



ASX Announcement | 22 October 2020
Rafaella Resources Limited (ASX:RFR)

Geophysical data review shows multiple prospects at the Midrim Ni-Cu-PGE deposit

Investment Highlights

- ① Southern Geoscience Consultants has completed their initial review of the first of the Canadian high-grade Ni-Cu-PGE projects currently subject to a conditional sale agreement.
- ① Ten shallow level anomalies have been identified in addition to the known mineralisation at Midrim and Lac Croche.
- ① These anomalies are favorably associated with elevated magnetics which enhances their prospectivity.
- ① The Priority 1 and Priority 2 targets defined are on the western margin of a very significant zone of elevated magnetics, about 1.5km in east-west dimension that corresponds with documented gabbro-anorthosite intrusive rocks.
- ① New heli-borne EM (HEM) surveys are planned for late 2020 to follow up on these prospects.

Rafaella Resources Limited (ASX:RFR) ("Rafaella" or "the Company") is pleased to provide initial findings from the geophysical review being undertaken by Southern Geoscience Consultants ('SGC') on the Midrim and Laforce Ni-Cu-PGE deposits (the 'Projects') located in the highly prospective Belleterre-Angliers Greenstone Belt located in the Province of Quebec, Canada (**Figure 1**). The Projects are the subject of a conditional acquisition agreement between the Company and Meteoric Resources NL¹.

As previously disclosed², the Projects benefit from exceptionally high-grade intercepts including intersections at the Midrim Deposit from drilling conducted, including:

- **4.3m @ 6.57% Ni, 5.15% Cu & 7.15g/t PGEs** from 57.15m depth in hole MR00-05;
- **4.6m @ 5.97% Ni, 4.91% Cu & 3.38g/t PGEs** from 48.00m depth in hole MR00-37; and
- **9.4m @ 3.52% Ni, 4.25% Cu & 4.59g/t PGEs** from 56m depth in hole MR17-01

¹ See ASX announcement "Agreement to Acquire High-Grade Nickel-Copper Sulphide Projects in Canada and ~1.2M Private Placement Completed" dated 21 August 2020.

² See ASX announcement "Agreement to Acquire High-Grade Nickel-Copper Sulphide Projects in Canada and ~1.2M Private Placement Completed" dated 21 August 2020.

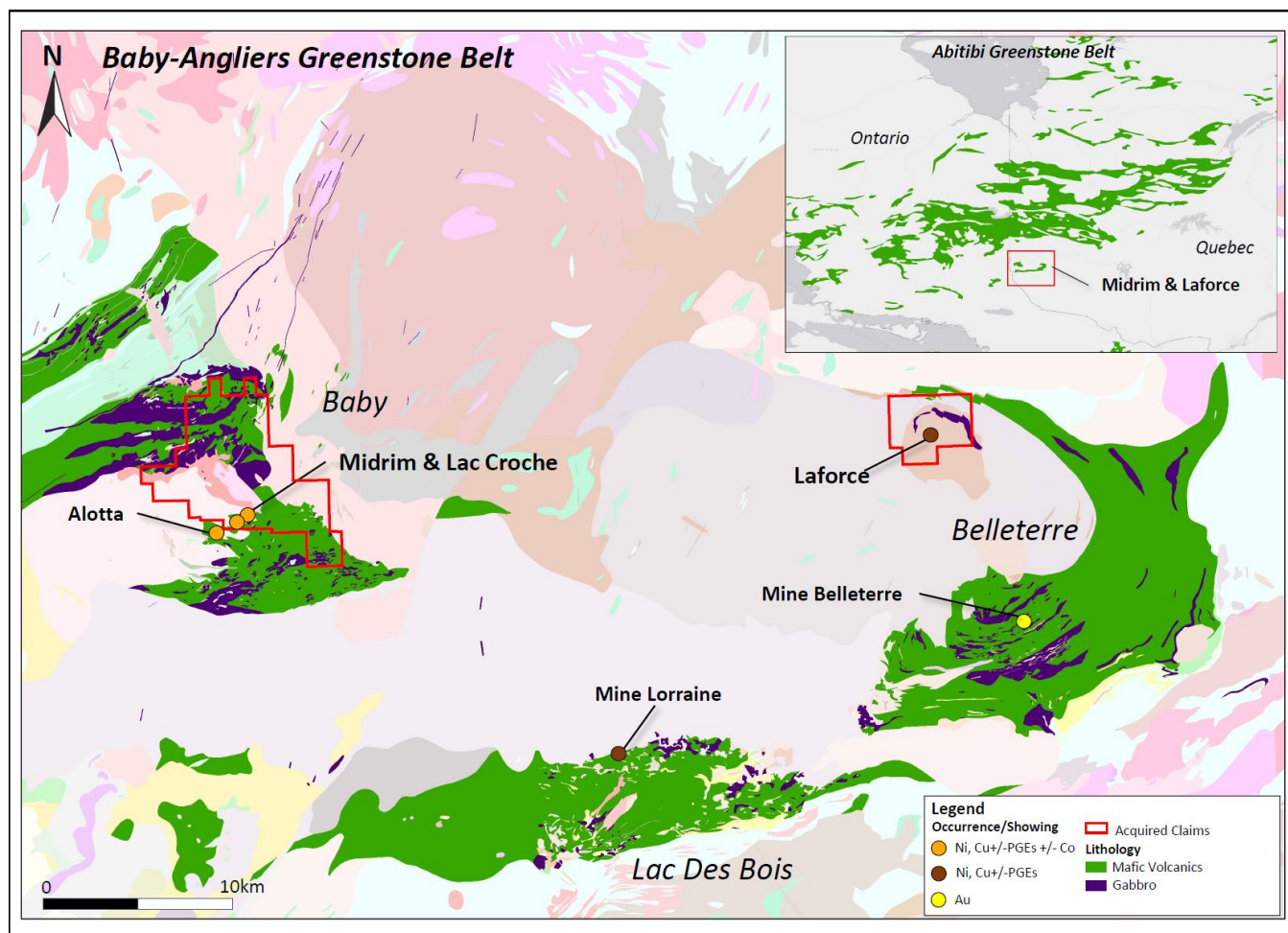


Figure 1: Temiscamingue Regional Geology of the Midrim and Laforce Projects in the Belleterre Angliers Greenstone Belt

The review efforts have been greatly aided by MegaTEM data previously not available to the Company. SGC notes that the previously flown MegaTEM survey (2001 vintage) is a high frequency (90Hz) airborne EM system flown at a relatively high altitude of about 120m (or higher in areas of steep terrain). With the rapid advancement of geophysical systems this approach is not deemed to be the most appropriate airborne EM system to assist exploration for intrusive hosted Ni-Cu-PGM mineralisation. The effective depth penetration of this previously flown MegaTEM survey is far less effective than more modern and powerful surveys (HEM) searching for much larger conductive ore bodies at depth within the tenement area. However, the historic MegaTEM surveying was successful in discovering the known, shallow level high-grade deposits of Midrim and Laforce and therefore has been useful in validating the proof of concept as highlighted by CSA Global in their review³.

³ See ASX announcement "Due Diligence Finds Strong Encouragement for Exploration at Midrim and LaForce Ni-Cu-PGE Projects" dated 21 September 2020.

Review and re-processing efforts by SGC have highlighted up to ten new, untested anomalies (**Figure 2**).

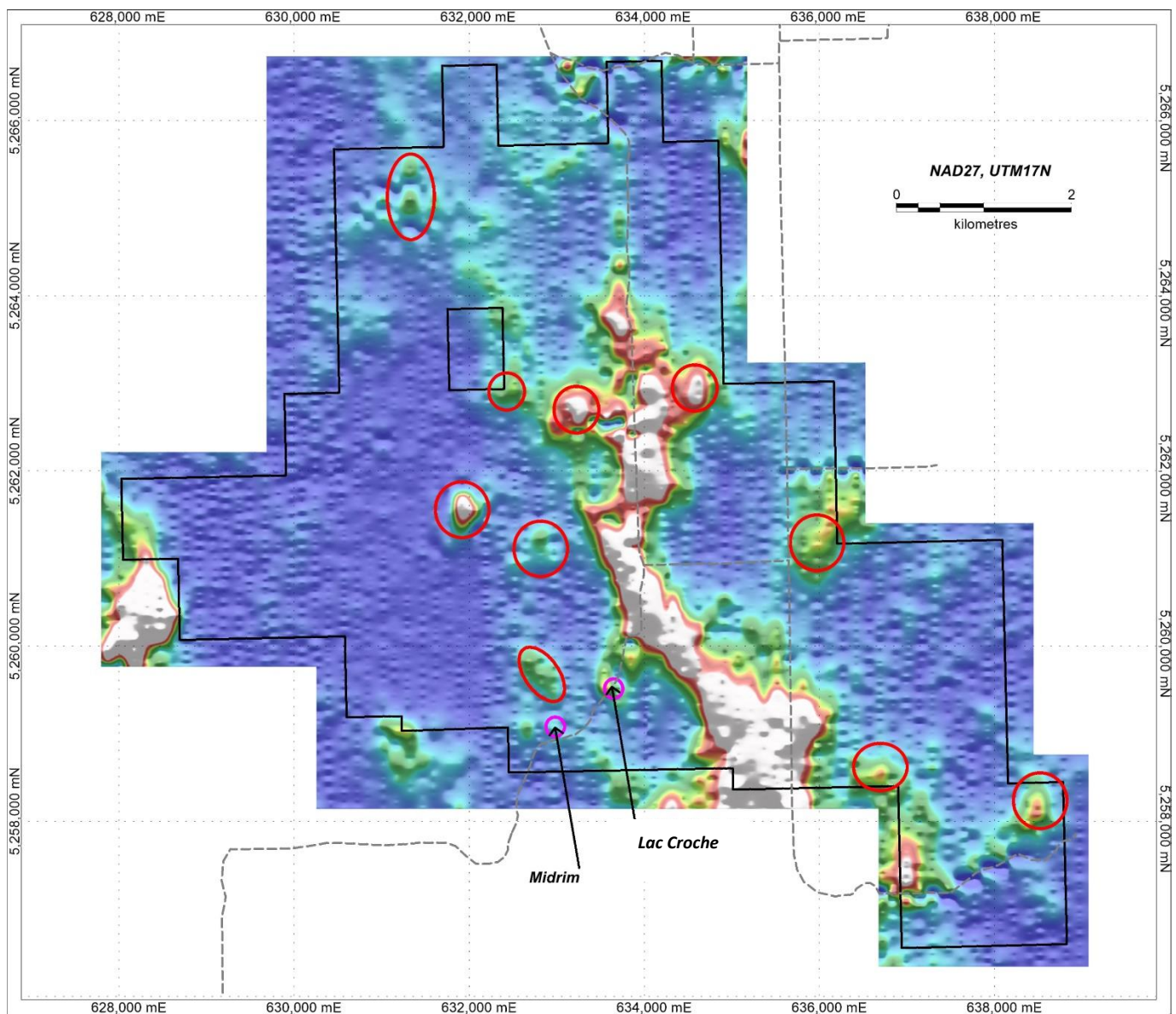


Figure 2 – MegaTEM reprocessed data identifying new prospects

Subject to completion of the acquisition, the Company plans to further review and test these prospect locations for the potential to add to the already well-endowed surface deposits of Midrim and Laforce. Any new near surface Ni-Cu-PGM discoveries here would greatly add to the economics of these deposits and further assist in the identification of the extent of potential intrusive hosts.

SGC has recommended that the Company:

- Fly the project areas of primary interest using the latest survey systems at a considerably lower frequency - high powered HEM system (i.e. 40m terrain clearance and using a system such as HeliTEM, VTEM or SKYTEM at 7.5-15 Hz base frequency);
- Follow-up the Heliborne EM with ground reconnaissance / sampling and ground gravity and /or ground EM if access allows; and
- Continue with the re-processing of the Laforce 2005 VTEM data, including modelling and interpretation of the regional magnetics.

Rafaella's Managing Director Steven Turner said: "The review by SGC strongly supports the initial findings by CSA Global that the Midrim and Laforce high grade nickel-copper-PGE deposits offer exceptional upside to the Company. SGC have confirmed that prior work, although extensive, has not been effective given the relatively shallow penetration of previous airborne EM coverage and therefore significant potential may have been overlooked. Rafaella intends to act upon the SGC recommendations following the acquisition of the Project, that remains subject to the shareholder meeting on October 29th. We believe that significant additional value can be realized through this approach for a modest initial budget. We are very excited and fortunate to have secured these high-grade high-potential nickel sulphide deposits at a time when the world is recognizing the growing importance of this key commodity."

This announcement has been authorised by the Board of Directors of the Company.

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About Rafaella Resources

Rafaella Resources Limited (ASX:RFR) is an explorer and developer of world-class mineral deposits worldwide. Rafaella owns the Santa Comba tungsten and tin development project in Spain and the McCleery cobalt and copper exploration project in Canada. Santa Comba is located in a productive tungsten and tin province adjacent to critical infrastructure and the McCleery project was previously under-explored and holds significant potential.

To learn more please visit: www.rafaellaresources.com.au

About Southern Geoscience Consultants

Southern Geoscience Consultants (SGC) is a group of highly experienced geophysicists based in Perth, Western Australia, who provide independent, specialised consulting services to the mineral and petroleum exploration industries globally.

SGC works with all types of geoscientific data, and expertise includes the planning, management, quality control, processing, imaging and interpretation of geophysical surveys, management of exploration programs, targeting and design of drill holes, GIS and database compilations, project evaluations, regional targeting studies, sales of multi-client data and value-added products, instrument rentals, rock property measurements and software development. SGC staff and consultants have considerable experience in the exploration of nickel-sulfide orebodies and the use of EM survey for targeting massive sulfides.

To learn more please visit: <https://sgc.com.au/>

Forward Looking Statements Disclaimer

This announcement contains forward-looking statements that involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future development.