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### **NEWS RELEASE**

April 13, 2023

## HANNAN DRILLING AT KILMURRY IN IRELAND

Vancouver, Canada – Hannan Metals Limited ("Hannan" or the "Company") (TSXV: HAN) (OTCPK: HANNF) is pleased to announce that drilling has commenced at the Kilmurry zinc-silver-lead target in Ireland directly targeting a seismic anomaly interpreted to represent massive sulphides at 700 m vertical depth.

#### **Highlights:**

- > Drilling to target a high amplitude seismic reflector, interpreted to represent massive sulphides has been permitted and drilling of hole 23-3643-19 has commenced at Kilmurry, Ireland (Figure 1).
- The seismic reflector was identified in line 17-HAN-02, acquired by Hannan in 2018. The target extends over 1 km strike with the highest amplitudes focused in a 400 m wide zone at 700 m depth (Figure 2).
- The target is located within the Kilmurry Fault system (reported by the Company in 2019). It represents a syn-sedimentary ramp relay fault system which exceeds over 15 km in length and is up to 2 km wide, with over 700 m vertical displacement. This represents one of the largest basin-scale displacements mapped in Ireland (Figure 2) and forms a compelling large-scale target, with historic results interpreted to be the distal parts of a major mineralizing system. This is supported by:
  - Drill hole <u>11-3643-10</u>, located approximately 900 m south, intersected extremely high grades of mineralization (0.3 m @ 56.5% zinc ("Zn") plus lead ("Pb")) at 166 m depth, in the hanging wall to the Waulsortian mineralized position.
  - Historic work in the footwall of the ramp relay fault system, some 2.5 km south of the ongoing drill hole, mapped an extensive zone of dissolution and black matrix breccias as well as low grade zinclead mineralization such as 2 m @ 5.1% Zn+Pb and 2 m @ 5.8% Zn+Pb (Figure 2).

**Michael Hudson, Chairman & CEO, states:** "While awaiting drill permits on our vast and extensive Peruvian and Chilean copper targets, we look forward to drill testing what we believe to be one of the best grassroots zincsilver-lead exploration targets developed in Ireland over the last decades. The target represents a rare opportunity in Europe's premier zinc province to leverage the benefit of our past application of seismic technology in hard rock exploration. This has allowed us to both constrain the geological model and drill test a high amplitude seismic anomaly, which is interpreted to be massive sulfides at 700 m depth. Drill testing has started and will be completed by the end of May.

"Meanwhile, final drill permitting on our copper-silver JOGMEC joint venture in San Martin, Peru is expected over the next quarter. Additionally, our drill permit process is advancing at our Valiente copper-gold porphyry projects in Peru where a team of 12 people have recently completed the baseline environmental survey. In Chile, geophysical ground crews will mobilise in the coming weeks to validate historic magnetic and electro-magnetic anomalies over the Cerro Rolando porphyry copper target to define drill targets. Should these surveys be successful, it is anticipated drilling permissions should take 3-4 months in Chile. With all these current and upcoming drill programs, Hannan has developed a series of concurrent drill tests of largescale critical metal projects, starting today and extending over the coming years. We do not see the drill rigs stopping for long and look forward to providing investors with exposure to potential new and large scale, potential company-making grassroot discoveries."

## **GEOLOGICAL DISCUSSION**

The Kilmurry syn-sedimentary relay fault system represents an unexplored ramp-relay fault system for Irish style carbonate replacements deposits. This deposit style exhibits both strong structural and stratigraphic controls. The fault system is rare in the sense that it has been de-risked by seismic mapping, which has constrained both the geological model and the drill depth of the target. The survey deployed by Hannan in 2018 also identified a unit of high seismic impedance which subsequently has been interpreted to potentially represent massive zinc-silver-lead sulphides (Figure 2). The size of this impedance anomaly is up to 1,000 m wide and with the highest amplitudes focused over a 400 m window.

Historic work at Kilmurry by Lundin Mining, predating Hannan's exploration, focused on the footwall of the fault system prior to the context that the seismic surveying provided. The results strongly suggested the presence of an active mineralizing system in the area. This is exemplified by the dissolution breccias in various drill holes and low-grade base metal mineralization up to 2 m @ 5.8 % Zn+Pb. The seismic survey suggested the best part of the fault system (the hanging wall), was poorly drill tested, with only one drill hole reaching the target depth (DH 11-3643-10) after an extension by Hannan in 2018. The drill hole intersected 0.3 m @ 56.5% Zn+Pb at 166m depth high in a hanging wall of a fault. This was followed by multiphase calcite-dolomite breccias with gossanous patches after pyrite between 754-819m depth. The drill hole also intersected intense hydrothermal hematite alteration over 4 m width in the footwall of the potentially mineralized unit. The hydrothermal hematite alteration is highly significant as it lies proximal to mineralization at Irish-style deposits such as Lisheen, Tynagh and Silvermines and can be considered a near-miss indicator.

The Kilmurry fault system holds a series of drill ready targets (Figure 3) of which the high amplitude target is the first target to be drill tested. Subject to the results of the current drill hole, additional drilling may take place at other targets.

### **About the Clare Project**

<u>Hannan Metals Limited</u> has 100% ownership of the County Clare Zn-Pb-Ag-Cu project in Ireland, which consists of five prospecting licences for 18,499 hectares. Zinc remains in tight supply amidst rising demand and stagnant supply. Ireland is a leading global jurisdiction for zinc mining and exploration. In 2015, Ireland was the world's 10th largest zinc producing nation with 230,000 tonnes produced.

The project hosts two target areas:

- a) The Kilbricken deposit in the northern part of the project. A maiden mineral resource, dated <u>July 10, 2017</u>, as amended and restated on January 28, 2019, immediately ranked Kilbricken as one of the top ten base metal deposits discovered in Ireland by tonnes and grade. Total indicated mineral resources were calculated as 2.7 million tonnes at 8.8% zinc equivalent ("ZnEq"), including 1.4 million tonnes at 10.8% ZnEq and total inferred mineral resources of 1.7 million tonnes at 8.2% ZnEq, including 0.6 million tonnes at 10.4% ZnEq.
- b) The Kilmurry relay fault system represents a syn-sedimentary relay fault system which exceeds over 15 km in length and is up to 2 km wide and represents one of the largest basin-scale displacements mapped in Ireland. Kilmurry lies 12 km south of Kilbricken.

# About Hannan Metals Limited (TSXV:HAN) (OTCPK: HANNF)

<u>Hannan Metals Limited</u> is a natural resources and exploration company developing sustainable resources of metal needed to meet the transition to a low carbon economy. Over the last decade, the team behind Hannan has forged

a long and successful record of discovering, financing, and advancing mineral projects in Europe and Peru. Hannan is a top ten in-country explorer by area in Peru.

Mr. Michael Hudson FAusIMM, Hannan's Chairman and CEO, a Qualified Person as defined in National Instrument 43-101, has reviewed and approved the technical disclosure contained in this news release.

#### NI 43-101 Technical Report:

On January 28, 2019, Hannan filed an amended and restated independent National Instrument 43-101 Technical Report (the "NI 43-101 Technical Report") on The Mineral Resource Estimate for the Kilbricken Zinc-Silver-Lead-Copper Project Co. Clare, Ireland. The NI 43-101 Technical Report was authored by Mr. Geoff Reed of Reed Leyton Consultants and Dr. John Colthurst who are independent "qualified persons" as defined by National Instrument 43-101. The NI 43-101 Technical Report may be found under the Company's profile on SEDAR at www.sedar.com and on the Company's website at www.hannanmetals.com.

On behalf of the Board,

#### "Michael Hudson"

Michael Hudson, Chairman & CEO

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**Forward Looking Statements.** Certain disclosure contained in this news release may constitute forward-looking information or forward-looking statements, within the meaning of Canadian securities laws. These statements may relate to this news release and other matters identified in the Company's public filings. In making the forward-looking statements the Company has applied certain factors and assumptions that are based on the Company's current beliefs as well as assumptions made by and information currently available to the Company. These statements address future events and conditions and, as such, involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the statements. These risks and uncertainties include but are not limited to: the political environment in which the Company operates continuing to support the development and operation of mining projects; the threat associated with outbreaks of viruses and infectious diseases, including the novel COVID-19 virus; risks related to negative publicity with respect to the Company or the mining industry in general; planned work programs; permitting; and community relations. Readers are cautioned not to place undue reliance on forward-looking statements. The Company does not intend, and expressly disclaims any intention or obligation to, update or revise any forward-looking statements whether as a result of new information, future events or otherwise, except as required by law.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this news

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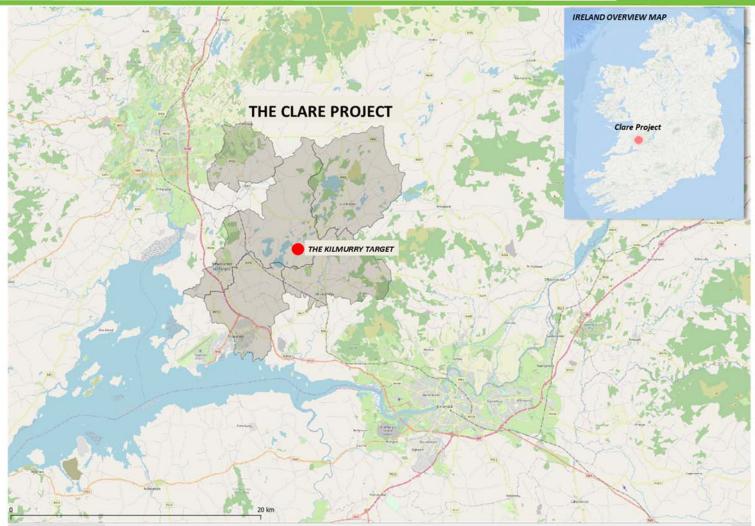
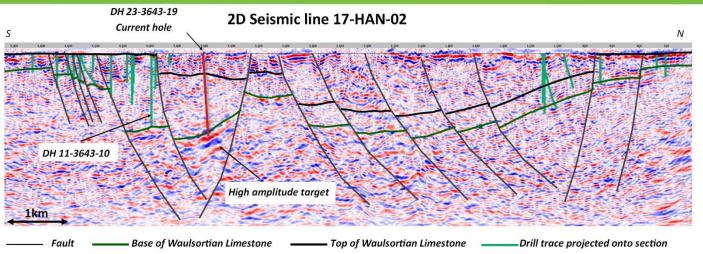


Figure 1. Project overview



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Results from drill hole 11-3643-10



Figure 2. Seismic line 17-HAN-02 showing the high amplitude target and drill results from adjacent drill holes.

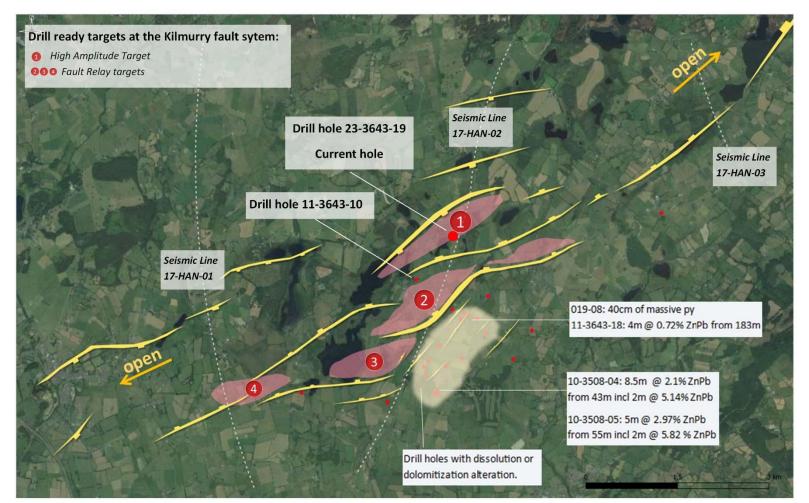


Figure 3. The Kilmurry relay fault system shown at target depth. The fault are defined by drilling, seismic and detailed gravity data. Target areas are defined by geological setting and seismic data. The alteration in drill hole 11-3643-10 is encouraging as it is regarded to be related to mineralization at several Waulsortian hosted base metal deposits.