

# Surge Copper Delivers Geotechnical Results Supporting Pit Design and Resource Growth at Berg

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Vancouver, May 08, 2025 - [Surge Copper Corp.](#) (TSXV: SURG) (OTCQB: SRGXF) (Frankfurt: G6D2) ("Surge" or the "Company") is pleased to report results from a geotechnical drilling and analysis program completed in 2024 at its 100%-owned Berg Project in central British Columbia. The program, designed to support future open pit mine design studies, included six geotechnical drill holes (BRG24-246 to 251) targeting both the central and outer areas of the deposit.

## Highlights

- Completed PFS-level geotechnical data collection on time and under budget
- Acoustic Televiwer surveys completed on seven holes to support a detailed geologic fault model
- 79 rock strength tests completed with spatial coverage across the conceptual open pit
- Delivery of Slope Design Criteria with inter-ramp angles ranging from 39 to 46 degrees, enabling more confident mine design inputs and indicating potential for an overall reduction in strip ratio compared to the PEA design (inter-ramp angles ranged from 30 to 49 degrees)
- Mineralization encountered in central stock and on outer deposit margins suggests resource expansion potential and possible strip ratio improvements
- Hole BRG24-246 (central Berg Stock): 184 metres grading 0.30% CuEq (0.26% copper, 0.008% molybdenum, 1.50 g/t silver, and 0.016 g/t gold) from 6 metres, converting expected waste into mineralized material and highlighting further exploration potential within the central Berg Stock
- Hole BRG24-251 (eastern margin): 136 metres grading 0.19% CuEq (0.16% copper, 0.002% molybdenum, 2.16 g/t silver, and 0.016 g/t gold), demonstrating low-grade potential along pit edges and highlighting potential to further improve the low strip ratio at Berg with additional drilling
- Silver-rich base-metal veins encountered in holes BRG24-248, 249, and 250, indicating potential for precious metal mineralization peripheral to the porphyry system. Notably, hole BRG24-249 returned:
  - 2 metres grading 83.9 g/t Ag, 0.27 g/t Au, and 0.40% Cu from 130 metres
  - 4 metres grading 69.7 g/t Ag, 0.56 g/t Au, and 0.34% Cu from 240 metres

Leif Nilsson, Chief Executive Officer, commented: "The completion of this geotechnical program represents another important de-risking milestone for the Company. The results confirm the geotechnical suitability of the Berg deposit for the open pit design we have envisioned. Importantly, because Berg is a single, cohesive open pit, rather than a collection of separate mining areas, these results meaningfully strengthen the project's low-complexity, low-risk profile. Our team delivered the program efficiently, ahead of schedule and under budget, and we now have the critical data in hand to advance PFS-level engineering design. Additionally, the mineralization encountered on the margins and in the central stock points to further upside in our resource model."

The geotechnical program was designed and implemented in collaboration with BGC Engineering ("BGC") to Pre-Feasibility Study ("PFS") standards. Five of the six holes were drilled on the margins of the deposit and one within the central Berg Stock. The primary objectives were to gather data on structural geology, rock mass quality, and hydrogeological conditions within a conceptual pit shell.

Each drill hole was subjected to acoustic televiwer logging, hydrogeological testing, and geotechnical logging. Vibrating wire piezometers were installed, and laboratory testing included compressive strength

testing on selected core samples. These efforts enabled BGC to develop a slope stability model and provide geomechanical recommendations for pit slope angles.

The resulting Slope Design Criteria table outlines recommended inter-ramp angles by rock type and structural domain, ranging from 39 to 46 degrees, allowing Surge's mining engineering team to advance PFS-level open pit design with increased confidence. The updated fault model incorporates 2024 drilling data alongside historical records to better define transitions between rock types and improve the geotechnical resolution of the key structural features.

With a minimum catch berm width of 8 metres and maximum inter-ramp height of 150 metres, the pit wall geometry is expected to allow for steeper slopes and a more consistent inter-ramp profile. This may contribute to a lower overall strip ratio and more efficient pit development over the life of mine.

Table 1 below summarizes inter-ramp slope angles used for engineering design, varying by rock type and structural domain. These criteria reflect updated PFS-level assumptions and are derived from both empirical and analytical stability modeling.

Additional scoped work by BGC included drone photogrammetry of areas at the top of the conceptual pit to inform design of future surface infrastructure, including waste rock storage areas identified in the 2023 Berg Preliminary Economic Assessment ("PEA").

Mark Wheeler, VP Projects, commented: "This program was a major step forward in advancing the engineering understanding of the Berg deposit. The geotechnical results provide the data density and quality required for robust pit slope design, while the updated fault model significantly enhances our structural interpretation. Working closely with BGC, we achieved the program objectives efficiently and cost-effectively, and we're now well-positioned to incorporate these results into the next phase of mine-design."

Importantly, while the primary purpose of drilling was geotechnical in nature, several holes intersected low-grade mineralization and silver-rich base-metal veins, which may support future resource expansion and conversion.

Figure 1. Berg drill hole location map showing 2024 drill holes and the location of cross section A - A'.  
Please click here to view image

Figure 2. Open pit Slope Design Criteria domain and sector map showing kinematic sector and maximum inter-ramp angles.  
Please click here to view image

Figure 3. Cross section A - A' showing geotech drill holes BRG24-246, BRG24-251, and 253. See Figure 1 for section location.  
Please click here to view image

Table 1. Summary of Slope Design Criteria by Rock Type

Rock Type	Inter-Ramp Angle Range (°)	Bench Face Angle (°)	Max Inter-Ramp H
Andesite	40-44	70	150
Diorite	39-46	70	150
Berg Stock	38-46	70	150
Supergene	35	70	90
Leach Cap (sparse and thin, not used in final pit)	33	70	15

Note: Slope angles were derived using a combination of regulatory bench geometries, kinematic stability analysis, and equilibrium modeling.

Figure 4. Drill rig completing geotechnical hole BRG24-250 in far northeast of conceptual pit. This hole encountered multiple intervals of silver-rich, base-metal veins (see Table 2).  
Please click here to view image

Figure 5. West-facing view over Berg camp, with drill rig in foreground completing geotechnical hole BRG24-246 which intersected 184 metres grading 0.26% copper, 0.008% molybdenum, 1.50 g/t silver, and 0.016 g/t gold from 6 metres.  
Please click here to view image

Figure 6. Drill rig mobilized between two geotechnical holes at the Berg Project.  
Please click here to view image

#### Description of Geotech Holes BRG24-246 to 251

Hole BRG24-246 targeted the central Berg Stock and penetrated the conceptual constraining pit at depth (PEA pit on Figure 2). The hole encountered porphyritic intrusive rocks from the start of bedrock at 5 metres to the end of the hole at 501 metres depth. The hole returned 184 metres grading 0.30% copper equivalent (0.26% copper, 0.008% molybdenum, 1.50 g/t silver, and 0.016 g/t gold) from 6 metres depth. This hole is expected to extend near-surface mineralization eastward toward the centre of the Berg Stock.

Hole BRG24-247 tested the conceptual Berg constraining pit on the south side of the deposit. The hole was collared to the south of known Berg mineralization but intersected very low-grade mineralization on the outer margin returning 66 metres grading 0.12% copper equivalent (0.08% copper, 0.002% molybdenum, 3.93 g/t silver, and 0.021 g/t gold) from 6 metres depth. The hole encountered andesite volcanic and sedimentary rocks from the start of bedrock at 6 metres depth to the end of the hole at 315 metres depth.

Hole BRG24-248 tested the northwest side of the Berg deposit area and was lost due to high water pressure prior to reaching its target depth. This hole encountered low grade mineralization returning 20 metres grading 0.15% copper equivalent (0.11% copper, 0.001% molybdenum, 4.53 g/t silver, and 0.010 g/t gold) from 48 metres depth. The hole also intersected late quartz-carbonate silver base-metal veins highlighted by an intercept of 2 metres grading 41.8 g/t silver, 0.06 g/t gold, 0.07% copper, 1.1% zinc, and 0.7% lead from 74 metres depth. The hole intersected interbedded andesite volcanic and sedimentary rocks from the start of bedrock at 17 metres depth to the end of the hole at 252 metres depth.

Hole BRG24-249 tested the north side of the Berg deposit area and was collared north of the known Berg mineralization. The hole tested the conceptual Berg constraining pit on the north side of the deposit and also intersected multiple late quartz-carbonate silver-rich base-metal veins highlighted by an intercept of 2 metres grading 83.9 g/t silver, 0.27 g/t gold, 0.4% copper, 0.6% zinc, and 0.4% lead from 130 metres depth. The hole intersected equigranular quartz diorite from the start of bedrock at 4 metres depth to the end of the hole at 402 metres depth.

Hole BRG24-250 tested the northeast side of the Berg deposit area and was collared northeast of the known Berg mineralization. The hole tested the conceptual Berg constraining pit on the northeast side of the deposit and also intersected multiple late quartz-carbonate silver-rich base-metal veins highlighted by an intercept of 2 metres grading 43.7 g/t silver, 0.21 g/t gold, 0.55% copper, 0.04% zinc, and 0.03% lead from 210 metres depth. The hole intersected equigranular quartz diorite from the start of bedrock at 3 metres depth to the end of the hole at 300 metres depth.

Hole BRG24-251 tested the conceptual Berg constraining pit on the east side of the deposit and was collared on the eastern edge of known mineralization. The hole encountered very low-grade mineralization on the outer margins returning 100 metres grading 0.20% copper equivalent (0.18% copper, 0.002% molybdenum, 2.34 g/t silver, and 0.019 g/t gold) from 20 metres depth. In addition to providing key geotechnical information, this hole helps define the low grade margin of the Berg system on the east side. The hole intersected andesite and related sedimentary rocks from the start of bedrock at 6 metres depth to the end of the hole at 324 metres depth.

Results from all drill holes completed during the 2024 program at the Berg Project have now been reported.

Table 2. Summary of Assay Results for Geotech Holes BRG24-246 and 251

Drill Hole	From (m)	To (m)	Width (m) <sup>1</sup>	CuEq (%) <sup>2</sup>	Cu (%)	Mo (%)	Ag (g/t)	Au (g/t)
BRG24-246	6	190	184	0.30	0.26	0.008	1.50	0.016

including	116	152	36	0.35	0.32	0.007	1.11	0.017
BRG24-246	316	332	16	0.23	0.16	0.019	1.94	0.011
BRG24-247	6	72	66	0.12	0.08	0.002	3.93	0.021
including	46	72	26	0.14	0.09	0.002	5.76	0.036
BRG24-248	48	68	20	0.15	0.11	0.001	4.53	0.010
BRG24-248	74	76	2	0.32	0.07	0.00	41.80	0.060
BRG24-249	130	132	2	0.97	0.4	0.00	83.9	0.269
BRG24-249	234	238	4	0.33	0.13	0.00	32	0.074
BRG24-249	240	244	4	0.92	0.34	0.00	69.7	0.560
BRG24-249	352	354	2	0.57	0.267	0.00	52.9	0.033
BRG24-250	34	40	6	0.32	0.077	0.00	34.7	0.154
BRG24-250	104	105	1	0.30	0.08	0.00	31.1	0.132
BRG24-250	210	212	2	0.86	0.548	0.00	43.7	0.210
BRG24-250	290	292	2	0.36	0.073	0.00	44	0.138
BRG24-251	18	154	136	0.19	0.16	0.002	2.16	0.016
BRG24-251	188	198	10	0.20	0.17	0.004	3.90	0.012

1.Width refers to drill hole intercepts; true widths have not been determined. 2.CuEq (copper equivalent) is provided for illustrative purposes only to express the combined abundance of copper, molybdenum, silver, and gold, with secondary metals calculated net of assumed metallurgical recoveries using deposit average recovery assumptions of 76% for molybdenum, 65% for silver, and 55% for gold. The calculation uses metal prices of US\$4.00/lb copper, US\$15.00/lb molybdenum, US\$23.00/oz silver, and US\$1,800/oz gold resulting in the formula: CuEq [%] = Cu [%] + 2.85 x Mo [%] + 0.0055 x Ag [g/t] + 0.3609 x Au [g/t].

#### Quality Control

All drill core is logged, photographed, and cut in half with a diamond saw. Half of the core is bagged and sent to ALS Geochemistry in Kamloops, British Columbia for analysis (which is ISO/IEC 17025 accredited), while the other half is archived and stored on site for verification and reference purposes. Gold is assayed using a 30g fire assay method and 33 additional elements are analyzed by Inductively Coupled Plasma (ICP) utilizing a 4-acid digestion. Duplicate samples, blanks, and certified standards are included with every sample batch and then checked to ensure proper quality assurance and quality control.

#### Qualified Person

Dr. Shane Ebert P.Geol., is the Qualified Person for the Berg Project and the Ootsa Property as defined by National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101") and has approved the technical and scientific disclosure contained in this news release.

Mark Wheeler, P.Eng., VP of Projects at the Company as well as a Qualified Person as defined by NI 43-101, has supervised the preparation of the technical information in this news release.

#### About Surge Copper Corp.

Surge Copper Corp. is a Canadian company that is advancing an emerging critical metals district in a well-developed region of British Columbia, Canada. The Company owns a large, contiguous mineral claim package that hosts multiple advanced porphyry deposits with pit-constrained NI 43-101 compliant resources of copper, molybdenum, gold, and silver - metals which are critical inputs to modern energy infrastructure and electrification technologies.

The Company owns a 100% interest in the Berg Project, for which it announced a maiden PEA in June 2023 outlining a large-scale, long-life project with a simple design and high outputs of critical minerals located in a safe jurisdiction near world-class infrastructure. The PEA highlights base case economics including an NPV8% of C\$2.1 billion and an IRR of 20% based on long-term commodity prices of US\$4.00/lb copper, US\$15.00/lb molybdenum, US\$23.00/oz silver, and US\$1,800/oz gold. The Berg deposit contains pit-constrained 43-101 compliant resources of copper, molybdenum, silver, and gold in the Measured,

Indicated, and Inferred categories.

The Company also owns a 100% interest in the Ootsa Property, an advanced-stage exploration project containing the Seel and Ox porphyry deposits located adjacent to the open pit Huckleberry Copper Mine, owned by Imperial Metals. The Ootsa Property contains pit-constrained NI 43-101 compliant resources of copper, gold, molybdenum, and silver in the Measured, Indicated, and Inferred categories.

On Behalf of the Board of Directors

"Leif Nilsson"  
Chief Executive Officer

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