



For Immediate Release

## **DEEPROCK ANALIZING HIGH RESOLUTION HELIBORNE MAGNETIC SURVEY FLOWN OVER RALLEAU GOLD/VMS PROJECT ALONG URBAN-BARRY DFZ, QUEBEC.**

VANCOUVER, CANADA, January 9, 2020 – DeepRock Minerals Inc. (the “Company”) (CSE Symbol: “DEEP”), announces it is in receipt of, and now analyzing the results of, a High-Resolution Heliborne Magnetic Survey flown over its Ralleau gold/ VMS property, located in the Abitibi region of Quebec, just east of Lebel sur Quevillon, Quebec, and a short distance between both of Osisko’s Urban-Barry and Windfall deposits.

Combined with Megastar’s Helicopter-borne VTEM (Versatile Time Domain ElectroMagnetic) and MAG survey flown in 2008, the interpretation of DeepRock’s new 2019 survey has permitted DeepRock Minerals a high level of confidence in four priority 2020 exploration targets.

The first target corresponds to a high magnetic anomaly coincident with a good conductor, on strike with a known Cu-Zn-Ag showing. The second target corresponds to a folded magnetic axis coupled to a good conductor running parallel. Targets 3 and 4 are two other magnetic anomalies which present non-conventional aspects and were detected in proximity of a known Copper-silver showing.

These new results show a net improvement in the interpretation of the geology of the Ralleau Project, and of the structures and presence of zones with an economic potential. This detailed high resolution heliborne magnetic survey also highlighted some posterior structures which could be gold bearing. Several gold deposits hosted within the Urban-Barry Belt are associated with a set of NE faults included into a NNE couloir. This deformation event is accompanied by a magmatic event represented by QFP dykes dated 2697 Ma. These intrusions are closely related to the mineralization and appear to have acted as rheological anisotropies promoting fracturation, hydrothermal brecciation and sulfides precipitation. Characteristics of the different showings point toward orogenic-type mineralization.

DeepRock intends to verify the four priority targets on the ground by carrying out till sampling and IP survey programs. This will be followed by stripping and trenching in preparation of an aggressive diamond drilling program.

The strongest magnetic anomaly occurs in the southeastern area of the survey block. It seems to be located at the hinge of a fold, which possibly favored the thickening of magnetite or pyrrhotite rich units, creating a locally larger volume of magnetic rocks. In several areas, strings of alternating series of magnetic highs and lows aligned longitudinal to the general lineaments’ trends occur. This type of feature possibly belongs to mafic intrusive or volcanic rocks affected by boudinage effects which could explain the alternating sequence of magnetic highs and lows.

Prospectair from Gatineau, Quebec and Dynamic Discovery Geoscience of Ottawa, Ontario performed the survey and provided the detailed interpretation.

The Ralleau Project was flown with traverse lines at close 50 m spacings and control lines spaced every 500 m. The survey lines were oriented N015. The control lines were oriented perpendicular to traverse lines. The average height above ground of the helicopter was only 39 m and the magnetic sensor was at an even lower 18 m. The survey coverage was a total of 733 linear-km.

Data compilation including editing and filtering, quality control, and final data processing was performed by Joël Dubé, P.Eng.. Processing was performed on high performance desktop computers optimized for quick daily QC and processing tasks.

The airborne magnetometer data, recorded at 10 Hz, was carefully plotted and checked for spikes and noise on a flight basis. An average of 1.95 second lag correction was applied to the data to correct for the time delay between detection and recording of the airborne data.

Ground magnetometer data was recorded at 1 sample per second and interpolated by a spline function to 10 Hz to match airborne data. Data was inspected for cultural interference and edited where necessary. Low-pass filtering was deemed necessary on the ground station magnetometer data to remove minor high frequency noise. The diurnal variations were removed by subtracting the ground magnetometer data to the airborne data and by adding back the average of the ground magnetometer value.

Levelling corrections were performed using intersection statistics from traverse and tie lines. After statistical levelling was considered satisfactory, de-corrugation was applied on the data to completely remove any subtle non-geological features oriented in the direction of the traverse lines.

Once the Total Magnetic Intensity (TMI) was gridded, its First Vertical Derivative (FVD) and Second Vertical Derivative (SVD) were calculated to enhance narrow and shallow geological features. Finally, the component of the normal Earth's magnetic field, described by the International Geomagnetic Reference Field (IGRF), was then removed from the TMI to yield the residual TMI.

In order to enhance the subtle magnetic features further, the Tilt Angle Derivative (TILT) was also computed for this project.

It has been shown that it is possible to use the Tilt Angle Derivative to estimate both the location and depth of magnetic sources.

Most of the surveyed area is affected by strong linear magnetic features characteristic of alternating sequences of mafic volcanic rocks with sedimentary or intermediate to felsic volcanic rocks, with possibly some small size intrusive stocks or dykes locally. Areas with lower background values and decreased signal variability are likely to be dominated by sedimentary or felsic intrusive/volcanic rocks.



Most of the magnetic lineaments found in the survey block are generally trending from E-W to NW-SE, except in areas where lineaments are clearly curved, and even heavily folded locally, attesting that the area underwent strong deformation events in the past.

In some areas, it is possible to detect structural features offsetting observed magnetic lineaments and causing abrupt interruption or changes of the magnetic responses. These features are typically caused by faults, fractures and shear zones.

Dr. Christian Derosier, P.Geo., D.Sc., is the qualified person (QP) as defined in National Instrument 43-101 and, acting on behalf of DeepRock, has reviewed and approved the technical content of this news release.

### **About DeepRock Minerals Inc.**

DeepRock Minerals is a dynamic Canadian mineral exploration company headquartered in Vancouver, British Columbia. DeepRock's primary focus is in acquiring and developing prime North American gold and VMS type exploration/development mining projects; as well as existing processing and producing mining operations of merit. DeepRock Minerals is managed by an experienced team of mining and business professionals with more than 150 years of combined extensive operating and financial experience and expertise. The shares of DeepRock Minerals Inc. trade on the Canadian Securities Exchange (CSE) under the trading symbol "DEEP".

Should you have any questions please feel free to contact the undersigned at any time at [PO@juniormining.com](mailto:PO@juniormining.com)

### **ON BEHALF OF THE BOARD OF DIRECTORS OF DEEPROCK MINERALS LIMITED**

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