TSX.V: HSTR OTCQX: HSTXF

# Heliostar Metals Announces Updated Mineral Resource Estimate for the Ana Paula Project, Mexico

## **Highlights of the Mineral Resource Estimate:**

- Total measured and indicated mineral resources of 710,920 gold ounces grading 6.60 g/t gold
- Total inferred mineral resources of 447,512 gold ounces grading 4.24 g/t gold
- Mineral resource estimation cutoff grade of 2.5g/t gold. Increased from previous estimate
- A connected zone of greater than 200,000 gold ounces grading greater than 10 g/t gold within the measured resource in the High Grade Panel that can be targeted in the initial years of mining
- 58% increase in measured and 30% increase in indicated gold grade relative to the previous resource estimate at same 2.5 g/t cutoff grades

## **Key Statistics:**

- Tighter spaced drilling has led to resource grade growth which is a positive indication for additional grade increases during conversion of the inferred resources to higher classifications
- Increase in Inferred ounces is due to stricter estimation with a view to underground mining
- The High Grade Panel at core of the resource is 280m long, 100m high and 60m thick
- All-in discovery cost of US\$16 per new gold ounce, inclusive of all exploration and project costs

Vancouver, Canada, November 27, 2023 – Heliostar Metals Ltd. (TSX.V: HSTR, OTCQX: HSTXF, FRA: RGG1) ("Heliostar" or the "Company") is pleased to report an updated mineral resource estimate ("Updated Mineral Resource Estimate") for its Ana Paula Project (the "Project" or "Ana Paula") located in Guerrero, Mexico. The Updated Mineral Resource Estimate was completed by Rita Teal, Qualified Person with Teal CPG Inc.

The high-grade portion of the Ana Paula deposit has grown significantly from 860,519 measured and indicated ounces of gold grading 4.86 grams per tonne ("g/t") and 5,564 inferred ounces of gold grading 3.72 g/t to 710,920 measured and indicated ounces of gold grading 6.60 g/t and an additional 447,512 ounces inferred ounces of gold grading 4.24 g/t.

"At the beginning of this year Heliostar set out to transform the Ana Paula Project into a deposit that will support a high-margin, underground gold mine. Today's updated resource estimate is a major milestone on this rapid path of growth and de-risking toward production. In acquiring the project, the Company saw three key levers to improve the deposit; increases in both resource size and grade, enhanced gold recoveries and higher upfront mining grades. Today's resource estimate, coupled with the Company's recent metallurgical results have firmly delivered on each lever. The measured and indicated resource grades are up by 58% and 30% respectively and the deposit has grown significantly. The initial metallurgical analysis improved on our base case by over 10% to an 80.4% gold recovery utilizing a conventional flow sheet. The continuous zone of greater than 200,000 ounces grading greater than 10 g/t gold within the High Grade Panel can be targeted in the initial years of a mine plan. These additional resources have been delivered at a cost of just US\$16 per gold ounce. Perhaps the most exciting aspect of this update is that the High Grade Panel, Parallel Panel and Expansion zone are all open to grow, and new targets, immediately north of this year's drilling, are clear with our new exploration model." commented Heliostar CEO, Charles Funk.

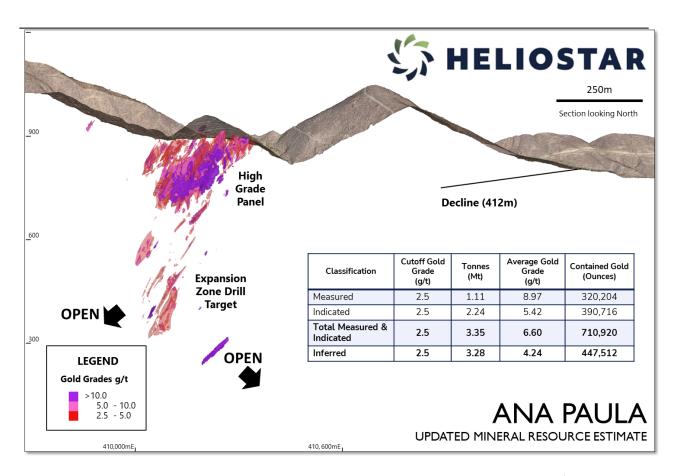


Figure 1: A section through the Updated Mineral Resource Estimate. Clipped to show blocks greater than 2.5g/t gold.

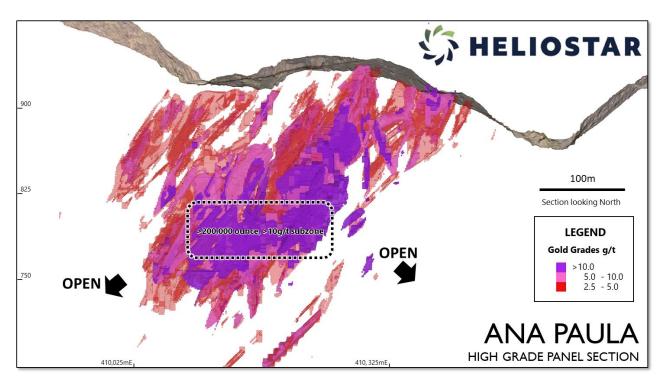


Figure 2: A detailed section through the High Grade Panel. Clipped to show blocks greater than 2.5g/t gold. Inset connected zone greater than 200,000 gold ounces grading greater than 10 g/t gold labelled.

Table 1: Ana Paula Project High Grade Mineral Resource Estimate (2.5 g/t cutoff grade)

Classification	Cutoff Gold Grade Tonnes		Average Gold Grade	Contained Gold	
	(g/t)	(Mt)	(g/t)	(Ounces)	
Measured	2.5	1.11	8.97	320,204	
Indicated	2.5	2.24	5.42	390,716	
Total Measured &					
Indicated	2.5	3.35	6.60	710,920	
Inferred	2.5	3.28	4.24	447,512	

Table 2: Ana Paula Project Global Mineral Resource Estimate (1.0 g/t cutoff grade)

Classification	Cutoff Gold Grade (g/t)	Tonnes (Mt)	Average Gold Grade (g/t)	Contained Gold (Ounces)
Measured	1.0	1.68	6.48	349,084
Indicated	1.0	5.89	3.01	569,708
Total Measured				
& Indicated	1.0	7.56	3.78	918,792
Inferred	1.0	14.3	2.12	974,192

#### Notes:

- The classification of the Updated Mineral Resource Estimate into measured, indicated and inferred mineral resources is consistent with current 2014 CIM Definition Standards for Mineral Resources and Mineral Reserves.
- A technical report is being prepared on the Updated Mineral Resource Estimate in accordance with National Instrument 43-101 ("NI-43-101") and will be available on the Company's website and SEDAR+ within 45 days of the date of this release. The effective date of the Updated Mineral Resource Estimate is November 27, 2023
- All figures are rounded to reflect the relative accuracy of the estimate and numbers may not add due to rounding.
- All mineral resources are presented undiluted and in situ, constrained by continuous 3D solid models, and are considered to have reasonable prospects for eventual economic extraction.
- Mineral resources are not mineral reserves. Mineral resources which are not mineral reserves do not
  have demonstrated economic viability. An inferred mineral resource has a lower level of confidence
  than that applying to an indicated mineral resource and must not be converted to a mineral reserve.
  It is reasonably expected that the majority of inferred mineral resources could be upgraded to
  indicated mineral resources with continued exploration.
- The database comprises a total of 419 drill holes totaling 170,674 metres of drilling for 111,352 samples completed between 2005 and 2023 by Goldcorp Inc., Newstrike Capital Inc., Timmins Gold Corp., Alio Gold Inc., and Heliostar. This estimate includes 2023 drilling completed by Heliostar.
- Heliostar completed 18 holes totaling 3,218.8 metres for 2,794 samples which were included in this model. These were not included in previous models.
- The model was limited to an area with a minimum easting and northing of 409,450 and 1,997,000 and a maximum easting and northing of 411,300 and 1,999,050.
- Density and specific gravity sampling totaled 7,177 samples collected between 2005 and 2023.
   Samples were measured in house, principally using wax coat or sealed or sealed water immersion methods with check samples sent to two external labs.

- Heliostar collected and included 1,899 specific gravity samples which were measured by wax coat immersion with 5% of samples sent to ALS as an external check.
- High grade gold samples were commonly analyzed multiple times using three methods. In these
  cases, the gold value used to estimate the resource was selected based on a preference list where
  screen fire assay was preferred above fire assay with gravimetric finish was preferred above fire assay
  with AAS finish.
- The Updated Mineral Resource Estimate relies on the updated geologic model completed in Leapfrog Geo modeling software for domaining. This includes five domains: main polymictic breccia, monomictic breccia, sediments, skarn/hornfels, and granodiorite/porphyry.
- The resource model is constrained to a 0.2 g/t gold grade shell. This was constructed in Leapfrog Geosoftware using an ellipsoidal structural model and indicator modeling tool at a 50% probability. A grade shell study was completed to evaluate the percentage of dilution and exclusion of gold grades at differing probabilities. Outlying volumes that did not meet modeling criteria were removed.
- The resource model was completed in Leapfrog Edge software, based on 5x5x5 metre blocks with minimum sub-block size of 1x1x1 metre. Grade estimation is based on Ordinary Kriging using 2.0 metre composites. The top cutting for each domain was determined by analyzing log-normal probability plots and performing Parrish analysis. A three-pass search was used to optimize block estimation. This process ensures that blocks with more informed data are interpolated using a tighter search ellipsoid, in contrast to blocks with less information, which are interpolated using a broader search ellipse.
- The mineral resource estimate has been classified as either measured, indicated, or inferred based on search passes, geologic continuity (Main Polymictic Breccia), sample spacing for measured classification (25m x 25m), grade continuity and estimation quality (slope of regression).
- Heliostar Metals envisions that the Ana Paula deposit may be mined using underground mining methods. Mineral resources are reported at a cutoff grade of 2.5 g/t gold. The mineral resource grade blocks were quantified above the base case cutoff grade, below surface and within the constraining mineralized wireframes.
- The Updated Mineral Resource Estimate may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

Table 3: Ana Paula Project Measured, Indicated and Inferred Resource Sensitivity Table

Classification Cutoff Grade (g/t)	Tonnes (Mt)	Gold Grade (g/t)	Contained Metal (Ounces)
Measured:			
>=0.6	1.99	5.57	357,157
>=1.0	1.68	6.48	349,048
>=2.0	1.23	8.33	328,516
>=2.5	1.11	8.97	320,204
>=5.0	0.79	11.12	283,597
>=7.5	0.57	13.01	239,747
>=10.0	0.38	15.27	184,509
Indicated:			
>=0.6	10.10	2.08	674,085
>=1.0	5.89	3.01	569,708
>=2.0	2.87	4.72	436,143
>=2.5	2.24	5.42	390,716
>=5.0	0.87	8.45	236,564
>=7.5	0.39	11.47	142,387
>=10.0	0.19	14.52	87,449
Inferred:			
>=0.6	29.23	1.43	1,339,575
>=1.0	14.29	2.12	974,192
>=2.0	4.71	3.63	549,800
>=2.5	3.28	4.24	447,512
>=5.0	0.66	7.68	162,308
>=7.5	0.21	11.49	75,983
>=10.0	0.10	14.63	47,352

Table 4: Comparison Between Updated and March 2023 Resource Estimates at 2.5g/t cutoff

Classification	Cutoff Gold Grade (g/t)	Tonnes (Mt)	Average Gold Grade (g/t)	Contained Gold (Ounces)	Cutoff Gold Grade (g/t)	Tonnes (Mt)	Average Gold Grade (g/t)	Contained Gold (Ounces)	Change in Grade	Change in Ounces
	March 2023 MRE			Updated November 2023 MRE						
Measured	2.5	2.51	5.68	457,943	2.5	1.11	8.97	320,204	58%	-30%
Indicated	2.5	3.00	4.18	402,576	2.5	2.24	5.42	390,716	30%	-3%
Total Measured & Indicated	2.5	5.51	4.86	860,519	2.5	3.35	6.60	710,920	36%	-17%
Inferred	2.5	0.05	3.72	5,564	2.5	3.28	4.24	447,512	14%	7,943%

**Note:** The March 2023 Resource Estimate was not previously presented at a cutoff gold grade of 2.5 g/t. These figures are presented here for comparison purposes. The technical report to be filed in connection with the Updated Mineral Resource Estimate will include these figures.

Table 5: Comparison Between Updated and March 2023 Global Resource Estimates

Classification	Cutoff Gold Grade (g/t)	Tonnes (Mt)	Average Gold Grade (g/t)	Contained Gold (Ounces)	Cutoff Gold Grade (g/t)	Tonnes (Mt)	Average Gold Grade (g/t)	Contained Gold (Ounces)	Change in Grade	Change in Ounces
	March 2023 MRE			Updated November 2023 MRE						
Measured	0.6/1.6	9.18	2.09	703,800	1.0	1.68	6.48	349,048	210%	-50%
Indicated	0.6/1.6	12.0	2.38	765,000	1.0	5.89	3.01	569,708	26%	-26%
Total Measured & Indicated	0.6/1.6	21.1	2.16	1,468,880	1.0	7.56	3.78	918,792	75%	-37%
Inferred	0.6/1.6	0.04	1.89	23,700	1.0	14.3	2.12	974,192	12%	4,011%

**Note:** The cutoff gold grades in the table above differ because the March 2023 resource estimate has a 0.6 g/t cutoff within an open pit shell and a 1.6 g/t outside of this shell. Heliostar has selected a 1.0g/t cutoff as a representation of the global resource estimate for the Updated Mineral Resource Estimate.

#### **Updated Resource Estimate Discussion**

The Updated Mineral Resource Estimate has been designed and optimized for an underground mining scenario. The previous mineral resource estimate from March 2023 (the "March 2023 estimate") was designed and optimized for an open pit mining scenario with an underground component beneath the pit shell. The simplest comparison between these estimates is undertaken using the 2.5 g/t cutoff grade for both estimates (Table 4). A global comparison is shown for direct comparison with the previous total resource estimate (Table 5).

The clearest contrast between the updated resource and March 2023 Estimate remains the average gold grade. In the new resource, the gold grade has materially increased in every category.

The tighter drill spacing undertaken by Heliostar in 2023 in the area of the High Grade Panel has supported reporting to the measured and indicated categories in the updated resource with an underground mining focus. The broader spaced holes outboard and beneath the High Grade Panel have largely been reclassified to inferred status in the updated resource due to the tighter drill spacing required for an underground mining focused resource estimate. In underground mining, each resource block must be targeted for extraction and underground development must be put in place to access it. Whereas in an open pit scenario all blocks on each level of the mine are mined regardless of classification.

The tighter spaced drilling completed by Heliostar in 2023 was the principal driver of higher average gold grades in the Updated Mineral Resource Estimate. The Company believes the same potential exists to increase grades in the current inferred classification when it undertakes tighter spaced drilling to convert these resources to higher confidence classification categories.

Heliostar's understanding of the geological controls on mineralization has also increased between the resource models. The Ana Paula deposit is hosted by westerly dipping, thinly bedded, calcareous sediments and lesser tuffs. These rocks have been deformed and intruded by calc-alkalic, felspar porphyry sills and dykes. These intrusives are believed to drive phreatomagmatic breccias that pre-date gold mineralization. An interpreted east-west fault system control is considered key for gold mineralization. The High Grade Panel is defined by one of these faults, where it hosts a polymictic breccia body that is approximately 280 metres wide, 100 metres high and 60 metres thick. The Parallel Panel is a second east-west trending fault to the north. Gold mineralization is interpreted to have been driven by deeper

intrusive rocks and exploits the east-west faults and porous bedding planes as a fluid conduit. Favorably porous and reactive rock units preferentially host high-grade gold mineralization, particularly the main polymictic breccia body that hosts the High Grade Panel.

To the north of the Parallel Panel, the Updated Mineral Resource Estimate highlights a number of poorly defined high-grade gold intercepts. These intercepts model as discrete zones of high-grade mineralization but remain poorly defined due to a lack of drilling. Heliostar believes these may be repetitions to the north of the interpreted east-west fault controls that host the High Grade Panel and Parallel Panels. They represent excellent exploration targets for continued growth of the Ana Paula deposit (Figure 3).

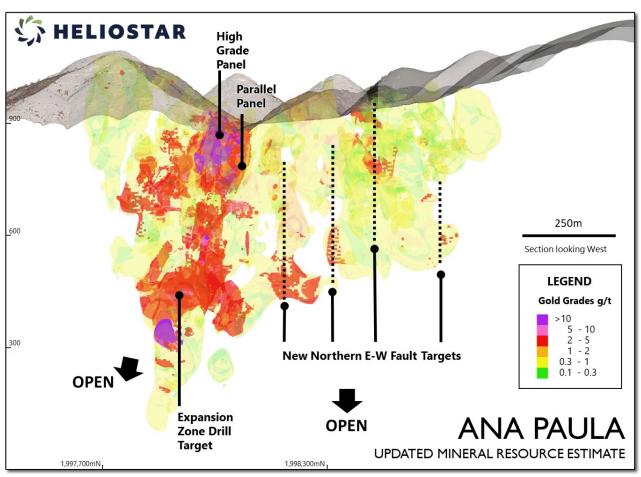


Figure 3: A north-south section through the Ana Paula Update Mineral Resource Estimate. Major zones, the High Grade Panel, Parallel Panel and Expansion Zone are labelled along with new northern exploration targets.

## **Exploration Discovery Cost**

To date, the Company has incurred an aggregate of approximately US\$4.7 million on exploration, project holding costs, studies and related matters since acquisition of the Project on March 28, 2023. This equates to an estimated discovery cost of US\$16 per ounce for new high grade gold resources (above 2.5g/t gold) defined in the Updated Mineral Resource Estimate.

All-in; including project acquisition costs, all site and exploration costs and G&A since the acquisition of the Ana Paula project the company has a total cost of US\$15.5 per resource ounce in the Updated Mineral Resource Estimate.

#### **Webinar Invitation**

The Company is hosting a webinar tomorrow, November 28 at 1pm Pacific/4pm Eastern time, to provide present the Updated Mineral Resource Estimate for the Ana Paula Project. Please use the link here to register for the webinar:

https://us02web.zoom.us/webinar/register/WN\_oPjMzIKFQq23gNkh0jE-zA#/registration

## **Quality Assurance / Quality Control**

Core samples were shipped to ALS Limited Santiago Queretaro, Queretaro for sample preparation and for analysis at the ALS Laboratories in North Vancouver. The North Vancouver ALS facility is ISO/IEC 17025 certified. Gold was assayed by 30-gram fire assay with atomic absorption spectroscopy finish and overlimits were analyzed by 50g fire assay with gravimetric finish.

Control samples comprising certified reference samples and blank samples were systematically inserted into the sample stream and analyzed as part of the Company's quality assurance / quality control protocol.

## **Statement of Qualified Person**

The Updated Mineral Resource Estimate was completed by Rita Teal, of Teal CPG Inc. Ms. Teal is an independent Qualified Person as defined by NI 43-101. Rita Teal and Lewis Teal, QP with Teal CPG, Inc. have reviewed and approved the technical contents of this news release.

## **About Heliostar Metals Ltd.**

Heliostar is a junior mining company with a portfolio of high-grade gold projects in Mexico and Alaska.

The Company is developing the 100% owned Ana Paula Project in Guerrero, Mexico. In addition, Heliostar in conjunction with the Mexican federal and local government, is working to permit the San Antonio Gold Project in Baja Sur, Mexico. The Company continues to explore the Unga Gold Project in Alaska, United States of America.

Ana Paula hosts measured and indicated resources of 710,920 ounces of gold (320,204 measured and 390,716 indicated ounces) at 6.60 g/t gold and an inferred resource of 447,512 ounces of gold at 4.24 g/t gold. The asset is permitted for open-pit mining and contains significant existing infrastructure including a portal and a 412-metre-long decline.

#### For additional information please contact:

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These statements reflect the Company's respective current views with respect to future events and are necessarily based upon a number of other assumptions and estimates that, while considered reasonable by management, are inherently subject to significant business, economic, competitive, political, and social uncertainties, and contingencies. Many factors, both known and unknown, could cause actual results, performance, or achievements to be materially different from the results, performance or achievements that are or may be expressed or implied by such forward-looking statements or forward-looking information and the Company has made assumptions and estimates based on or related to many of these factors. Such factors include, without limitation: precious metals price volatility; risks associated with the conduct of the Company's mining activities in foreign jurisdictions; regulatory, consent or permitting delays; risks relating to reliance on the Company's management team and outside contractors; risks regarding exploration and mining activities; the Company's inability to obtain insurance to cover all risks, on a commercially reasonable basis or at all; currency fluctuations; risks regarding the failure to generate sufficient cash flow from operations; risks relating to project financing and equity issuances; risks and unknowns inherent in all mining projects, including the inaccuracy of reserves and resources, metallurgical recoveries and capital and operating costs of such projects; contests over title to properties, particularly title to undeveloped properties; laws and regulations governing the environment, health and safety; the ability of the communities in which the Company operates to manage and cope with the implications of public health crises; the economic and financial implications of public health crises, ongoing military conflicts and general economic factors to the Company; operating or technical difficulties in connection with mining or development activities; employee relations, labour unrest or unavailability; the Company's interactions with surrounding communities; the Company's ability to successfully integrate acquired assets; the speculative nature of exploration and development, including the risks of diminishing quantities or grades of reserves; stock market volatility; conflicts of interest among certain directors and officers; lack of liquidity for shareholders of the Company; litigation risk; and the factors identified under the caption "Risk Factors" in the Company's public disclosure documents. Readers are cautioned against attributing undue certainty to forward-looking statements or forward-looking information. Although the Company has attempted to identify key factors that could cause actual results to differ materially, there may be other factors that cause results not to be anticipated, estimated or intended. The Company does not intend, and does not assume any obligation, to update these forward-looking statements or forward-looking information to reflect changes in assumptions or changes in circumstances or any other events affecting such statements or information, other than as required by applicable law.