

21 MAY 2018

# ASX ANNOUNCEMENT

# PIOP Maturation Programme Update and Retraction

#### Highlights

- Geotechnical, hydrological and metallurgical test work has now been completed for the Company's PIOP as planned
- The potential for lower-grade detrital material to contribute to the PIOP Mineral Resource has been confirmed
- Base case metallurgical processing test work indicate that the PIOP detrital resource material, whilst being upgradeable to a circa 59%Fe product, experiences significantly lower yields than non-detrital ores.
- Further mine planning, infrastructure agreements and financial work is required to confirm a yearly production target and mine life estimate
- The Company will investigate the potential for further exploration drilling at PIOP to extend the mine life, subject to funding
- The Company plans to progress discussions on provision of a logistics solution to de-strand the PIOP asset, although the Company notes that a commercial solution to enable PIOP ore to reach market is currently not available
- The Company intends to undertake an entitlement offer during the June Quarter 2018 to repay the \$5 million loan provided by Todd Corporation

Flinders Mines Limited (ASX: FMS) (Flinders or Company) provides the following update on the maturation programme undertaken at the Company's Pilbara Iron Ore Project (**PIOP**) located 70km from Tom Price in Western Australia.

# **Retraction of Production Target**

As announced on 31 March 2017, a strategic review was undertaken by Flinders to identify the best path forward to unlock the value of the PIOP assets.

At that time, the Company noted it was targeting an annual production rate of approximately 45Mtpa for a life of 14 years subject to further maturation test work and external infrastructure solutions. The Company has since become aware that this production related statement may constitute a "production target" as defined in the ASX listing rules, which requires disclosure of additional information pursuant to Chapter 5 of the ASX listing rules.

Given the time that has elapsed since making that production related statement and the subsequent findings of the maturation programme, the Company does not at this stage intend to meet the disclosure requirements for that earlier production related statement. As a result, Flinders retracts the production related statement made on 31 March 2017 and advises that this information should be disregarded. Investors should not rely on the retracted information as the basis for an investment decision.

The Company is not presently in a position to provide a production target as defined in the ASX listing rules as further mine planning, infrastructure inputs and financial modelling is required to confirm a production target and mine life estimate. To date, the Company has been unable to progress infrastructure discussions.

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# **Summary of Maturation Programme Findings**

The strategic review recommended a maturation programme to investigate and eliminate potential project risks so that the value of the PIOP could be enhanced.

The primary purpose of the maturation programme was to determine if lower iron grade detrital ores (DIDs), ranging in grade from ~40% to 50% Fe, could be upgraded to a product that would contribute to a total project marketable quality blend. If successful, this would increase the total recoverable tonnes from the PIOP.

The key technical PIOP risks identified during the strategic review were:

- metallurgical testing previously completed was insufficient across all ore domains to provide a reliable mine plan and mining process flow sheet
- geotechnical analysis was needed to confirm mine pit-slope design angles
- geohydrological water levels to confirm a water licence application and a robust mine pit de-watering assessment

These risks are now better understood and have been mitigated, including:

- **Metallurgical upgrade risk** the base case metallurgical processing parameters for Ore Processing Facility 1(OPF1) and Ore Processing Facility 2 (OPF2) have now been confirmed. These parameters include the detrital ores which have proven to be upgradable to a quality that contributes to an overall blended product.
- Geotechnical pit slope risk geotechnical pit slope design angles have been further defined to an improved level of confidence for all deposits across the PIOP. The angles show that previous analysis was conservative and the overall pit slope angles can be steepened.
- **Geohydrological risk** dewatering modelling on a conceptual mine schedule has modified the risk profile from a groundwater oversupply risk to a groundwater undersupply risk. Whilst this risk cannot be retired, it is now a lower overall project risk. Flinders applied for and was issued with a letter from the Department of Water and Environmental Regulation (DWER) which upgraded the water held in reserve by DWER from 5GLpa to 13GLpa.

The other notable outcomes and findings associated with the maturation programme are summarised below:

A revised JORC Code 2012 Mineral Resource estimate was completed for PIOP and announced on 1 March 2018. The Mineral Resource estimate is summarised in Table 1.

Area	CLASS	Tonnes (Mt)	Fe %	SiO2 %	Al2O3 %	P %	LOI %
Blacksmith	Measured	54.1	59.8	6.24	4.28	0.064	2.98
	Indicated	1,148.0	52.6	14.06	4.81	0.067	4.93
	Inferred	105.2	51.6	15.71	5.13	0.057	4.40
Blacksmith Total		1,307.3	52.8	13.87	4.81	0.066	4.81
Anvil	Inferred	176.9	47.0	21.38	6.04	0.045	4.15
Anvil Total		176.9	47.0	21.38	6.04	0.045	4.15
PIOP (Blacksmith & Anvil)	Measured	54.1	59.8	6.24	4.28	0.064	2.98
	Indicated	1,148.0	52.6	14.06	4.81	0.067	4.93
	Inferred	282.1	48.7	19.26	5.70	0.049	4.24
Grand Total		1,484.2	52.2	14.76	4.96	0.064	4.73

### Table 1 - PIOP JORC Mineral Resource Estimate

Small discrepancies may occur due to rounding. Cut Off: Ore types DID1, DID2, DID3 reported using Fe>40% and Al2O3<8%; ore types DID4, CID, BID reported using Fe>50% and Al2O3<6%

The maturation programme has also produced a preliminary process design for OPF1 and OPF2:

- OPF1 proposed to process DID4, CID, BID ore types and includes crushing, wet scrubbing, wet screening and hydrocyclone desliming
- OPF2 proposed to process DID1, DID2 and DID3 ore types and includes crushing, wet scrubbing, wet screening and dense media separation (DMS)

The initial process flow diagrams and mechanical equipment lists reflect the metallurgical test work and will facilitate engagement with process engineering designers and contractors once the infrastructure solutions and ore marketability has been further developed.

Whilst the maturation programme achieved the majority of its goals and progressed the PIOP project towards development, it also highlighted areas of future work. Further program recommendations include:

- Progress discussions on provision of a logistics solution
- Consider further exploration programs at PIOP to identify additional Mineral Resources and higher resource grade
- Product quality optimisation and marketing update
- Process plant development to assess the impacts of the ore characteristics
- Undertake detailed mine planning once infrastructure parameters are secured

For further information please contact:

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### About Flinders Mines Limited

Flinders Mines Limited is an ASX-listed (ASX: FMS) exploration and development company focused on the commercialisation of its large, high quality hematite resource - the Pilbara Iron Ore Project (PIOP).

#### **Competent Persons Statement**

The information in this report that relates to the PIOP Mineral Resource estimate is based on information compiled by John Graindorge who is a Chartered Professional (Geology) and a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM) and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity to which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". John Graindorge is a full-time employee of Snowden Mining Industry Consultants Pty Ltd. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement. The Company confirms that the form and context in which the Competent Person's findings are presented have not been modified from the original announcement and, in the case of estimates of Mineral Resources, all material assumptions and technical parameters underpinning the estimates in the initial announcement continue to apply and have not materially changed.