

### **ASX Announcement**

23 July 2020

# **Numerous Gold Targets and Extensive Gold Potential** Identified at the Eade Gold Project, Quebec

# **Highlights:**

- Numerous gold-copper exploration targets have been identified by Aster remote sensing which has highlighted the substantial gold potential of the Eade Gold Project
- Field mapping and prospecting completed at the Eade Gold Project highlighted broad zones of gold mineralisation on surface along banded iron formation (BIF) located within the eastwest trending Guyer greenstone belt
- The Eade Gold Project sits within a southern branch of an east-west trending greenstone belt which is host to numerous high-grade Au-Cu and base metal discoveries
- The **Eade Gold Project** is split into two domains:
  - West Eade contains an 8.3 km strike length with at least two gold prospects (rock chip samples of 7.41 g/t Au and 11.45g/t Au) which have not been followed up with modern exploration techniques 1
  - East Eade contains a 6.7 km strike length with at least two gold prospects (rock chip samples up to 12.0g/t Au and a 1m channel sample at Eade-Till returned a value of 5.3g/t Ag) which have not been followed up with modern exploration techniques. East Eade borders the Azimut Exploration Inc. (TSX.V: AZM) and SOQUEM owned Masta 2-Corvette Project (the Passi Prospect) 1
- The Company has recently completed a detailed geological and geophysical review of all historical geological and geophysical data across the region generally and the Eade Gold Project in particular as part of a follow-up phase of planned exploration
- A field exploration program is planned to commence at the Eade Gold Project during August 2020 - this Program will be focused on field testing these additional targets which have been identified during the geological and geophysical review and the Aster remote sensing program as well as following up on other high priority targets previously identified
- The Eade Gold Project, comprising both East and West Eade has, to date, over 15 km of strike length with several mineralised structures already identified
- The Company plans to continue exploration on the Eade Gold Project including additional field mapping and sampling, soil geochemistry, till sampling and channel sampling, and drilling when required
- 1. Refer to the ASX Announcement dated 25 September 2019 and titled "Acquisition of Quebec Focused Gold Exploration Projects" for the complete details of the rock chip samples referred to above, including full particulars of the location of the samples, the type of sample collected and the source of the sample assay results.





Metals Australia Ltd (ASX: MLS) (MLS or the Company) is pleased to announce that it has completed a detailed remote sensing study at its Eade Gold Project, located in Quebec, Canada. An aster satellite longwave infrared (LWIR), visible/near infrared (VNIR), and shortwave infrared (SWIR) survey and interpretation of the Eade Gold Project was completed. The results were most encouraging and multiple gold, copper and base metal anomalous targets have been identified.

The Eade Gold Project is located within a southern branch of the Lac Guyer greenstone belt of northern-Quebec (Canada), an east-west trending greenstone belt which is host to numerous high-grade gold-copper and base metal discoveries.

The Eade project is located approximately 120km northeast of the Eleonore Gold Mine which is owned and operated by Goldcorp and is located in close proximity to the Trans-Taiga Highway which provides excellent all-year road access to the projects.

The map below provides a general location of the Eade Gold Project relative to the Company's other exploration projects in Quebec, Canada.

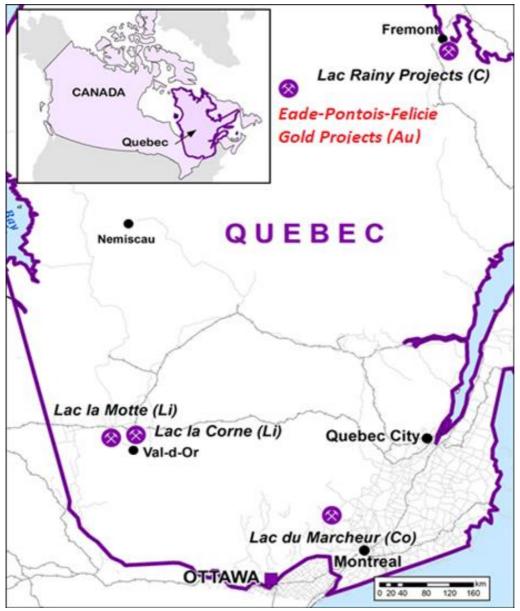


Figure 1: General location map of the Eade-Pontois-Felicie Gold Projects located in Quebec, Canada.



# **Eade Gold Project: Remote Sensing Program**

The Eade Gold Project has seen many campaigns of fieldwork by geologists of the Quebec Government Survey beginning in 1998, with more than twenty rock chip samples available with significant Au and Cu grades.

The Eade Gold Project is composed of amphibolitized metabasalts interlayered with felsic volcanic and metasedimentary, banded iron formation and ultramafic rocks. These rocks were intruded locally by veins, dikes and stocks some of which are granite, tonalite, pegmatite, diorite and quartz and/or feldspar porphyry. This geological setting is the duplicate of the geological setting of the nearby high-grade Mythril project, owned by Midland Exploration Inc.

The thermal cameras of the Japanese Aster satellite can map quartz, feldspar and porphyry minerals as well as metal sulphides associated with Au and Cu mineralisation even through moderate vegetation cover. The VNIR/SWIR optical cameras can map iron minerals and clay alteration halos through vegetation at increased spatial resolution.

The LWIR survey indicated that there is good spatial correlation between calcite and quartz which indicates an environment conducive to orogenic Au deposition. Orogenic gold deposits represent by far the most economically important primary gold mineralisation. At the Eade Gold Project, the gold, copper and base metal anomalism observed in the spectral data can be directly correlated to the mineralised zones which have been identified by the Company during its previous exploration program which was conducted in late 2019.

The Company observed a high-degree of correlation between the gold, copper and base metal anomalism identified with the remote sensing data when compared with those gold, copper and base metal mineralised samples which were collected during the late October 2019 field program at the Eade Gold Project. This high-degree of correlation observed supports the outcome of the Remote Spectral Analysis, suggesting that the mineralised samples which were collected by the Company in late October 2019 provide a reliable "signature" which can be used to model the results of the Remote Spectral Analysis.

The objective of the remote sensing study was to delineate gold, copper and base metal anomalies that may represent additional gold, copper and base metal mineralised horizons which would then be followed up with further field exploration. The remote spectral imagery results provide targets which can be assessed in the field to determine if mineralised horizons are present and if so followed up by further exploration and drilling. Given the observed correlation between the gold, copper and base metal anomalism from the Remote Sensing data and mineralised zones identified by the Company at the Eade Gold Project, the Company believes that significant potential exists to increase the mineralised footprint at the Eade Gold Project through increased exploration, target generation and reconnaissance drilling.

Exploration within the Lac Guyer greenstone belt, of which the Eade Gold Project forms part, has become quite intense with several junior and mid-tier companies now actively exploring this region. The region is host to several high-grade gold, copper and base metal discoveries and deposits.

Recently, Midland Exploration Inc. announced the discovery of the Mythril project, a high-grade copper-gold-molybdenum-silver mineralised zone with over 2 km strike length on surface (E-W), open in both directions. The geology of the Mythril project area consists of a volcano-sedimentary belt striking ENE, present within a tonalite, quartz monzodiorite and granite intrusive domain. Quartz-feldspar porphyry dykes are also present within the tonalite and granodiorite intrusions.

The geological setting of the Mythril Project is replicated at the Eade Gold Project. At the Eade Gold Project there is also a strong presence of sulphide minerals, such as pyrite, pyrrhotite, arsenopyrite and chalcopyrite, which have distinct longwave infrared (**LWIR**) spectral signatures and are mappable by satellite.



These spectral signatures observed from the sulphide minerals at the Mythril project provide an important comparison, particularly when correlating those spectral signatures at the Mythril project with those at the Eade Gold Project with a view to identify similar mineralised targets.

In addition, the volcano sedimentary rocks which host the Mythril project have a distinct spectral signature which is able to be mapped by the Aster satellite. The Aster spectral survey completed by the Company modelled the signature and response produced by the nearby Mythril project, with a view to evaluate whether the same spectral signature and response could be duplicated at the Eade Gold Project. At the Mythril project, a thermal response identified as chalcopyrite correlates with mineralised outcrops. The survey showed that this response is duplicated at the Eade Gold Project, which is located approximately 25km to the southwest on the same geological trend. This response suggests that the Eade Gold Project also has the potential to host copper mineralisation.

Electrical conductivity estimates made from satellite Synthetic Aperture Radar (SAR) confirm the Mythril project outcrops and boulders as anomalously conductive. A similar response is also observed when this methodology is applied to the Eade Gold Project. Minerals associated with orogenic gold discoveries and deposits, meaning gold lodes within and associated with metamorphic belts, typically have high dielectric constants (a measure of a mineral permittivity). A conductivity survey completed at the Eade Gold Project suggests that the conductivities associated with chalcopyrite and bornite (where the dielectric constant is greater than 81) provide a similar response and signature to those identified at the Mythril project, thereby presenting attractive targets for follow up.

The outcome of the SAR has identified numerous additional exploration targets at the Eade Gold Project which will be followed up in the field to test their potential to host gold mineralisation.

The map below outlines the geology of the Eade Gold Project, which is separated into the Eade-East domain and the Eade-West domain. Also shown on the map is the Pontois Gold Project and the Felicie Gold Project, which are also 100% owned by the Company:

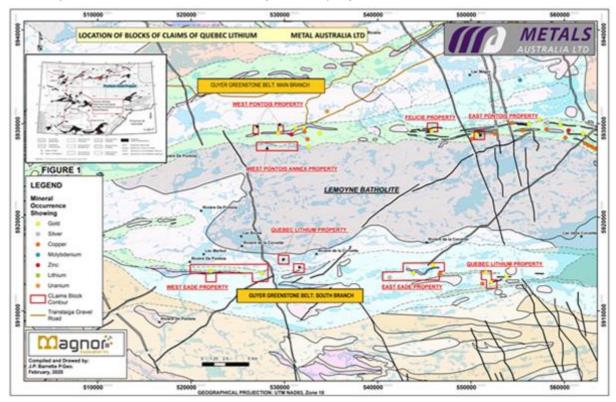


Figure 1: Geology map of the Eade-East and Eade-West gold projects as well as the Pontois and Felicie Gold Projects, located in Quebec, Canada. Historical samples, drill holes and channel samples are also noted on the map together with regional geological features such as regional fault structures and shear zones.



The field mapping and prospecting exploration program previously conducted by the Company in late 2019 successfully identified a number of mineralised targets which were sampled on surface. Although the program was only able to investigate a limited number of the prospective areas, the Eade Gold Project has demonstrated the potential for broad zones of mineralisation which will be followed up during subsequent field programs.

Gold mineralisation identified across the Lac Guyer greenstone belt and within the Eade project area are within silicate, oxide (magnetite) and sulphide facies of banded iron formation. The map below outlines the claim blocks of the Eade East and Eade West project areas underlain by the geology of the area, which forms part of the Guyer Gold Belt: South Branch:

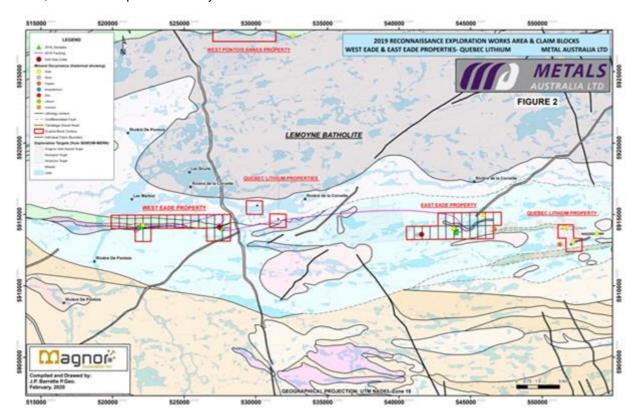


Figure 2: Location map outlining the claim blocks of the Eade East and Eade West project areas underlain by the geology of the area, which forms part of the Guyer Gold Belt: South Branch, located in northern Quebec, Canada.

A rock sample collected along strike of the Eade-6 historic gold showing returned a result of 3.37 g/t Au whilst another sample collected further along strike of the same mineralised banded iron formation and structure returned a result of 0.82 g/t Au at surface. These results indicate that the mineralisation extends along strike of the target geological structures within the banded iron formation (**BIF**) at West Eade over a considerable distance.<sup>1</sup>

The results collected from the field program completed in late October 2019 were consistent with the historical sampling that was undertaken at the Eade Gold Project confirming the presence of gold mineralisation within these BIF structures.

Although higher grade mineralisation has been identified in localised zones, it is understood that these concentrations are due to a higher accumulation of fluids which deposit the gold in the formation. The presence of gold mineralisation over broader zones within these BIF structures is significant and

<sup>&</sup>lt;sup>1</sup> Refer to Appendix A of ASX Announcement dated 5 March 2020 and titled "Exploration Program Highlights Gold Potential Eade Project" for the complete list of sample results.



encouraging for the Company due to the fact that it eliminates the theory that the gold mineralisation is simply coincidental.

The Eade Gold Project has not been the subject of modern exploration and limited follow up exploration has been undertaken on the historical occurrences. The Company believes that modern exploration techniques, including channel sampling, soil geochemical sampling and till sampling will open up a significant amount of strike length of the known structures, enabling a focus on modern gold and copper exploration on and around the known prospects.

The map below illustrates the location of the 2019 field exploration sampling points at the Eade-East project area as well as the historic exploration, including historical drill holes, rock samples and channel samples.

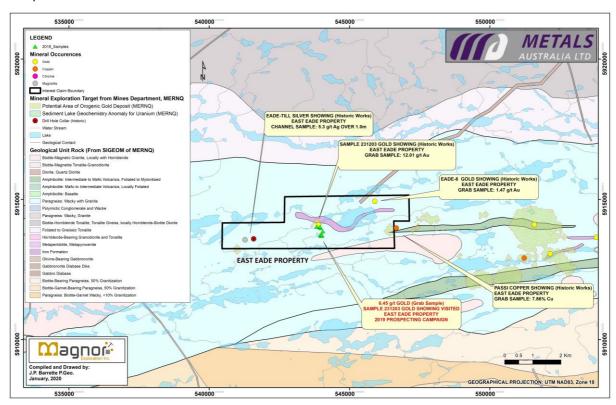


Figure 3: Geological map overlaid by the 2019 field exploration sampling points at the Eade-East project area together with the sampling points and location of historic exploration, including historical drill holes, rock samples and channel samples.



The map below illustrates the location of the 2019 field exploration sampling points at the Eade-West project area as well as the historic exploration, including historical drill holes, rock samples and channel samples.

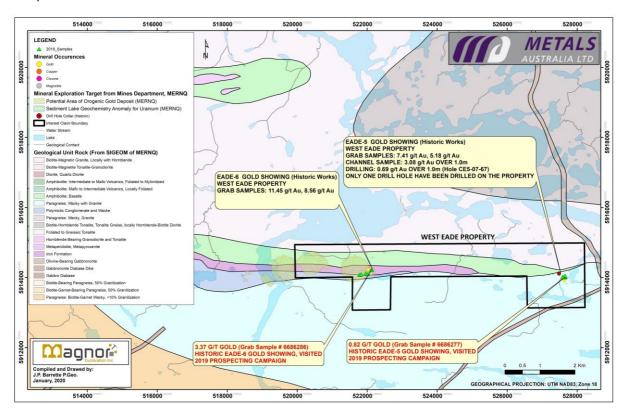


Figure 4: Geological map overlaid by the 2019 field exploration sampling points at the Eade-West project area together with the sampling points and location of historic exploration, including historical drill holes, rock samples and channel samples.

The East Eade and West Eade project areas include 20km of an east-west trending volcanosedimentary belt. The geological setting is characterised by sheared metasediments, banded iron formation (silicate, oxide-magnetite and sulfide facies BIF), paragneisses, metabasalt and small felsic intrusions.

The West Eade project area contains an **8.3 km strike length** and covers two gold occurrences: Eade-5 and Eade 6. At Eade-5 rock chips have returned values up to **7.41g/t Au** in iron formation within a sulphidic shear. Approximately 6km along strike to the west at Eade-6, rock chip samples of iron formation returned results up to **11.45g/t Au**.<sup>2</sup>

The East Eade project area contains a **6.7km strike length** and covers three gold occurrences (Eade-8, Eade-Till, Ech.231203) and a copper occurrence (Passi). Rock chip samples at the Eade-8 occurrence returned values to **1.47g/t Au in a 2m wide shear zone**. To the west at Ech.231203 quartz veins in a shear zone returned a best result of **12.0g/t Au** and a **1m channel sample at Eade-Till returned a value of 5.3g/t Ag.<sup>2</sup>** 

This announcement was authorised for release by the Board of Directors.

<sup>&</sup>lt;sup>2</sup> Refer to ASX Announcement dated 25 September 2019 and titled "Acquisition of Quebec Focused Gold Exploration Projects".



#### **ENDS**

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## **ASX Listing Rules Compliance**

In preparing this announcement dated 23 July 2020, the Company has relied on the announcements previously made by the Company and disclosed below. The Company confirms that it is not aware of any new information or data that materially affects those announcements previously made, or that would materially affect the Company from relying on those announcements for the purpose of this announcement dated 23 July 2020.

## **Eade Gold Project**

Pursuant to ASX Listing Rule 5.23.2, the Company confirms that it is not aware of any new information or data that materially affects the information included in the announcement dated 25 September 2019, the announcement dated 7 November 2019 and the announcement dated 5 March 2020.

# **Caution Regarding Forward-Looking Information**

This document contains forward-looking statements concerning Metals Australia. Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.

Forward looking statements in this document are based on the company's beliefs, opinions and estimates of Metals Australia as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

#### **Competent Person Declaration**

The information in this announcement that relates to Exploration Results is based on information compiled by Mr. Jean-Paul Barrette P.Geo, B.Sc. Mr Barrette is Project Geologist with Magnor Exploration Inc. and a consultant to Metals Australia Limited. Mr Barrette and is a member of the Ordre des Géologues du Québec (OGQ) with member number OGQ #619. Mr. Barrette has sufficient experience (35 years) that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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'. Mr. Barrette consents to the inclusion in the report of the matters based on their information in the form and context in which it appears.