may be achieved by a given iron ore. It will indicate the probable product quality such as:

- grade of iron and silica; and
- levels of undesirable contaminants.

By using magnetic properties on the whole ore, the nature of the split between waste (non-magnetic) and magnetite (magnetic) can be determined.

The Davis Tube test is used because the magnetite content and potential concentrate grade cannot be predicted from the whole iron ore assay. The iron content on a whole iron ore assay will generally be higher when compared to the iron contained in magnetite. The iron can exist in many forms in any given ore sample as the magnetite may have been altered or other species that also contain iron may be present. Rarely does a correlation exist between the assayed iron and the resultant magnetite product.

The only way to determine the quality and quantity of the magnetite for an ore deposit is through Davis Tube work. Figure 1 shows a typical Davis Tube apparatus consisting of a glass tube which is agitated within an electromagnetic field. A water wash is used to help remove non-magnetic material.

Davis Tube Recovery Test

The standard Davis Tube Recovery (DTR) test was developed to handle a large range of ore competencies. A sample is pulverised for a set time in a ring pulveriser, screened at 75 μm and then the oversize is re-pulverised for a time dependent on the oversize weight reground. This procedure was developed to closely mimic the products of a plant using closed circuit classification. Once ground, a sample is then washed in the Davis Tube and the concentrate collected for weighing and assay.

2.2 Davis Tube Wash Test

In the Davis Tube Wash (DTW) procedure, the sample is washed using the same washing technique as used in a DTR test. The essential difference between the DTR and the DTW is that the former is at a fixed grind size while the latter is usually a cleaning method at any given grind size.

The grind sizes selected were 500, 250, 106, 75, 45, 32 μm.

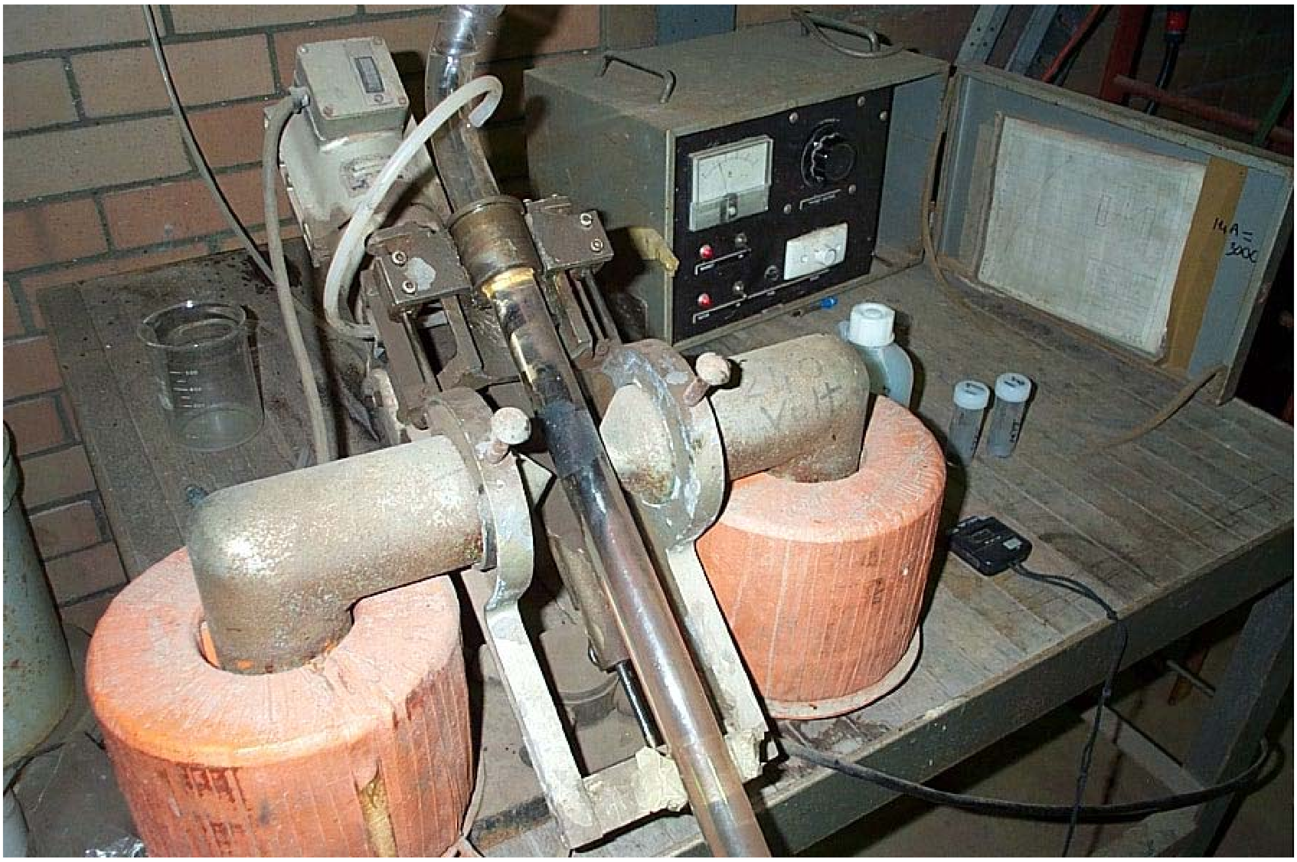

Figure 1: Davis Tube Apparatus

2.3 Dry Magnetic Separation

Concept

The Dry Magnetic Separation (DMS) test is designed to determine whether the first separation of waste could be feasible at coarser sizes. The metallurgical performance of dry magnetic separation is established by plotting mass vs. magnetite rejection at the 80% passing size of the ore. A graph of the results will show high levels of mass loss and magnetite loss at larger sizes with increasing mass and decreasing magnetite loss as size decreases.

If significant mass of material can be rejected with minimum loss of magnetite, consideration can be given to a pre-concentrating magnetic step on crushed ore.

Procedure

This involves splitting the feed into a number of portions and crushing each portion to 100% passing 32 mm, 16 mm, 8 mm and 3 mm. For the testwork, each size fraction is passed over a dry magnetic separator, operated at either 20 or 40 rpm.

Sub samples of concentrate, ore and tailings are selected for testing using the DTR method to determine the amount of magnetic material reporting to concentrate and tails. The magnetic Fe yield is compared to the weight yield to determine the selectivity of coarse magnetic separation.

2.4. Bond Work Indices

Concept

The purpose of these tests is to establish the grinding characteristics of the ore. The Bond Work Index (BWI) is used to size ball mill and other grinding equipment. The standard BWI shows the power needed to grind from infinite size to 106 μm which is ostensibly a constant and is independent of the starting and finishing grind. In reality, the standard test has been modified to incorporate grinds using a 75 μm and a 45 μm size to calculate the BWI. This is done as a result of our experience that if finer grind sizes are required, this may result in higher BWI values being recorded.

Procedure

The methods utilised include Ball Mill Work Index determinations on representative samples. The procedure used was the standard BWI procedure but uses the three screen sizes as previously explained.

2.5 Rod Mill Work Index

Concept

The information derived from the Rod Mill Work Index (RWI) will assist in sizing a rod mill. The method used is similar to that used in determining the BWI. The RWI is test procedure used to ascertain the behaviour of the larger particle sizes and their competency. This test is compared to the BWI and the differential between the RWI and BWI will indicate whether the ore will behave in similar fashion when the small versus large particles are compared with each other. The data will be utilised to assist with equipment selection and final product sizing.

Procedure

The general procedure used is to stage crush a representative set volume sample of the ore to -12.5 mm, followed by dry milling in a standard lab mill, set at speed of 46 rpm. The mill product is removed and sized at the final product sizing by screening. The screen oversize is returned together with some new sample equivalent in mass to the screen undersize (to simulate the circulation load, at 100%). The mill is recharged with the new feed plus the screen oversize and reground. The test will be complete when the net amount of ore ground per revolution is constant. The RWI is calculated from the data, using the feed and product sizing from the net product obtained per mill revolution.

3.0 Comminution Test work

Concept

This testwork determines the Abrasion Index (AI), Unconfined Compressive Strength (UCS) and Crushing Work Index (CWI). This data/criteria is used for the selecting and sizing of equipment contained within the crushing circuit.

Procedure

The standard Bond Crushing Work Index, Unconfined Compressive Strength and Abrasion Index procedures are used.

3.1 Abrasion Index

This test is used to determine the abrasiveness of an ore in relation to metal wear in crushing and grinding. The procedure involves rotating a steel paddle of defined material specification in a standardised charge of ore. The weight of steel abraded after a specific number of revolutions is measured in grams.

3.2 Unconfined Compressive Strength

The Unconfined Compressive Strength (UCS) of the rock is an important consideration in crushing machinery selection. Cylindrical cores are cut from the rock and the ends are machined flat at right angles to the length of the core. The cylinders are then stressed to failure by compression. The pressure at which failure occurs and the mode of failure are noted.

3.3 Crushing Work Index

In this test the average energy required to break sized pieces of rock by twin pendulum hammers is determined for at least ten rock particles. The energy absorbed by the rock is calculated by subtracting the impact from the residual energy as derived from the initial and rebound height of the pendulums.

Appendix 2: Results of Davis Tube Recovery Testwork on the three ore types

P_{80}	Wt.	Fe	SiO_2	Al_2O_3	CaO	MgO	TiO_2	Mn	P	S	K_2O	Na_2O	Zn	LOI_{1000}
Sample A – Coarse														
Head	100.0	28.53	43.05	7.21	0.300	2.680	0.689	1.100	0.180	0.090	2.460	0.762	0.011	0.07
DTR1	22.3	70.70	0.61	0.97	0.441	0.170	0.210	0.030	0.003	0.004	0.024	0.017	0.017	-3.12
Sample B – Fine														
Head	100.0	15.55	58.25	10.25	0.097	2.680	0.806	1.200	0.096	0.209	2.516	0.880	0.008	0.62
DTR2	9.1	69.70	1.66	0.99	0.194	0.240	0.350	0.060	0.005	0.073	0.037	0.013	0.019	-3.23
Sample C – Hematite														
Head	100.0	19.54	52.80	8.61	0.173	2.307	0.760	1.450	0.113	0.070	3.104	1.090	0.14	0.98
DTR3	11.7	69.50	0.80	0.71	0.116	0.090	0.170	0.040	0.008	0.008	0.026	0.009	0.014	-1.27