

Deep Yellow Limited - Updates On Results Of Preliminary Assessment And Testwork Of Shiyela Iron Project In Namibia

14.02.2011 | [ABN Newswire](#)

10:09 AEST Feb 14, 2011 ABN Newswire (C) 2004-2011 Asia Business News PL. All Rights Reserved.

Perth, Australia (ABN Newswire) - [Deep Yellow Limited](#) (ASX: DYL) (PINK: DYLLF) 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.

PRELIMINARY RESULTS

Iron Versus Silica

The first analysis that ProMet undertook was plotting iron (Fe) versus silica (SiO₂) 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 SiO₂ relationship which is linear for all three ore types tested.

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 (

Results for Sample A show a very sharp drop in silica between 500 and 300 micron - a feature of very coarse grained magnetite.

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 μ m 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 μ m.

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.

A review of the Fe yield to magnetics 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.

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

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.

For the complete Deep Yellow Limited announcement including figures and appendixes, please refer to the following link:

<http://www.abnnewswire.net/media/en/docs/65210-ASX-DYL-528788.pdf>

About Deep Yellow Limited:

Deep Yellow Limited (ASX:DYL) (PINK:DYLLF) is an Australian-based uranium focused exploration company with advanced exploration projects in Namibia and in Australia.

In Namibia the Company operates through its wholly-owned subsidiary Reptile Uranium Namibia P/L which is focusing on its mid to high grade INCA primary uraniumiferous magnetite and secondary Red Sand projects and the extensive secondary calcrete deposits contained in the Tumas-Oryx-Tubas palaeochannel and fluvial sheetwash systems.

In Australia the Company is focused on resource delineation of mid to high grade discoveries in the Mt Isa district - 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.

A pipeline of other projects and discoveries in both countries are continually being examined and there is extensive exploration potential for new, additional uranium discoveries in both Namibia and Australia.

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Die URL für diesen Artikel lautet:

<https://www.rohstoff-welt.de/news/99290--Deep-Yellow-Limited---Updates-On-Results-Of-Preliminary-Assessment-And-Testwork-Of-Shiyela-Iron-Project-In-N>

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