



## NEWS RELEASE

### **Zeb Nickel to commence drilling at the Zebediela Class I Nickel Sulphide Project**

#### **Focus will be on upgrading of the historical resource and simultaneous exploration for higher grade footwall nickel sulphide mineralisation**

**13 September 2021 - Toronto, Ontario.** Zeb Nickel Corp (TSX-V:ZBNI) (the “Company”) is pleased to announce that geological exploration drilling is commencing on the Company’s flagship Zebediela Project, targeting high grade nickel-sulphide mineralisation to the east of the existing Zebediela historical nickel-sulphide resource, as reported in the Company’s NI43-101, available through SEDAR filings and on the Company’s website, [www.zebnickel.com](http://www.zebnickel.com).

#### **PROJECT HIGHLIGHTS**

- **8<sup>th</sup> largest known sulphide nickel resource globally**
- **Located in a major Ni-PGE producing area adjacent to Ivanhoe Mines Platreef Project and along strike from the worlds largest open pit platinum mine, Anglo American Platinum’s Mogalakwena Mining Complex**
- **Recent exploration drilling has identified high grade nickel mineralisation in the footwall to the existing historical resource**

#### **ABOUT THE PROJECT**

The Zebediela Project, located in South Africa, contains a historical resource as follows:\*

<b>Resource Category</b>	<b>Million Tons</b>	<b>Nickel Grade</b>
Indicated	485.4	0.256%
Inferred	1,115.1	0.248%
Total	1,600.5	0.250%

Source: Independent NI 43-101 Technical Report on the Zebediela Nickel Sulphide Project (March 31, 2021). Report prepared by Caracle Creek International Consulting Inc. The historical mineral resource estimates presented above used categories that conformed to CIM Definition Standards on Mineral Resources and Mineral Reserves (CIM, 2010) at the time of completion of the estimates, as outlined in NI 43-101. However, a qualified person has not done sufficient work to classify any of the historical estimates as current mineral resources and as such the Company is treating them as historical resource estimates. Readers are cautioned that the historical mineral resource estimates do not mean or imply that economic deposits exist on the Project.

A 2011 Preliminary Economic Assessment by MSA Geoservices demonstrated that the project has the ability to produce over 500,000 tons of nickel using an open-pit mining method (Croll, R., Clarke, B., Hall, M. and Sexton, J. (2012). Preliminary Economic Assessment for the Zebediela Nickel Project. Report prepared by MSA Geoservices (Pty) Ltd on behalf of Umnex Minerals Limpopo (Pty) Ltd).

The historical resource ranks as the 8<sup>th</sup> largest nickel sulphide resource globally in terms of contained nickel (Mudd, G.M. and Jowitt, S.M. (2014). A detailed assessment of global nickel resource trends and endowments. *Economic Geology*, 109 (7), 1813-1841).

### **HIGH GRADE NICKEL TARGET**

The Company has identified a target geological zone directly east and adjacent to the existing historical resource that has from historical drilling done in 2017 produced results of 0.56% nickel over an average width of approximately 5 m from exploration drilling, with significant cobalt and PGE credits, resulting in a nickel equivalent grade of 2,75% nickel.

Drillhole Z017 intersected approximately 1.7% Ni and 0.7 g/t 3PGE+Au over a width of 2.25 m, 20 m below the existing historical resource. Assays were conducted by SGS South Africa, an accredited laboratory for the analytical methods used being used to report these results.

A 3,600 m diamond exploration drill programme is expected to commence in September 2021. This drilling programme will target higher grade nickel sulphide mineralisation recently discovered in the footwall of the historical estimate, and is expected to enable the Company to estimate the amount of infill drilling required to classify the historical resource as a current mineral resource.

The footwall target is estimated to be approximately 5,000 metres in strike length and varies in thickness between 1.8 and 10m, from depths of 30 m below the surface down to depths of greater than 400 m below surface. This footwall target is thought to be a similar geological horizon to that being developed at the adjacent Ivanhoe Mines Platreef Project (Figure 1 and 2). If successful, this drilling will result in increasing the overall grade of the project.

### **LOCATION IN A MAJOR NICKEL-PGE PRODUCING DISTRICT**

The Zebediela Project is located on the Northern Limb of the Bushveld Complex, South Africa, and is in a major nickel and platinum group element producing area. The project is immediately adjacent to, and up-dip from, Ivanhoe Mines \$1.5 billion Platreef Project, and about 15 km along strike from Anglo Platinum's flagship Mogalakwena Mining Complex.

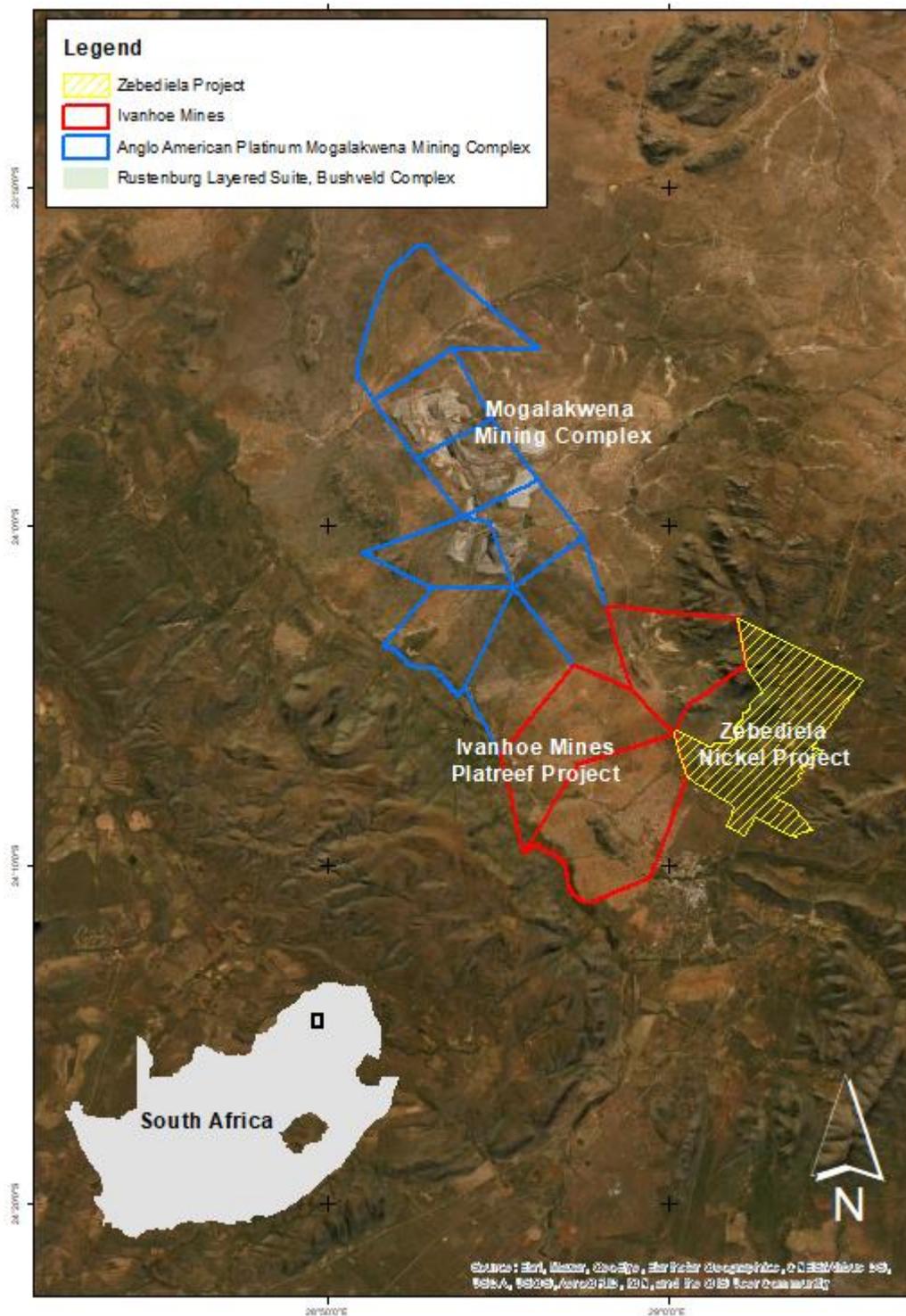


Figure 1: Map showing the location of the Zebediela Project and its proximity to Ivanhoe Mine's Platreef Project and Anglo American Platinum's Mogalakwena Mining Complex, on the Bushveld Complex in South Africa.

Ivanhoe Mines' Platreef Project contains a total resource of 852 million tons at 0.31% nickel, 0.16% copper and 3.5 g/t 3PGE+Au (platinum + palladium + rhodium + gold). Information for this Project is publicly available through Ivanhoe Mines' website and technical reports filed on SEDAR ([www.ivanhoemines.com/projects/platreef-project/](http://www.ivanhoemines.com/projects/platreef-project/)).

Anglo American Platinum's Mogalakwena Mining Complex has an estimated resource of 3.8 billion tons at 0.18% nickel, 0.10% copper and 2.4 g/t 3PGE+Au, as reported in their publicly available Annual Resource and Reserve Report on their website, [www.angloamericanplatinum.com](http://www.angloamericanplatinum.com).

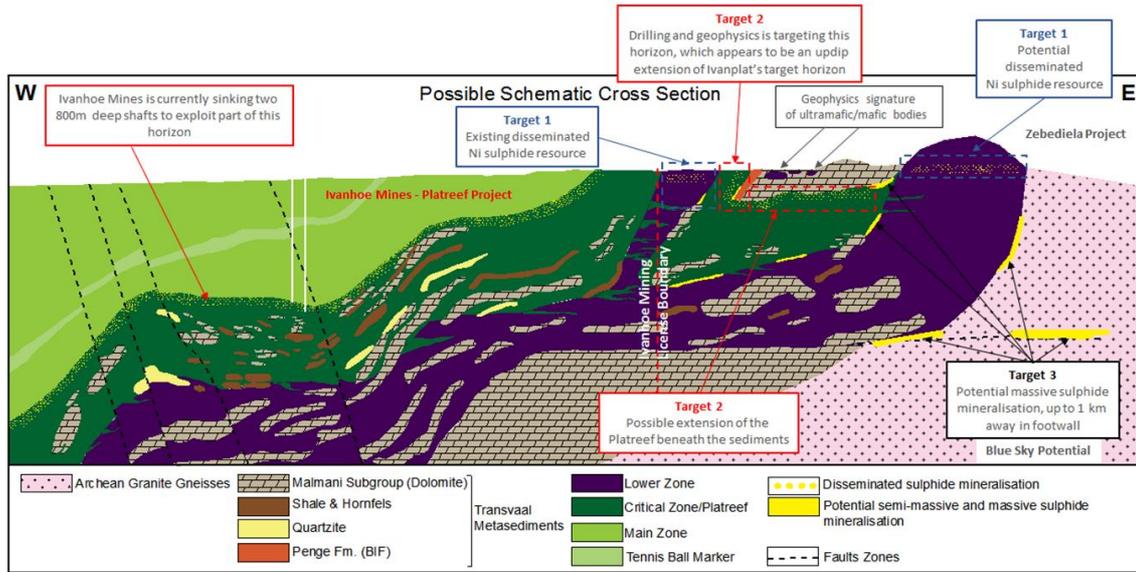


Figure 2: Interpreted schematic cross-section through the Property showing the different target types being explored for the Project. The drilling campaign will focus on Target 1 and Target 2.

**Comment by Wayne Isaacs, CEO**

"This drilling program is the next exciting step in helping ZEB Nickel identify and quantify higher grade nickel sulphide and PGE mineralisation in the footwall. We see the next steps as identifying the extent of the higher-grade mineralisation, classifying the historical resource as current, and then updating the PEA which could ultimately translate into better project economics with reduced project capital requirements with a higher life of mine head grade, assisted by PGE by-products."

**Qualified Person and Quality Control/Quality Assurance**

Richard Montjoie, has supervised the preparation of the scientific and technical information that forms the basis for this news release and has approved the disclosure herein. Mr. Montjoie is not independent of the Company. Mr Montjoie is a registered member of the South African Council for Natural Scientific Professions (SACNASP) membership number 400131/09. Mr. Montjoie holds a M.Sc. Honours in Economic Geology from the University of Witwatersrand, South Africa, and is fellow of the Geological Society of South Africa (GSSA).

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### **Cautionary Note Regarding Forward-Looking Statements**

This press release contains certain information that may constitute "forward-looking information" under applicable Canadian securities legislation. Forward looking information includes, but is not limited to, drill results relating to the Zebediela Project, the potential thereof, timing of economic studies and mineral resource estimates, the ability to classify the historical resource as a current mineral resource, the ability to sell marketable materials, strategic plans, including future exploration and development results, and corporate and technical objectives. Forward-looking information is necessarily based upon a number of assumptions that, while considered reasonable, are subject to known and unknown risks, uncertainties, and other factors which may cause the actual results and future events to differ materially from those expressed or implied by such forward-looking information. Factors that could affect the outcome include, among others: future prices and the supply of metals, the future demand for metals, the results of drilling, inability to raise the money necessary to incur the expenditures required to retain and advance the property, environmental liabilities (known and unknown), general business, economic, competitive, political and social uncertainties, results of exploration programs, risks of the mining industry, delays in obtaining governmental approvals, failure to obtain regulatory or shareholder approvals, and the impact of COVID-19 related disruptions in relation to the Company's business operations including upon its employees, suppliers, facilities and other stakeholders. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such information. Accordingly, readers should not place undue reliance on forward-looking information. All forward-looking information contained in this press release is given as of the date hereof and is based upon the opinions and estimates of management and information available to management as at the date hereof. The Company disclaims any intention or obligation to update or revise any forward-looking information, whether as a result of new information, future events or otherwise, except as required by law.