

## Stillwater Critical Minerals Identifies Multiple New Sulphide-Rich Mineralized Structures in Resource Expansion Drilling at Stillwater West

December 5, 2023 - Vancouver, B.C., Stillwater Critical Minerals Corp. (TSX.V: PGE | OTCQB: PGEZF) (the “Company” or “Stillwater”) is pleased to provide an update on diamond drilling completed at the Company’s flagship Stillwater West Ni-PGE-Cu-Co + Au project in Montana in 2023, and other initiatives.



Figure 1 - Significant sulphide mineralization in hole CM2023-06 from approximately 865 to 888 feet (263.7 to 270.7 meters) depth as part of a broader mineralized interval from approximately 841 to 919 feet (256.4 to 280.1 meters) depth which tested a large and previously untested geophysical anomaly.

### Highlights – Stillwater West

- The 2023 drill campaign focused on expansion of the NI 43-101-compliant resources, announced on January 25, 2023 (the “2023 Resource”), with particular focus on expanding recent high-grade discoveries at Chrome Mountain at the west end of the nine-kilometer-long resource area.
- Six holes totaling 2,310 meters were completed within and outside of the current resource area, west and south of the current DR-Hybrid deposit, as part of a planned multi-phase program.
- Multiple new mineralized zones were intercepted (see Figure 1 above and September 12, 2023, release).
- Results include identification and expansion of the N series of sulphide-rich mineralized structures parallel to high-grade nickel sulphide mineralization first discovered by the Company in drill holes **CM2021-05** and **CM2020-04**.
- Drilling in 2023 intercepted the N2 and N3 mineralized zones in parallel to high-grade mineralization in CM2021-05, which is now known as N1. As reported May 3, 2022, N1 returned **13.2 meters grading 2.89% Recovered Nickel Equivalent<sup>1</sup> (“NiEq”) (2.31% Ni, 1.51 g/t 4E, 0.35% Cu, and 0.115% Co), starting at 37.6 meters** and is **contained within 400.8 meters of continuous battery and precious metal mineralization**.
- N series structures and associated high-grade mineralization are now understood to be part of a series of north-south trending structures that crosscut the layered sequence and Platreef-style mineralization of the Stillwater Igneous Complex.

- Drilling also confirmed nickel and copper sulphide mineralization in a large and previously untested geophysical anomaly which forms part of a string of untested anomalies extending over 12 kilometers along strike.
- All core has now been submitted to the lab for assay with results expected over the coming weeks.
- Mineralized zones were predicted by the updated exploration model, demonstrating the Company's success in advancing the first ever detailed geologic model of the lower Stillwater Igneous Complex.
- The 2023 drill campaign is the first campaign funded by the strategic investment made by Glencore PLC in June 2023, and the first to apply updated geological models which incorporate similar geology from South Africa's Platreef district under the direction of Dr. Danie Grobler, who joined the team in May of 2022 as Vice-President of Exploration.
- Drilling for 2024 is now being planned to continue expansion around known mineralization at the existing resource areas, at recent discoveries including the N series structures, and also more broadly across the 32-kilometer-long project.

Michael Rowley, Stillwater President and CEO, stated, "We continue to advance new sulphide-rich discoveries at our flagship Stillwater West project as we apply geologic models from South Africa's giant polymetallic nickel sulphide mines to similar geology at our Stillwater West project. Recent work is identifying additional styles of mineralization, and we look forward to expanding further on these exciting developments as they advance. Overall, the Stillwater district remains underexplored - and therefore wide open for significant expansion of known mineralization - despite having produced critical and strategic minerals such as nickel, copper, palladium, platinum and chrome for over a century. We look forward to reporting assay results and providing updated analysis as we work with our partners at Glencore PLC and the US Geological Survey to advance primary domestic supply of nine of the commodities identified as critical by the US Government. Additional news is expected from our Kluane and Drayton-Black Lake projects, carbon sequestration studies, and other initiatives including continued work on government funding channels."

Dr. Danie Grobler, Stillwater Vice-President of Exploration, said "Drilling in 2023 focused on intersecting several of the north-south trending high-grade and high-tenor nickel sulphide mineralized N-structures recognized during the 2022 field season. A 100% target intercept rate was achieved due to predictability and good correlation of the N-structure orientations within the 3D structural model developed by the team including results from a 2023 ground magnetic survey across Chrome Mountain. The first two holes intersected both of the sulphide-rich N1 and N2 structures at shallow depth. Drillhole CM2023-03 intersected an approximately 20-meter-thick zone of nickel sulphide mineralization at a depth of 223 meters from surface. All three of these holes also intersected a PGE+Ni+Cu mineralized pegmatoidal pyroxenite layer at its predicted position within the geological model. Drillhole CM2023-04 intersected disseminated, net-textured to semi-massive nickel sulphide mineralization from approximately 100 to 180 meters depth. In addition to the above, drillholes CM2023-05 and CM2023-06 both intersected zones of net-textured to semi-massive nickel and copper sulphide mineralization associated with a previously untested large shallow electromagnetic anomaly at Chrome Mountain. This anomaly forms part of a string of untested anomalies found near the footwall contact zone which runs more than 12 kilometers along strike from west of Chrome Mountain to Iron Mountain in the east. Visual inspection of the 2023 core shows many similarities to Stillwater's CZ deposit, located approximately five kilometers to the east, which contains the highest nickel grades in the 2023 declared resource. This exciting discovery is expected to form a priority target for the upcoming 2024 campaign."

#### **Upcoming Events - Clean Energy and Precious Metals Virtual Investor Conference and AMEBC Core Shack**

Stillwater Critical Minerals President & CEO, Michael Rowley, will present live on December 5<sup>th</sup> at 10am ET | 1pm PT with a Q&A to follow. Mr. Rowley is also available for one-on-one meetings following the event. For more information and to register [click here](#).

The Company looks forward to displaying core from the 2023 drill season at the upcoming AMEBC Mineral Roundup event held in Vancouver, BC from January 22 to 25, 2024. For more information [click here](#).

#### **Government Funding**

The Company continues to work with Cornell University under a Department of Energy grant, as announced February 14, 2023, and separately with the US Geological Survey on other programs at Stillwater West. In addition, the

Company is actively pursuing other US government initiatives relating to developing domestic supply of critical minerals and will make further announcements as information becomes available.

### **Kluane PGE-Ni-Cu Project Update**

Geological mapping, drone LiDAR and imagery acquisition, claim staking, and prospecting and rock sampling programs were completed in 2023 at the Company's 100%-owned Kluane PGE-Ni-Cu project in Yukon, Canada, with field work funded in part by a Yukon Mineral Exploration Program grant. Follow-up work including completion of detailed geologic maps over priority areas and the advancement targets for later campaigns is on-going.

The Company has also begun to formally examine potential opportunities for carbon capture at the Kluane project with an initial focus on developing a procedure to identify and map rocks for their potential to sequester carbon based on existing data sources, remote sensing and imagery.

The Kluane project consists of a large 260 km<sup>2</sup> land position containing the Spy, Ultra and Catalyst properties, all of which occur within the Kluane Mafic-Ultramafic Belt; a system of PGE-Ni-Cu deposits which are part of a sequence of mafic-ultramafic rocks that extends through the Yukon from northern British Columbia to central Alaska. Located near the Alaska Highway, the Kluane project properties are on trend with the Wellgreen Ni-Cu-PGE deposit.

### **Drayton - Black Lake**

Heritage Mining ("Heritage", CSE: HML) continues to meet the requirements of the earn-in agreement announced November 29, 2021, by the completion of exploration work on the Company's district-scale Drayton-Black Lake gold project in Ontario, and the issuance of shares and cash to the Company. Results are pending from Heritage's recent drill campaigns, and follow-up exploration programs are now being planned for 2024.

The Drayton-Black Lake Project site is located in northwestern Ontario in the Abrams - Minnitaki Lake Archean greenstone belt approximately 25 kilometers east of the town of Sioux Lookout, Ontario. Access and infrastructure are excellent, featuring direct road access, and proximity to rail and power. Heritage Mining compiled the significant project database as part of advancing the substantial exploration potential of the project including demonstrated high-grade gold in drill results and bulk samples across more than 30 kilometers of underexplored strike in a geologic setting that is shared with Treasury Metals' adjacent development-stage Goliath Gold Complex project. Work since the 1990s has proven more than 14 million ounces of gold in the broader district in this emerging and highly active gold belt lead by New Gold's Rainy River mine and other deposits, and Heritage is effectively applying geological models and exploration methods that have been successful elsewhere in the district.

### **About Stillwater Critical Minerals Corp.**

Stillwater Critical Minerals (TSX.V: PGE | OTCQB: PGEZF) is a mineral exploration company focused on its flagship Stillwater West Ni-PGE-Cu-Co + Au project in the iconic and famously productive Stillwater mining district in Montana, USA. With the addition of two renowned Bushveld and Platreef geologists to the team and a strategic investment by Glencore, the Company is well positioned to advance the next phase of large-scale critical mineral supply from this world-class American district, building on past production of nickel, copper, and chromium, and the on-going production of platinum group and other metals by neighboring Sibanye-Stillwater. An expanded NI 43-101 mineral resource estimate, released January 2023, delineates a compelling suite of critical minerals contained within five Platreef-style nickel and copper sulphide deposits at Stillwater West, which host a total of 1.6 billion pounds of nickel, copper and cobalt, and 3.8 million ounces of palladium, platinum, rhodium, and gold, and remains open for expansion along trend and at depth.

Stillwater also holds the high-grade Black Lake-Drayton Gold project adjacent to Treasury Metals' development-stage Goliath Gold Complex in northwest Ontario, currently under an earn-in agreement with Heritage Mining, and the Kluane PGE-Ni-Cu-Co critical minerals project on trend with Nickel Creek Platinum's Wellgreen deposit in Canada's Yukon Territory.

**FOR FURTHER INFORMATION, PLEASE CONTACT:**

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1 - Recovered Nickel Equivalents (“NiEq”) are presented for comparative purposes using long-term metal prices (all USD): \$8.00/lb nickel (Ni), \$4.00/lb copper (Cu), \$24.00/lb cobalt (Co), \$1,000/oz platinum (Pt), \$2,200/oz palladium (Pd), \$1,800/oz gold (Au), and \$10,000/oz rhodium (Rh). NiEq is determined as follows:  $NiEq\% = [Ni\% \times recovery] + [Cu\% \times recovery \times Cu \text{ price} / Ni \text{ price}] + [Co\% \times recovery \times Co \text{ price} / Ni \text{ price}] + [Pt \text{ g/t} \times recovery / 31.103 \times Pt \text{ price} / Ni \text{ price} / 2,204 \times 100] + [Pd \text{ g/t} \times recovery / 31.103 \times Pd \text{ price} / Ni \text{ price} / 2,204 \times 100] + [Au \text{ g/t} \times recovery / 31.103 \times Au \text{ price} / Ni \text{ price} / 2,204 \times 100]$ . In the above calculations: 31.103 = grams per troy ounce, 2,204 = lbs per metric tonne, and 100 and 0.01 convert assay results reported in % and g/t. The following recoveries have been assumed for purposes of the above equivalent calculations: 85% for Ni and 90% for all other listed metals, based on recoveries at similar nearby operations.

**Quality Control and Quality Assurance**

Mr. Mike Ostenson, P.Geol., is the qualified person for the purposes of National Instrument 43-101 for the Montana property, and he has reviewed and approved the technical disclosure contained in this news release.

Ms. Debbie James, P.Geol., is the qualified person for the purposes of National Instrument 43-101 for the Yukon and Ontario properties, and she has reviewed and approved the technical disclosure contained in this news release.

**Forward-Looking Statements**

This news release includes certain statements that may be deemed “forward-looking statements”. All statements in this release, other than statements of historical facts including, without limitation, statements regarding potential mineralization, historic production, estimation of mineral resources, the realization of mineral resource estimates, interpretation of prior exploration and potential exploration results, the timing and success of exploration activities generally, the timing and results of future resource estimates, permitting time lines, metal prices and currency exchange rates, availability of capital, government regulation of exploration operations, environmental risks, reclamation, title, and future plans and objectives of the company are forward-looking statements that involve various risks and uncertainties. Although Stillwater Critical Minerals believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results or developments may differ materially from those in the forward-looking statements. Forward-looking statements are based on a number of material factors and assumptions. Factors that could cause actual results to differ materially from those in forward-looking statements include failure to obtain necessary approvals, unsuccessful exploration results, changes in project parameters as plans continue to be refined, results of future resource estimates, future metal prices, availability of capital and financing on acceptable terms, general economic, market or business conditions, risks associated with regulatory changes, defects in title, availability of personnel, materials and equipment on a timely basis, accidents or equipment breakdowns, uninsured risks, delays in receiving government approvals, unanticipated environmental impacts on operations and costs to remedy same, and other exploration or other risks detailed herein and from time to time in the filings made by the companies with securities regulators. Readers are cautioned that mineral resources that are not mineral reserves do not have demonstrated economic viability. Mineral exploration and development of mines is an inherently risky business. Accordingly, the actual events may differ materially from those projected in the forward-looking statements. For more information on Stillwater Critical Minerals and the risks and challenges of their businesses, investors should review their annual filings that are available at [www.sedar.com](http://www.sedar.com).

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