

### **CERTIFICATE of AUTHOR**

This Certificate of Author has been prepared to meet the requirements of National Instrument 43-101 Standards of Disclosure for Mineral Projects as published 30 June 2011, Part 8.1.

**a) Name, Address, Occupation:**

John Edwards

MDM Technical Africa (Pty) Ltd a fully owned subsidiary of Amec Foster Wheeler, Building No. 2 Silver Stream Park, 10 Muswell Road, Bryanston, Johannesburg, 2021 South Africa, employed as Chief Metallurgist.

**b) Title and Date of Technical Report:**

Kakula 2016 Preliminary Economic Assessment with an effective date of 20 January 2017 (the "Technical Report")

**c) Qualifications:**

I graduated from Camborne School of Mines, UK with a B.Sc. (Hons.) in Mineral Processing Technology (1985) and subsequently completed a Master of Business Leadership at UNISA, South Africa in 2003. I am a Fellow of the Southern African Institute of Mining and Metallurgy (SAIMM) (no. 701196). I have practised my profession continuously since 1985 and have over 30 years of metallurgical experience. This includes 18 years in plant operational management as well as client based project management for various plant upgrades. I have completed numerous projects in many minerals throughout Africa and beyond from PEA through to construction.

**d) Site Inspection:**

I visited the Kamoia core shed, laboratory and Kakula proposed concentrator position between 26 -28th October 2016.

**e) Responsibilities:**

I am responsible for Sections 1.10, 1.13.4 to 1.13.6, 1.15.3; Section 2; Section 3, Section 10.9; Section 11.3; Section 13; Section 17; Section 18; Sections 21.3, 21.4, 21.5, 21.7, 21.8, 21.10; Sections 24.4.3, 24.6, 24.7; Section 26.5; Section 27.

**f) Independence:**

I am independent of Ivanhoe Mines Ltd. in accordance with the application of Section 1.5 of National Instrument 43-101.

**g) Prior Involvement:**

I have been working on various aspects of the studies of the project since 2014.

**h) Compliance with NI 43-101:**

I have read National Instrument 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance with same.

**i) Disclosure:**

As of 20 January 2017, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated: 27 January 2017.

/s/John Edwards

John Edwards  
Chief Metallurgist  
MDM Technical Africa (Pty) Ltd