

# QUARTERLY ACTIVITIES REPORT FOR THE PERIOD ENDED 31 DECEMBER 2010

Dynasty Metals Limited (ASX: DMA) is an Australian exploration company focused on developing its iron ore projects in the Pilbara region of Western Australia.

As at release date of 31 January 2011:

Issued Shares: 89.7M

Options: 17.6M @ \$0.20

Share Price: \$0.25

Market Cap: \$22.4M

Cash: \$2.3M

Debt: Nil

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## **Key Points**

- Resources of iron-rich gravels increased 300% to 1.4 billion tonnes for the Spearhole Detrital Iron Deposit at Dynasty's flagship Prairie Downs Iron Project.
- > 1.4 billion tonne JORC Compliant Resource includes 932 million tonnes at 27.4% Fe.
- Preliminary processing test-work results indicate direct shipping ore ("DSO") grades can be achieved from the Spearhole Detrital Iron Deposit.
- > Initial recoveries suggest that 160Mt DSO product may be achievable, further yield optimisation tests planned.
- > Less than 2% of Dynasty's Prairie Downs tenements (covering ~4,000km²) have been tested to date.
- Economic potential of detrital iron deposits is becoming more widely recognised. Dynasty's Prairie Downs Iron Project is strategically located
- Positive outcomes from work carried out during 2010 have provided Dynasty with the confidence to commence a Pre-Feasibility Study on the Spearhole Detrital Iron Deposit during 2011.
- > \$2.1 million placement to Chinese steel producer Hebei XingHua Iron and Steel.

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# **Overview of Dynasty's Iron Ore Projects**

Dynasty's iron ore tenements are located in the Pilbara region of Western Australia and total ~4,500km² in area, see **Figure 1**, areas highlighted in red.

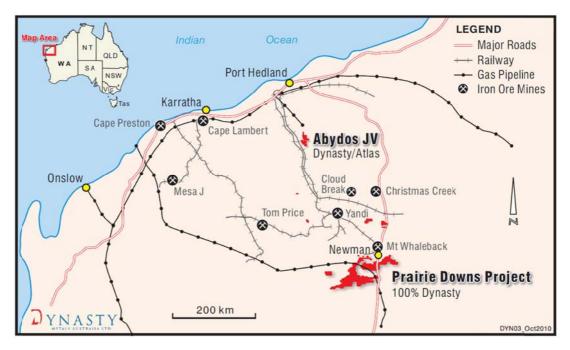


Figure 1 - Location of Dynasty's Tenements in Pilbara Region

Dynasty's flagship Prairie Downs Iron Project is located southwest and south of the township of Mt Newman. Exploration is focussed on a number of targets within the tenements with the main area drilled to date being at the Spearhole Prospect.

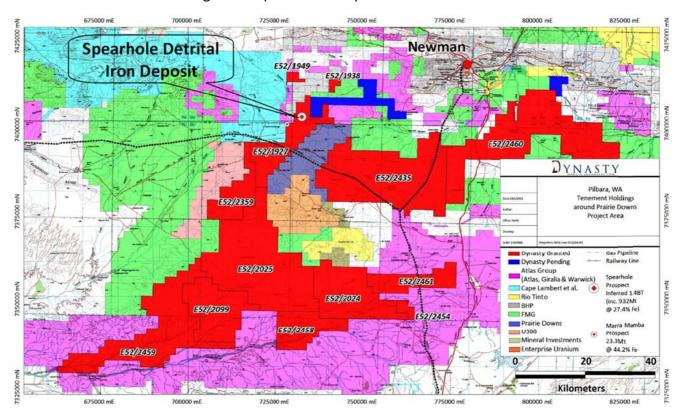


Figure 2 – Prairie Downs Iron Project - Strategic Location of Dynasty's Tenements



## **Prairie Downs – 2010 Exploration Program**

Dynasty's 2010 exploration program achieved its primary aims of advancing the understanding of the iron mineralisation present in the Prairie Downs tenements and advancing beneficiation studies of these large detrital (ironstone gravel) deposits.

Drilling completed during 2010 comprised 9,377m of RC drilling and 1,085m of Sonic drilling.

At the Spearhole Prospect, the 2010 RC drilling program:

- > tested "extension" areas to the south and southeast of established resource;
- > tripled the Inferred Resource to 1.4 billion tonnes; and
- > twinned Sonic drilling holes allowing tight control on the beneficiation results

Drilling during 2010 extended the known detrital iron mineralisation approximately 4 km to the southeast, over an additional area of 11.5 km<sup>2</sup>.

### **Prairie Downs – Increased Resource**

On 27 October 2010, Dynasty announced a **1.4 billion tonne JORC-Compliant Resource including 932 million tonnes at 27.4% Fe at a cut-off grade of 20% Fe for the Company's** Spearhole Detrital Iron deposit ("ironstone gravel") at Prairie Downs in the Pilbara region of Western Australia.

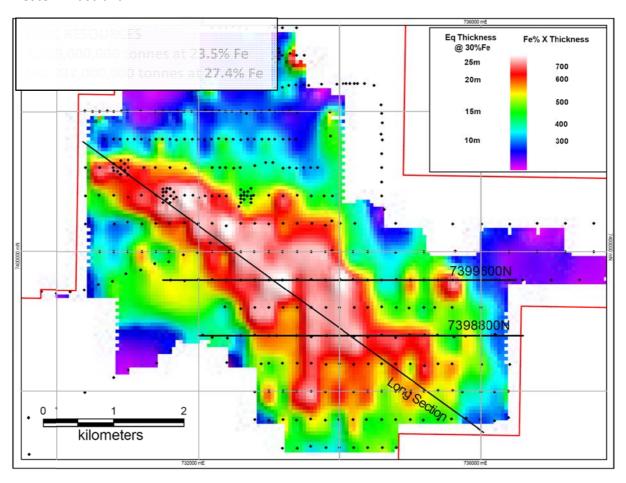


Figure 3 – distribution (Fe grade x thickness) of the iron mineralisation at the Spearhole Detrital Iron Deposit, with the deepest, high-grade channel trending NW-SE.



The Resources defined to date are set out in **Table 1** below.

The total Mineral Resource estimate has increased 300% since the Company announced the initial Mineral Resource estimate for the Spearhole Deposit in March 2010. This increase is a result of the successful 2010 drilling programs.

Table 1 – Inferred Resources for Spearhole Detrital Iron Deposit (October 2010 Estimate)

Tonnes Mt	Fe %	Calcined Fe* "CaFe" %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub>	P %	LOI %	Cut-Off Grade % Fe
449	31.5	34.0	30.2	13.6	0.04	7.5	>27% Fe
586	30.2	32.7	31.6	13.9	0.04	7.6	>25% Fe
800	28.4	30.8	33.5	14.4	0.04	7.7	>22% Fe
932	27.4	29.7	34.6	14.7	0.04	7.8	>20% Fe
1,118	25.9	28.1	36.1	15.0	0.04	7.9	>17% Fe
1,400	23.5	25.5	38.6	15.5	0.03	8.1	Total Resource

<sup>\*</sup>Calcined Fe ("CaFe") = Fe/((100-LOI)/100)

The Spearhole Detrital Iron Deposit occurs at or near surface, with consistent grades and thicknesses that are tending to improve as extensions of the deposit are discovered to the southeast. The detrital iron mineralisation is contained within a large, ancient, iron-enriched drainage system between outcropping Brockman and Marra Mamba Iron Formations.

### Prairie Downs – Encouraging Results from Processing Test-work

Results to date from processing test-work are encouraging, especially the production of a premium-grade, high purity DSO grade iron ore product which has demonstrated that the potential for Dynasty's Spearhole Detrital Iron Deposit to supply both niche markets and to be a blend into the typical suite of Pilbara iron ores.

The 2010 drilling program included deploying a Sonic drill rig which drills a 150mm hole in unconsolidated material. Sonic drilling provides continuous and relatively undisturbed core samples which are ideal for assessing ore characterisation, density and metallurgical characteristics required for optimal beneficiation processes.

The Sonic rig has drilled large diameter holes in five areas of the Spearhole Detrital Iron Deposit. The aim has been to collect bulk samples "representative" of the in-situ material which are composited into five-tonne parcels for beneficiation test-work in Perth laboratories. An additional, larger 10 tonne sample was also collected.

The Sonic drilling program has also provided valuable information on the size and distribution of the detrital iron in the stratigraphy. The better understanding of the deposit has led to observing consistent lower-grade interburden between iron-rich layers which may be possible to mine and remove selectively. The collection of a complete sample from this unconsolidated material also allowed measurement of the bulk density of the material allowing more accurate resource estimation.

Test-work on the bulk samples collected by the Sonic drilling has indicated that simple physical processing significantly improves iron and silica grades and for the Area 3 sample returned commercial ("DSO") iron, silica and alumina grades of 61% Fe with 2.7% SiO2, 0.7% Al2O3 and <0.03% P2O5)

Preliminary processing test-work was recently completed on a single one-tonne sample from Area 3 of the Spearhole Detrital Iron Deposit, with the aim to determine the iron contents of



various size fractions. The test-work of this pilot sample was focussed on grades not yields and it has:

- > contributed towards determining the optimal processing method;
- > preliminarily indicated are that blended product grades can be achieved of approximately 57% Fe, 6-7% Si, 6-7% Al and 0.05% P with a yield in the order of 17%. Portions of the sample returns grades >60% Fe and <3% Si, <1% Al and <0.03% P with yields of up to 10%; and
- > confirmed that the Spearhole Detrital Iron Deposit, with simple processing, can achieve typical DSO grades.

Applying this "preliminary indicative yield" of 17% to the portion of the Inferred Resource at a cut-off grade >27% Fe (932 million tonnes at 27.4% Fe) indicates 'at this stage' that at least 160 million tonnes at DSO grades may be recoverable from the current resource. This represents a large proportion (80%) of the previously published 200 million tonne target for the Spearhole area and compares with Brockman Iron's estimated DSO production of 419 million tonnes.

Further work is ongoing on the remaining bulk samples to confirm these results and to investigate methods which may further increase the product grades as well as focussing on methods to increase the yield.

This work has enhanced Dynasty's understanding of the deposit and the high-grade zones within the gravels. It is hoped that, with more testing, increased understanding will confirm and potentially improve these results. However, it should be noted, these results require further confirmation before they can be considered a reliable indication of the grades and yields obtainable from the resource.

This test-work demonstrates that the Spearhole Detrital Iron Deposit can readily be separated from the majority of the waste material at a very low cost of <\$1.00/tonne. The substantial reduction in volume for a low cost, will increase head grade to the processing plant and reduce the overall processing and transport costs, as well as enable a DSO commercial grade of iron, silica and alumina to be achieved. Phosphorous is inherently low in the Spearhole Detrital Iron Deposit.

In order to further test processing of various size fractions, further drilling using a Sonic rig is planned to collect larger samples in the next phase of exploration.

Future beneficiation test-work will focus on applying various processing techniques to enhance and optimise grades in the remaining fractions to establish an optimum blend with the high grade fraction against an optimum product yield. The "optimum yield" is that yield which will support a commercially viable, profitable and competitive mining and processing operation.

Overall, these initial results confirm various similarities with Dynasty's Spearhole Detrital Iron Deposit at Prairie Downs and Brockman Resources' 1.6 billion tonne Marillana Detrital Iron Deposit, 100km to the north of Prairie Downs.

### Prairie Downs – Initial 2011 Exploration Program

The Dynasty Board has approved the following exploration program for the Prairie Downs Iron Project for January to May 2011:



- > Spearhole Detrital Iron Deposit: Complete 2010 beneficiation test work and optimise flow sheet.
- > Base line "seasonal" environmental studies will also be carried out in preparation for mining lease applications and mining approvals which have a two-year lead time.
- > Regional exploration for further iron ore using interpretations of airborne geophysics completed last year, reconnaissance mapping, rock chip sampling and drilling.

The above work will continue to evaluate the detrital deposit and provide information required to plan the work required to further explore and evaluate the iron ore potential of the Prairie Downs Iron Project.

The next stage of work is planned to commence by May 2011 and is likely to include:

- > Processing testwork on additional Spearhole Detrital Iron Deposit bulk samples;
- > Reconnaissance exploration on Prairie Downs tenements to identify high grade hematite targets;
- > Preliminary exploration on the massive iron rich basal conglomerate; and
- > Reconnaissance exploration on Dynasty's other tenements in the Pilbara Region.

The work near the Spearhole Detrital Iron Deposit will concentrate on the targets identified in Figure 4 below.

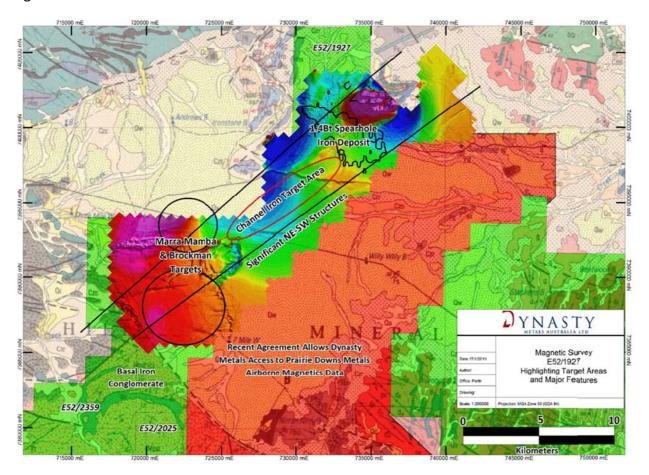


Figure 4 – targets identified in E52/1927 to be tested in 2011 exploration programs

To date, Dynasty has drilled less than 2% of its ~4,000km<sup>2</sup> Prairie Downs tenement holding.



# **Prairie Downs – Economic Considerations**

This work above is expected to provide the basis for many components of a Pre-feasibility Study ("PFS") on the Spearhole Detrital Ironstone Deposit. A PFS will take 12 to 18 months and its scope would include:

- > Mine planning and costing;
- > Process engineering and costing;
- > Infrastructure engineering and costing;
- > Environmental studies, native title negotiations;
- > Government negotiations for application for mining lease;
- > Off-take requirements and preliminary negotiations with potential off-take partners;
- > Funding options, and preliminary negotiations with sources of funding; and
- > Detailed financial modelling and commercial analysis.

The potential development of Dynasty's Detrital Iron deposit is likely to benefit from the following economic advantages:

- > Economies of scale (>15 million tonne per annum operation);
- > Low mining costs due to a low to negligible strip (waste to ore) ratio and a free digging, relatively soft, unconsolidated iron deposit;
- > Simple physical processing to achieve marketable grades of iron & silica; and
- > Sweet spots, high-grade zones and hematite ores all contribute to uplift average grades.

Dynasty believes that the Spearhole Detrital Channel Iron Resource at Prairie Downs has a reasonable probability of proving to be economic to mine and beneficiate.

Several infrastructure options are being investigated which include access to existing infrastructure in the Pilbara for its centrally located project at Prairie Downs.

### Corporate

#### **Annual General Meeting**

Shareholders approved all resolutions at the Company's Annual General Meeting held on 25 October 2010.

#### \$2.1 Million Placement to Hebei XingHua Iron and Steel

On 8 October 2010, Dynasty announced a \$2.1 million placement to Xinghua Iron and Steel Co., Ltd ("Xinghua"), comprising 11,652,197 shares at an issue price of \$0.18 per share).

The placement enabled Dynasty to accelerate the exploration and evaluation programs for the Prairie Downs Iron Ore Project.



Xing Hua is a medium-sized steel producer based in China's Fujian Province that is keen to build an iron ore supply business in Australia.

In addition to technical and financial support, Xing Hua brings Dynasty access to a large iron ore market and the potential to secure off-take arrangements into the Hebei steel making province of China.

### **Changes to Board of Directors**

In November 2010, Ms XiaoDong Sun was appointed a Non-Executive Director of the Company. Ms XiaoDong Sun is the board representative of Dynasty's major shareholder, Hebei Xinghua Iron and Steel Co. Ltd ("Xinghua").

Mr Terence Gygar was appointed as the Alternate Director for Ms XiaoDong Sun.

On 17 January 2011, Dynasty announced that Lewis Tay ceased being an Executive Director of the Company but will continue as a Non-Executive Director.

#### **Capital Structure**

As at 31 January 2011, Dynasty has on issue:

*Quoted shares:* 89,733,509

Unlisted options: 17,600,000 options exercisable at \$0.20 expiring 21 December 2011

## **Competent Persons**

Qualifying Statement: Malcolm Carson has compiled the information in this report from information supplied to Dynasty Metals Limited. Malcolm Carson has sufficient experience that is relevant to the style of mineralisation, the types of deposit under consideration and to the activity that he is undertaking and qualifies as a Competent Person as defined in the 2004 Edition of the Australasian Code for Reporting of Exploration Results ("JORC Code"). Mr Carson is a Member of the AusIMM and an Executive Director of Dynasty Metals.

JORC Statement: The information in this summary report relates to the Mineral Resource at Spearhole is based on the information complied by Mr David Jenkins who is a Members of the Australian Institute of Geoscientists. Mr Jenkins has sufficient experience in the style of mineralisation and type of deposit under consideration and the activity which they are undertaking to qualify as Competent Persons as defined in the JORC Code.

Mr Carson and Mr Jenkins consent to the inclusion in the report of the matters based on the information in which it appears.