

Meridian Smelter Tests Deliver High Quality Blister Copper from Cabaçal Copper Concentrates

HIGHLIGHTS:

- Exceptional quality of Cabaçal's copper concentrates confirmed in smelter test with high-grade, high-quality blister copper produced;
- Laboratory-scale smelting and converting tests resulted in:
 - Copper 98.9% purity;
 - Precious metals @ 95.2g/t gold and @ 387.6g/t silver¹;
- Cabaçal's blister copper's impurity levels assayed better than industry average for high-quality anode copper;
- The high copper grades, significant gold and silver credits and lack of impurities in Cabaçal's copper concentrates are expected to make them highly sought after by the world's copper smelters; and
- Meridian continues to engage in off-take discussions with a range of potential counterparties.

¹ See note on Table 1

London, United Kingdom--(Newsfile Corp. - July 30, 2026) - Meridian Mining plc (LSE: MNO) (TSX: MNO) (FSE: N2E0) (Tradegate: N2E0) (OTCQX: MRRDF) ("Meridian" or the "Company") is pleased to announce that the smelting of Cabaçal copper sulphide produced **high-quality blister copper grading 98.9 % Cu, 95.2 g/t Au and 387.6 g/t Ag** (Table 1). The blister copper was produced from a concentrate sample produced from the Cabaçal copper-gold-silver project ("Cabaçal") in Mato Grosso, Brazil. It was processed in laboratory-scale smelting and converting tests at Kingston Process Metallurgy (KPM), in Ontario, Canada.

Cabaçal's blister copper (Photo 1) contained very low minor-element impurity levels outperforming typical industry anode copper, while maintaining the residual sulphur levels targeted for the laboratory smelting and converting test programme. The associated high recoveries of copper, and gold and silver in the smelting stage, demonstrate that Cabaçal's copper concentrates convert efficiently into high-quality copper blister under smelting conditions representative of commercial operations.

Mr. Gilbert Clark, CEO, comments: "These results take the marketability and value of Cabaçal's copper concentrates to the next level; a tremendous confirmation of the product. Cabaçal's DFS is advancing towards completion and project finance preparation is well advanced. We are positioning Cabaçal to deliver one of the most sought-after high-grade, clean copper concentrates in the market with high gold and silver payable credits, exceptionally low impurities, and the sulphur content required for acid production. This is a strong negotiating position as we move into off-take discussions for a copper-gold mine that will go for over ten years and a belt that could potentially be in production for decades to come. These results are another demonstration of why Meridian is developing one of the most prospective copper-gold VMS hosted land packages in South America."

CABAÇAL COPPER CONCENTRATE SMELTING TEST

As part of Cabaçal's DFS¹ programme the Company has completed, laboratory-scale, smelter characteristic testwork on copper sulphide concentrates containing gold and silver, sourced from ROM-grade ore samples (the "Test"). The objective of the Test was to blow high-grade matte (~62% Cu) to blister copper to demonstrate that Cabaçal's low impurity Cu + Au-Ag sulphides exhibit superior smelting performance and could produce a high-grade, high-quality copper blister product. The results met the Company's expectations. They confirm that Cabaçal's copper concentrates possess excellent

smelting characteristics and if used as direct smelter feed will produce very high-purity copper anodes. In the more likely commercial scenario, the concentrate may be used as a premium blending feedstock, to upgrade third party lower quality copper concentrates (those that have lower copper content or are precious metal poor or have high penalty elements), helping smelters meet minimum feed specifications and improve overall furnace performance.

Cabaçal's future copper concentrates are expected to generate strong interest from smelter groups and/or trading houses seeking to secure high-quality, long-term supply. Current discussions are on-going with a range of potential off-takers for Cabaçal copper concentrate supply. In a market where copper concentrate demand exceeds supply, TC/RC's have fallen to historic lows and where deductions for gold and silver continue to decline. Cabaçal with its plus ten-year production profile of uncontracted high-quality copper concentrates, provides a highly attractive stable platform for future smelter feed. Samples of the blister (or sawing particles Photo 2), its data sheet, will be made available as part of Cabaçal's project finance and/or off-take discussions.



Photo 1: 300g copper blister sample produced from Cabaçal's copper sulphide concentrates

To view an enhanced version of this graphic, please visit:

https://images.newsfilecorp.com/files/7354/307178_125087bac4720b9d_002full.jpg



Photo 2: Copper sawings from high quality copper blister sample produced from Cabaçal's copper concentrates.

To view an enhanced version of this graphic, please visit:

https://images.newsfilecorp.com/files/7354/307178_125087bac4720b9d_003full.jpg

The quality of the Cabaçal copper concentrate and produced blister copper is illustrated in the table below.

	Cu %	Au g/t	Ag g/t	Fe %	S %	Ni %	Co %	Pb %	Zn %	Bi %	As %	Sb %	SiO ₂ %	CaO %	Al ₂ O ₃ %	MgO %
Grade	98.9	95.2	387.6	0.02	0.95	0.05	0.005	0.002	0.002	0.003	0.009	0.005	0.15	<0.03	0.009	<0.002

Table 1: Cabaçal blister copper grade.

Inspection of Table 1 shows that there was effective separation of the copper metal from the slag in the laboratory crucible. It is noted that the precious metal assays in Table 1 reflect their amounts in a smaller mass of copper. Commercially, matte such as illustrated in Figure 1 would be fully converted to copper, resulting in a larger mass of copper that would have a commensurate reduction in the precious metal grade.

In 2025, the mini pilot facility at the SGS laboratory in Lakefield, Ontario, Canada processed approximately 1.6 tonnes of Cabaçal ROM grade drill core averaging 0.50% Cu, 0.92g/t of Au and 1.60

g/t of Ag, producing a copper concentrate hosting gold and silver, as well as a separate gravity gold concentrate. The pilot test was preceded by a series of laboratory milling and flotation tests. Samples of the copper concentrate were then shipped to KPM for smelting tests.

For ease of handling at the laboratory scale, the smelting and converting tests at KPM were carried out in four phases broadly resembling commercial smelting and converting (with the exception that slag was not recycled for metal recovery and blister copper contained residual sulphur). The FACTSAGE™ software was used to compute the required blowing rate, time of blowing and flux addition.

The stages are as follows:

- i. Smelting the copper concentrate to a low-grade matte at 1250° C typically 26.3% Cu, 38.7% Fe and 28.5% S at a high copper recovery (95%) and a low copper slag (0.37% Cu);
- ii. Upon cooling, the matte contained in a crucible at 1230° C was:
 - a. Firstly, upgraded to about 45% Cu matte by lancing with gas at 30% O₂-70% Ar while adding SiO₂ flux in proportion to the blowing rate;
 - b. Secondly upgraded to 62% Cu using a similar method;
- iii. The 62% Cu matte was then converted to high-sulphur blister copper by lancing with 30% O₂-70% Ar gas and adding SiO₂ flux until the high-grade matte in the crucible was estimated at 78% Cu; lancing then continued. Blowing was deliberately stopped when the molten blister copper was estimated to contain about 1.0% S, avoiding over-blowing of the melt.

ASSAYING METHODS

The assaying for gold was done by SGS Lakefield, Peterborough, Ontario, and the trace elements were analysed by Kingston Process Metallurgy at Kingston, Ontario. Methods used by SGS Lakefield GC_FAA35V10 was utilized for gold analysis which is a lead oxide fusion.

Kingston Process Metallurgy (KPM) used the following procedure for the determination of metals and minor elements in copper and matte: Each sample was representatively sampled and prepared for analysis by sodium peroxide fusion followed by HCl digestion. The digestate samples were analysed by ICP-OES under three dilution factors, with matrix matching. Internal standardization was used for quality control. Seven certified reference materials containing the elements of interest at or below the reported detection limits were prepared and analysed by the same procedure. KPM analysed the silver using acid digestion of the blister copper with hydrochloric and nitric acids in the mass ratio 3:1, followed by an ICP-OES finish.

QUALIFIED PERSON STATEMENT

Dr. Norm Lotter of Flowsheets Metallurgical Consulting Inc., and a Qualified Person as defined by National Instrument 43-101, has reviewed, verified and approved the technical information in this news release.

ABOUT MERIDIAN

Meridian Mining is focused on:

- The development and exploration of the advanced-stage Cabaçal VMS gold-copper project;
- Expanding the initial resource inventory at the Santa Helena area through extension of Santa Helena Central, and new discoveries;
- Regional-scale exploration of the Cabaçal VMS Belt to expand the Cabaçal Hub strategy; and
- Exploration in the Jauru & Araputanga Greenstone Belts (the above all located in the State of Mato Grosso, Brazil).

The Pre-feasibility Study technical report (the "PFS Technical Report") dated March 31, 2025, entitled: "Cabaçal Gold-Copper Project NI 43-101 Technical Report and Pre-feasibility Study" outlines a base

case after-tax NPV5 of USD 984 million and 61.2% IRR from a pre-production capital cost of USD 248 million, leading to capital repayment in 17 months (assuming metals price scenario of USD 2,119 per ounce of gold, USD 4.16 per pound of copper, and USD 26.89 per ounce of silver). Cabaçal has a low All-in-Sustaining-Cost of USD 742 per ounce gold equivalent & production profile of 141,000 ounces of gold equivalent life of mine, driven by high metallurgical recovery, a low life-of-mine strip ratio of 2.3:1, and the low operating cost environment of Brazil.

The Cabaçal Mineral Reserve estimate in the PFS consists of Proven and Probable reserves of 41.7 million tonnes at 0.63g/t gold, 0.44% copper and 1.64g/t silver (at a 0.25 g/t gold equivalent cut-off grade).

Readers are encouraged to read the PFS Technical Report in its entirety. The PFS Technical Report may be found under the Company's profile on SEDAR+ at www.sedarplus.ca and on the Company's website at www.meridianmining.co.

The PFS Technical Report was prepared for the Company by Tommaso Roberto Raponi (P. Eng), Principal Metallurgist with Ausenco Engineering Canada ULC; Scott Elfen (P. E.), Global Lead Geotechnical and Civil Services with Ausenco Engineering Canada ULC; John Anthony McCartney, C.Geol., Ausenco Chile Ltda.; Porfirio Cabaleiro Rodriguez (Engineer Geologist FAIG), of GE21 Consultoria Mineral; Leonardo Soares (BSc Geo, MAIG), Senior Geological Consultant of GE21 Consultoria Mineral; Norman Lotter (Mineral Processing Engineer; P.Eng.), of Flowsheets Metallurgical Consulting Inc.; and, Juliano Felix de Lima (Engineer Geologist MAIG), of GE21 Consultoria Mineral.

On behalf of the Board of Directors of Meridian Mining plc

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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 Meridian's most recent Annual Information Form filed on www.sedarplus.ca. 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.

¹ Meridian Mining news releases of May 08, 2025



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