

Stillwater Critical Minerals Provides Exploration and Corporate Updates Including Resource Expansion Drilling Now Underway at Stillwater West

September 12, 2023 - Vancouver, B.C., Stillwater Critical Minerals Corp. (TSX.V: PGE | OTCQB: PGEZF) (the “Company” or “Stillwater”) is pleased to provide an update on drilling now underway at the Company’s flagship Stillwater West Ni-PGE-Cu-Co + Au project in Montana. The Company is further pleased to provide updates on exploration programs underway now at the Company’s Canadian projects including the Kluane PGE-Ni-Cu project in Yukon, and drilling at the Drayton - Black Lake gold project in Ontario via Heritage Mining, as part of their earn-in deal.

Figure 1 – Drill rig at Chrome Mountain, west of the DR-Hybrid deposits. Drilling to date has focused on this area with a view to expanding on recent high-grade nickel sulphide intercepts with significant copper, cobalt, palladium, platinum, gold and rhodium co-product grades.



Figure 2 - Significant sulphide mineralization in hole CM2023-04 around 369 feet (112.5 meters) depth.



Highlights

- Drilling focused on expansion of the NI 43-101-compliant resources announced January 25, 2023 (the “2023 Resource”) is underway now, funded by the strategic investment by Glencore PLC announced June 30, 2023.

- Crews have begun the sixth hole and completed more than 1,800 meters drilling to date.
- All holes in the 2023 campaign to date are west and south of the DR-Hybrid deposit at Chrome Mountain, which forms the western edge of the five deposits that span nine kilometers to comprise the 2023 Resource.
- Multiple intervals showing visible sulphide mineralization have been returned to date. Drilling has focused in the area of recent high-grade discoveries made by the Company such as drill hole **CM2021-05**, which returned **13.2 meters grading 2.89% Recovered Nickel Equivalent¹ (“NiEq”) (2.31% Ni, 1.51 g/t 4E, 0.35% Cu, and 0.115% Co), starting at 37.6 meters and contained within 400.8 meters of continuous battery and precious metal mineralization** (see news release May 3, 2022).
- The 2023 campaign is 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 Exploration.
- The Company is applying geologic models from the Platreef district based on well-documented parallels between the Stillwater Igneous Complex and the Bushveld Igneous Complex, which hosts very large Ni-Cu-PGE mines that are now in operation by Ivanhoe Mines and Anglo American.

Michael Rowley, Stillwater President and CEO, stated, “We are very pleased to have programs underway on all three of our 100%-owned district-scale assets, with particular focus on expansion of resources defined at our flagship Stillwater West project. The Stillwater West project is in a sweet spot as a district-scale asset that is underexplored yet also located in an expanding US mining jurisdiction with a long history of critical mineral supply and government support. Drilling is on-going on the western edge of the resource area and our partners including Glencore and the US Geological Survey are engaged and on-site. In Canada we are conducting a smaller but essential program to advance our Kluane PGE-Ni-Cu project, and Heritage Mining is actively drilling our Drayton-Black Lake high-grade gold project adjacent to Treasury Metals in Northwest Ontario. Heritage Mining is making good progress on their previously announced earn-in, and we are pleased with the excellent exposure that provides us to the gold market and with the value they are adding to the project. We look forward to further updates as results become available.”

Dr. Danie Grobler, Stillwater Vice-President of Exploration, said “We have successfully intercepted multiple targeted mineralized zones that were predicted in our updated exploration model and are very pleased with what we see in the core at Stillwater West. The current drill campaign is the first to incorporate detailed structural and stratigraphic models from very similar mineralization in South Africa’s Bushveld Igneous Complex in the Stillwater Igneous Complex.”

Kluane PGE-Ni-Cu Project Update

Exploration work is now underway at the Company’s 100%-owned Kluane PGE-Ni-Cu project in Yukon, Canada, funded in part by a Yukon Mineral Exploration Program grant. Geological mapping, drone LiDAR and imagery acquisition, and prospecting and rock sampling programs are being completed with the objective of advancing targets for follow-up campaigns and completing detailed geologic maps over priority areas.

Work in 2023 will also begin to formally examine the potential 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 255 km² 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

Drilling is now underway at Stillwater’s Drayton-Black Lake project by Heritage Mining (CSE: HML) under an earn-in agreement announced November 30, 2022, by which Heritage can earn a 90% interest in the project by completing work commitments and making payments of cash and shares to the Company.

As announced by Heritage Mining on September 5, 2023, drilling has been completed at the Alcona target area and is now mobilizing to the New Millennium target area as part of a 3,600-meter Phase One diamond drill program over three priority target areas that also includes the historically high-grade Moretti target. New Millennium is a new target

area, recently modeled for the first time, that has never been drilled previously but has returned very high-grade gold in grab samples. Exploration to date has confirmed mineralization along the central vein system and highlighted areas of higher grade, guiding the proposed drill plan at New Millennium.

The Drayton-Black Lake Project site is located in northwestern Ontario in the Abrams - Minnitaki Lake Archean greenstone belt approximately 25km 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.

Corporate Update

The Company announces that Susan Henderson has been appointed to the role of Corporate Secretary, effective immediately. Ms. Henderson has worked in expanding roles with Stillwater since 2016, most recently in the role of Business Manager. Ms. Henderson replaces Alicia Milne who has stepped down. Ms. Milne will continue as a consultant to the Company.

Michael Rowley, President and CEO of Stillwater Critical Minerals, stated, "Susan Henderson has been an essential part of our team in expanding roles since 2016 including most recently Business Manager, and we are pleased to expand that role further to include Corporate Secretary. We are very grateful to Alicia Milne for her excellent work as Corporate Secretary and her commitment to ongoing consulting work, and we wish her the very best with her new venture."

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 Critical Minerals 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 conservative 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: $NiEq\% = [Ni\% \times recovery] + [Cu\% \times recovery \times Cu\ price / Ni\ price] + [Co\% \times recovery \times Co\ price / Ni\ price] + [Pt\ g/t \times recovery / 31.103 \times Pt\ price / Ni\ price / 2,204 \times 100] + [Pd\ g/t \times recovery / 31.103 \times Pd\ price / Ni\ price / 2,204 \times 100] + [Au\ g/t \times recovery / 31.103 \times Au\ price / Ni\ price / 2,204 \times 100]$. 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

Ms. Debbie James, P.Geo., 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.

Mr. Mike Ostenson, P.Geo., 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.

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.

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