

22 November 2011

BID Exploration Target of 110 to 160Mt at Pilbara Iron Ore Project

Pilbara Iron Ore Project (PIOP), Western Australia



highlights

- Potential to lift the Mineral Resource to over 1Bt
- BID has the potential to add significantly to the saleable DSO ore inventory
- BID exploration strategy success rate of 80%
- Further upside from mapping of additional target areas

Tenements E47/882 (Blacksmith) and E47/1560 (Anvil)

Flinders Mines Limited (FMS) 100%

Flinders Mines Limited (ASX: FMS) is pleased to announce an Exploration Target* for the Brockman Iron Deposit (BID) mineralisation at its 100% owned Pilbara Iron Ore Project (PIOP). The Exploration Target* of 110 to 160Mt is in addition to the 917Mt of Mineral Resource already defined at the project and has the potential to lift the global Mineral Resource to over 1Bt. The grade of the Exploration Target* is estimated at between 55 and 58% Fe (60 to 63% calcined) – this is based on knowledge of existing BID mineralisation in the resource model.

It is important to note that the BID mineralisation has the benefit of being direct shipping ore (DSO) quality in its own right, such that a high proportion would be expected to convert into the saleable ore inventory, based on

geometallurgical test work to date. Further, this BID material would be relatively low cost to mine having a low strip ratio.

Background

Since the discovery hole was drilled at the PIOP in August 2008, drilling on the tenements has focused on the iron mineralisation in the channels. In 2010 Flinders Mines recognised BID on the flanks of the channels and since this time, has been investigating the potential for further BID mineralisation over the unexplored areas between the channels. These targets are based on proximity to known BID mineralisation beneath the valleys, and the relationship between interpreted geological stratigraphy and structural zones.

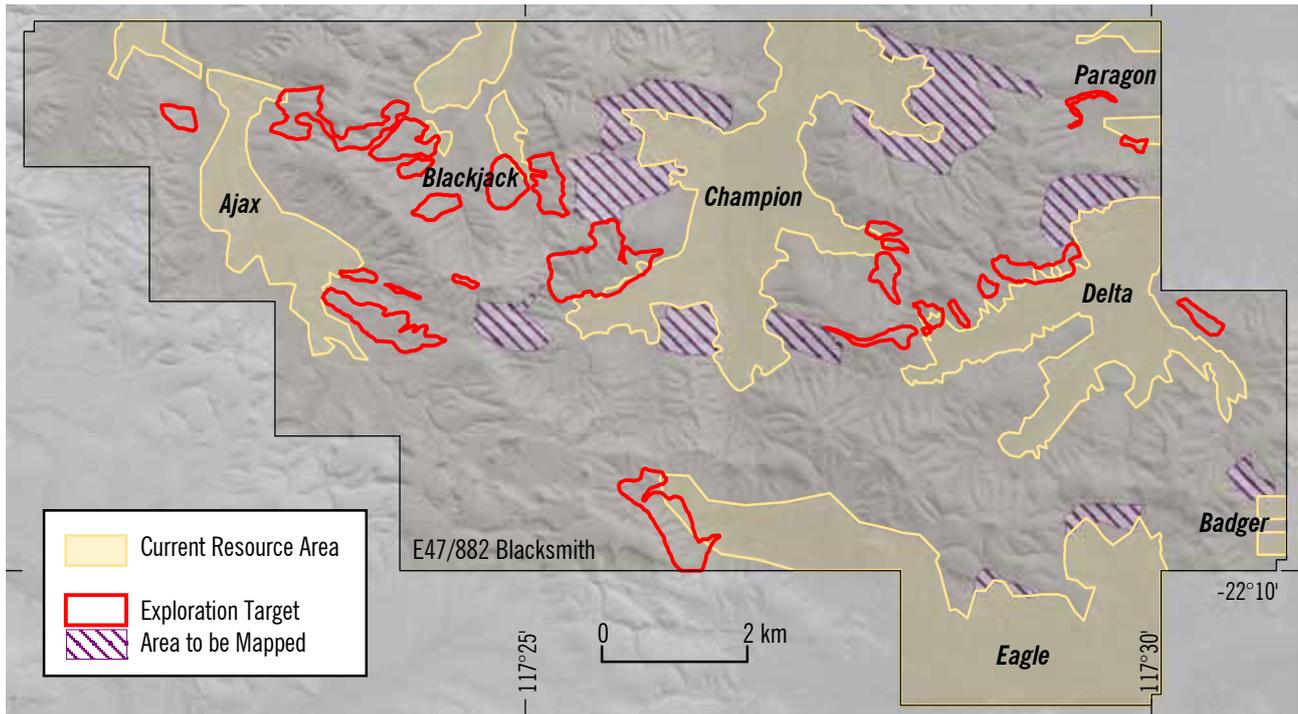


Figure 1 Location of PIOP highlighting potential BID Exploration Targets.

Late in 2010, several holes were drilled on the flanks of the valleys in the northern portion of the Delta deposit, targeting high quality BID mineralisation. The results were outstanding, intersecting near-surface BID mineralisation up to 54m in thickness (ASX Release 21st June 2011). Around 80% of the holes drilled to date have intersected greater than 4m of BID mineralisation, thus supporting our exploration strategy.

Exploration Target*

Since the identification of BID on the flanks of the valleys and hills in 2010 an extensive mapping program has been underway to further investigate the BID potential of these zones. Currently approximately 20 km² of the hills have been mapped with an emphasis on identifying structural zones with potential for BID mineralisation. Flinders' geologists have identified an



Plate 1 Photo looking east across Blackjacket deposit, clearly showing near vertical BID rich structural zone in the centre foreground.

area of approximately 5 km² where BID mineralisation either outcrops or has a high potential to exist in the subsurface.

An Exploration Target* of 110 to 160 Mt is estimated at between 55 and 58% Fe (60 to 63% calcined). This target size assumes a specific gravity (SG) of 2.52, as determined from diamond drill core samples of BID, and a conservative range in thickness from 9 to 13m based on current known intersections.

In terms of upside it is estimated that an additional 10-12 km² of BID targets across the Blacksmith and Anvil tenements are yet to be mapped in detail, thus providing an opportunity for further zones of BID mineralisation to be identified. The Company has identified structures in the unmapped areas in both Blacksmith and Anvil which have the potential to host BID.

Additionally, the headwaters of some of the valleys host cemented Detrital Iron Deposit (DID) ramps, also known as "canga", which have not yet been drilled. These ramps cover an area of approximately 1.5 km² and represent an Exploration Target* in their own right, but they also overlie outcropping BID mineralisation in some places. The nature of these ramps means that Section 18 heritage surveys will need to be completed prior to any drilling commencing – Flinders has been advised that these heritage clearances are likely to be a formality.

Ongoing Exploration & Going Forward

Further mapping will continue throughout Q4 2011 and Q1 2012, and together with ongoing evaluation of the data from the existing drilling the geological model will be refined further. This work will provide a basis for the focus of BID drilling during the first half of 2012 following the execution of Native Title agreement by Flinders, anticipated in Q4 2011.



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QUALIFYING STATEMENTS

JORC compliance

The information in this report that relates to Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Mr N Corlis (who is a member of the Australian Institute of Geoscientists) and Dr G McDonald (who is a member of the Australasian Institute of Mining and Metallurgy). Mr Corlis and Dr McDonald are employees of Flinders Mines Limited. Both have sufficient experience that is relevant to the style of mineralisation and types of deposit under consideration and consent to inclusion of the information in this report in the form and context in which it appears. Mr Corlis and Dr McDonald qualify as Competent Persons as defined in the 2004 Edition of the "Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves".

*Exploration Targets

Exploration targets are reported according to Clause 18 of the JORC Code. This means that the potential quantity and grade is conceptual in nature and that considerable further exploration, particularly drilling, is necessary before any Identified Mineral Resource can be reported. It is uncertain if further exploration will lead to a larger, smaller or any Mineral Resource.

Forward-looking statements

This release may include forward-looking statements. These forward-looking statements are based on Flinders Mines Limited's expectations concerning future events. Forward-looking statements are subject to risks, uncertainties and other factors, many of which are outside the control of Flinders Mines Limited and the Company makes no undertaking to subsequently update or revise the forward-looking statements made in this release to reflect events or circumstances after the date of this release.