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Meridian Reports First Results from Espigão Gravity Survey Program

Significant trend of gravity anomalies coincident with airborne EM defined at Espigão

LONDON, United Kingdom, May 5, 2022 / CNW / Meridian Mining UK S (TSX: MNO), (Frankfurt/Tradegate: 2MM) & (OTCQB: MRRDF), ("Meridian" or the "Company") is pleased to announce the first results of its ongoing gravity survey[1] over its Espigao copper-gold polymetallic project ("Espigão" or the "Project") in Rondônia, Brazil. The gravity survey is continuing at Espigão in parallel with Meridian's main focus, the drilling of the Cabaçal copper-gold VMS project. Espigão's initial results are revealing a broad series of significant gravity anomalies, measuring up to 15mgal above background data, with multiple discrete anomalies 2km in size. Leading external consultants have assessed the combined regional geophysical data for Espigão with this modern gravity data and are proposing that a non-granite lithology is hosting these anomalies This is consistent with the Company's exploration model for Espigão, to have strong potential to host a new Intrusion Related Iron-Oxide-Copper-Gold ("IOCG") province similar to those found in Australia. Meridian's past drilling and geological mapping within the survey area, has repeatedly identified brecciate hematite units; a common host for IOCG deposits. The low-cost Survey is continuing and further results are pending.

Highlights of today's announcement:

- Meridian's Espigão Cu-Au polymetallic project hosts significant IOCG type gravity anomalies;
- Broad regional gravity anomalies defined across Espigão Cu-Au polymetallic project;
  - Gravity anomalies of up to 15mgal above background have been defined;
  - Individual anomalies measured up to 2km across;
  - Gravity anomalies are co-incident with hydrothermal vein and breccia arrays at surface; and
- Espigão's gravity anomalies mirror those of common IOCG ore provinces in Australia.

Dr Adrian McArthur, CEO and President of Meridian, comments: "The strong gravity responses being mapped out in the first phase of geophysical surveys is exactly what we hoped to see and entirely consistent with the new exploration model being applied to the Espigão copper-gold polymetallic project. The responses provide a significant contrast to the background granite signature, and are indicative of a dense underpinning rock mass in the substrate, consistent with the IOCG model. The geophysical program is expanding to provide tenement-wide coverage before infilling the grid in promising areas to define more specific drill targets. Our active drilling will remain focussed on the Cabaçal copper-gold VMS project whilst we assess the longer-term approach to these emerging targets at Espigão."

Espigão Polymetallic Project

As part of its long-term strategic copper-gold focus, Meridian has initiated a gravity survey at its Espigao copper-gold polymetallic project. Espigão hosts a surface vein system carrying elevated copper – typically in the range of >0.2% Cu to a maximum of 0.8% Cu. Ferruginous breccia systems (hematite -dominated matrix) are present, and indicator elements from stream sediment indicator mineral analysis show minerals consistent with a dynamic hydrothermal system[2]. The granitic basement terrain has similarities

[1] Meridian News Release of March 7, 2022
[2] Meridian News Release of May 18, 2020

to the Gawler Craton - Hiltaba Volcano-Plutonic Association[3]. The objective of the gravity survey is to test for anomalies consistent in range to those seen in IOCG systems. The gravity survey remains in progress, focussing initially on establishing a regional framework with broadly spaced stations, along regional road access with approximately 2km spaced stations before further detailed infill program, to model the geometry of these subsurface anomalies more accurately.

Processing by the Company's geophysical consultancy Core Geophysics have highlighted a broad gravity feature developing in the southeast of the Project displaying a regional response, terrain corrected, up to 15mgal above background. Residual filtering has defined a number of smaller/discrete anomalies of interest up to 2km in size. The source of the anomalies needs further investigation, but responses at Espigão fall within ranges of known IOCG deposits (Table 1). The strongest responses are developed in a structurally favourable setting, lying to the north of an inflexion point on the margin of the hinge zone between the Parecis Basin and the Proterozoic crystalline basement. Regional geology places these gravity anomalies close to first-order terrain terrane boundary faults with the extensive 20km by 15km multi-element soil anomalies representing a major, potentially crustal-scale thermal event has occurred. Espigão's distribution of mineralisation assemblages are associated with a common zonation pattern.

	Magnetic Anomaly Amplitude	Magnetic Anomaly Amplitude	Gravity Anomaly Amplitude	Gravity Anomaly Amplitude
Units	nT	km	Mgal	Km
Espigão Project	Pending	Open	15	Open
Deposit				
Olympic Dam	1,400	8 km across	17	8 km across
Wirrda Well	1,800	6 * 9 km	6	6 * 9 km
Carapateena	200-300	1.5 * 1.0 km	2 - 2.5	2 * 2 km
Prominent Hill	7,000	0.7 * 0.5 km	5	2.5 * 1 km
Ernest Henry	7,000 – 10,000	1.2 * 0.7 km	2 - 3	1.2 * 0.7 km
Eloise	1,100	0.75 * 0.25 km	1.0	1.0 * 0.5 km

Table 1 International IOCG and associated

Many of the mapped vein occurrences mimic trends in the gravity gradients, suggesting the vein systems are exploiting structures linked to these anomalous responses. Some Gravity anomalies align with magnetic anomalies defined within Meridian's 2015 100m line spacing airborne HeliTEM survey.

[3] Technical Presentation: https://meridianmining.co/wp-content/uploads/MNO-Polymetallic_Final.pdf

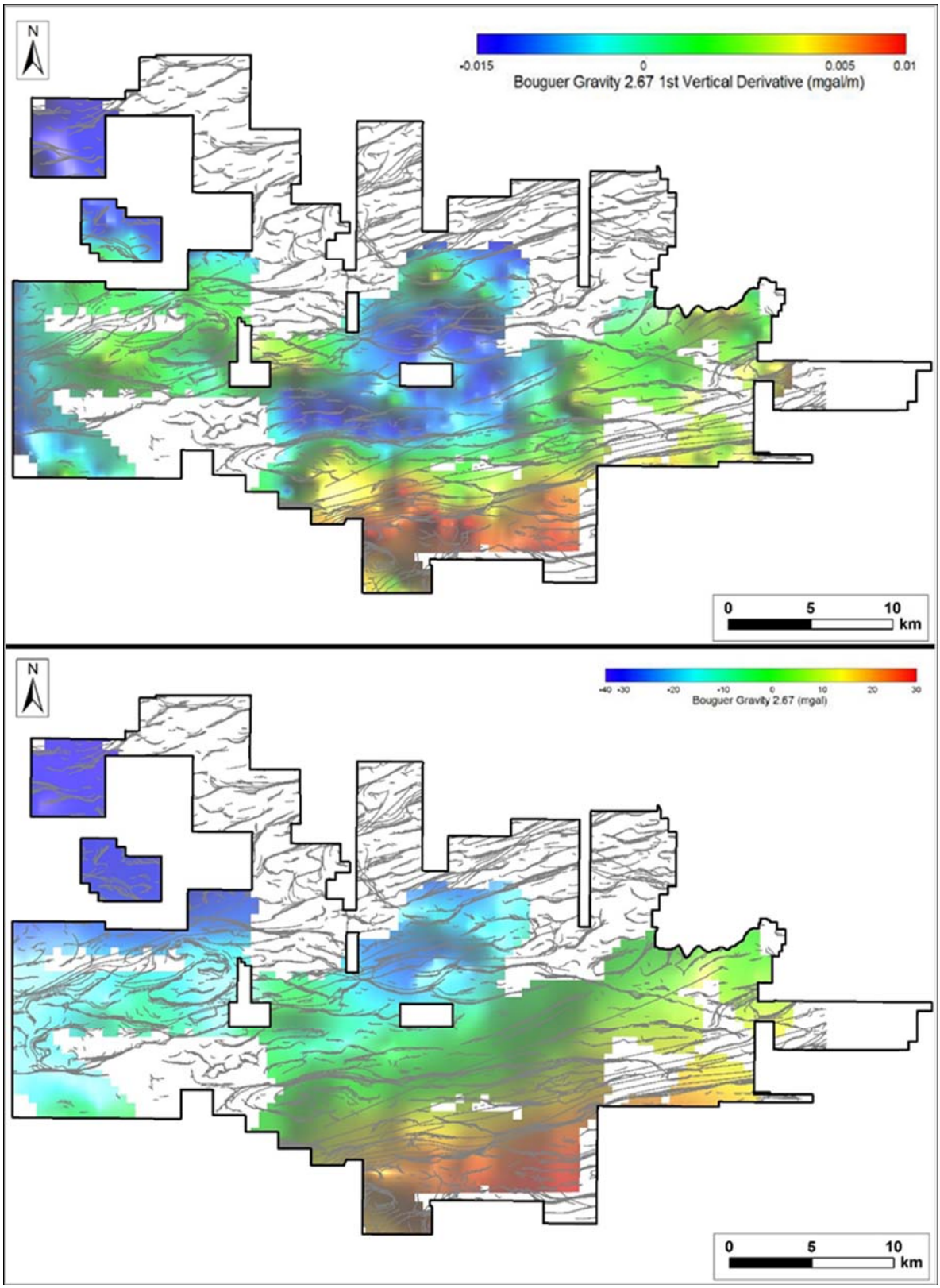

Figure 1. Terrain corrected Bouguer Gravity Residual Images, overlain by gradients defined in upward continuation modelling ("Worms") of magnetic data. Top: Bouguer Gravity, first vertical derivative. Bottom: Bouguer Gravity,

The gravity survey will continue through 2022 to complete regional survey coverage before a phase of prospect-scale assessment. Geophysical exploration targets are preliminary in nature and not conclusive evidence of the likelihood of a mineral deposit.

Notes

The gravity program is being executed by Meridian's trained in-house team using a new gravity meter (CG-6 Autograv™) purchased from Scintrex. Results are sent daily for processing and quality control to the Company's consultancy, Core Geophysics.

Qualified Person

Dr Adrian McArthur, B.Sc. Hons, PhD. FAusIMM., CEO and President of Meridian as well as a Qualified Person as defined by National Instrument 43-101, has supervised the preparation of the technical information in this news release.

On behalf of the Board of Directors of Meridian Mining UK S

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ABOUT MERIDIAN

Meridian Mining UK S is focused on the acquisition, exploration, and development activities in Brazil. The Company is currently focused on resource development of the Cabaçal VMS Copper-Gold project, exploration in the Jaurú & Araputanga Greenstone belts located in the state of Mato Grosso; exploring the Espigão polymetallic project and the Mirante da Serra manganese project in the State of Rondônia Brazil.

FORWARD-LOOKING STATEMENTS

Some statements in this news release contain forward-looking information or forward-looking statements for the purposes of applicable securities laws. These statements address future events and conditions and so involve inherent risks and uncertainties, as disclosed under the heading "Risk Factors" in under the heading "Risk Factors" in Meridian's most recent Annual Information Form filed on www.sedar.com. While these factors and assumptions are considered reasonable by Meridian, in light of management's experience and perception of current conditions and expected developments, Meridian can give no assurance that such expectations will prove to be correct. Any forward-looking statement speaks only as of the date on which it is made and, except as may be required by applicable securities laws, Meridian disclaims any intent or obligation to update any forward-looking statement, whether as a result of new information, future events or results or otherwise.