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21 February 2018

# **TESTWORK PROGRAM PROGRESS UPDATE**

Kogi Iron Limited (ASX: KFE, "Kogi", "the Company") is pleased to report on the progress of metallurgical testwork associated with the commercialisation of the Agbaja oolitic iron ore deposits in Kogi State, Nigeria.

Tests to validate the process of beneficiating the ore deposit to a standard suitable for the production of pig iron and downstream billet steel production were commenced in South Africa by Mintek at the end of October 2017.

Tenova Pyromet and SGS Bateman are managing the testwork carried out by Mintek. Mintek is a well-established laboratory that specialises in geochemical and metallurgical testwork and analyses.

As previously reported, the testwork program involves four distinct stages:

- 1. Bulk Sample Preparation and Beneficiation
- 2. Smelting
- 3. Refining
- 4. Process Modelling and Reporting.

As reported in the ASX announcement dated 19 January 2018, the first stage of **Bulk Sample Preparation and Beneficiation**, together with mineralogical and bulk chemical analysis of the ore, has largely been completed. Over the past month, further fine tuning of this first stage testing was completed to provide more definitive information. This included ore characterisation, crushing, scrubbing and screening of the ore for the production of a suitable concentrate for smelting. The results of these tests have been positive in showing that using standard crushing and washing the ore does produce an up-graded concentrate suitable for smelting. Based on these results the test work will now confidently proceed to Stage2.

Stage 2 **Smelting**, involving pre-reduction of the concentrate followed by smelting in an electric arc furnace to produce a pig iron, will now proceed and is expected to be completed by the end of March 2018.

This will lead to Stage 3 **Refining**, which will confirm the ideal refining conditions for impurity removal and converting of the pig iron into steel with a chemical composition suitable for steel billet manufacture. Refining testwork will also establish commercial production viability and include sample analysis. It is expected that Stage 3 of the testwork program will conclude by the end of May 2018.

Following this, a final technical report (including a detailed flowsheet design for the treatment of Kogi ore to provide iron ore feedstock for the production of steel billets) will be produced in Stage 4 **Process Modelling and Reporting** in the month of June 2018.

The detailed flowsheet design will be used to complete the Definitive Feasibility Study and ultimately to facilitate both debt and equity funding for the Project.

# KFE Capital Summary Ordinary Shares: 612,154,685 Unlisted options: 29.8m Share price: \$0.115 Market capitalisation: \$70m

# Board of Directors

Dr Ian Burston – *Non Executive Chairman*Mr Kevin Joseph – *Executive Director*Mr Don Carroll – *Non Executive Director*Mr Michael Tilley – *Non Executive Director*Mr Martin Wood – *Non Executive Director* 

## Contact

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Chairman of the Company, Mr Ian Burston, was very pleased with the testwork results to date. "I have recently travelled to South Africa to see firsthand the testwork activity and have been encouraged by the positive nature of the results and am looking forward to the next stage of testwork".

Updates of progress will continue to be provided during the course of each stage of test work, as well as variations to timing and technical activities.

For more information, please contact:

Kogi Iron Limited

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## About Kogi Iron (ASX: KFE)

Kogi Iron Limited is a Perth-based company with the objective of becoming an African iron ore and steel producer through the development of its 100% owned Agbaja iron ore and steel project located in Kogi State, Republic of Nigeria, West Africa ("Agbaja" or "Agbaja Project").

Nigeria has substantial domestic demand for steel products, which is currently met largely through imports. The Agbaja project, located on the Agbaja plateau approximately 15km northwest of Lokoja city in Kogi State and approximately 200km southwest of Abuja, the capital city of Nigeria, opens the opportunity for domestic production of steel billets.

The Company holds a land position which covers a large part of the Agbaja Plateau. The Agbaja Plateau hosts an extensive, shallow, flat-lying channel iron deposit with an Indicated and Inferred Mineral Resource of 586 million tonnes with an in-situ iron grade of 41.3% reported in accordance with the JORC Code (2012). This mineral resource covers approximately 20% of the prospective plateau area within ML24606 and ML24607.

Table 1 – Summary Grade Tonnage for Laterite (Zone A) and Oolitic (Zone B) Horizons (20% Fe lower cut off is applied) Refer ASX announcement 10 December 2013.

Classification	Tonnes (Mt)	Fe (%)
Zone A (Laterite Mineralisation)		
Indicated	147.5	33.2
Inferred	33.9	31.7
Total Indicated + Inferred (Zone A)	181.4	32.9
Zone B (Oolitic Mineralisation)		
Indicated	318.7	45.2
Inferred	86.3	44.7
Total Indicated + Inferred (Zone B)	405.0	45.1
Combined Zone A and Zone B		
Total Indicated	466.2	41.4
Total Inferred	120.1	41.1
Total Indicated + Inferred	586.3	41.3

The Company confirms that it is not aware of any information or data that materially affects the information included in the original market announcements and, in the case of estimated Mineral Resources, which all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.