

Highland Copper Reports Initial Resource Estimate for the 543S Deposit, Upper Peninsula, Michigan

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LONGUEUIL, QUEBEC--(Marketwired - Aug 25, 2014) - [Highland Copper Company Inc.](#) (TSX VENTURE:HI) ("Highland" or the "Company") is pleased to announce an initial resource estimate for the 543S copper deposit part of the Keweenaw Project located in the Keweenaw Peninsula of Michigan's Upper Peninsula (see Figure 1).

543S Project - Base Case - Underground Scenario
Mineral Resource Estimate - July 5, 2014

Resource Category	Cut-Off Grade Cu Eq. (%)	Tonnage ('000 t)	Grade Cu Eq. (%)	Grade Cu (%)	Copper ('000 lbs)	Grade Ag (g/t)	Silver ('000 oz)
Indicated	1.9	1,518	3.31	3.27	109,514	5.1	248
Inferred	1.9	193	3.12	3.08	13,116	4.8	30

Notes on Mineral Resources

1. Cu Equivalent = $\text{Cu\%} + (\text{Ag g/t} \times 20\$/\text{oz} \times 80\% \times 90\%) / (22.0462 \text{ lbs}/10\text{kg} \times 3\$/\text{lb} \times 31.1035 \text{ g}/\text{oz} \times 90\% \times 96.5\%)$
2. Mineral Resources are reported using a copper price of 3\$/lb and a silver price of 20\$/oz
3. A payable rate of 96.5% for copper and 90% for silver was assumed
4. Preliminary metallurgical testing suggests recovery of 90% for copper and 80% for silver
5. Cut-off grade of 1.9% Cu Eq. was used
6. Underground mining costs are estimated at 57.27\$/t of ore
7. Production costs are estimated at 37.50\$/t of ore: 12.00\$/t for processing, 2.50\$/t for general and administrative costs, 0.50\$/t for tailings and 22.50\$/t for ore transportation to White Pine Complex
8. A 5% royalty was used (4.99\$/t ore)
9. No mining dilution and mining loss were considered for the Mineral Resources
10. Rock bulk densities are based on rock types, %Cu and proximity to specific gravity measurements
11. Assay capping was applied to some mineralized domains
12. Classification of Mineral Resources conforms to CIM definitions
13. The qualified person for the estimate is Mr. Réjean Sirois, eng., Vice President Geology and Resources of G Mining. The estimate has an effective date of July 5, 2014
14. Mineral resources, which are not mineral reserves, do not have demonstrated economic viability. The estimate of mineral resources may be materially affected by environmental, permitting, legal, title, taxation, sociopolitical, marketing, or other relevant issues.
15. The quantity and grade of reported inferred resources in this estimation are uncertain in nature and there has been insufficient exploration to define these inferred resources as indicated or measured mineral resources.

The mineral resource estimate was prepared by G Mining Services Inc. ("G Mining"), a Canadian mining consulting firm. After a detailed review of different options, Highland and G Mining have opted to report the mineral resources for potential underground development of the 543S deposit. This initial mineral resource estimate for the 543S copper deposit is based on 262 diamond drill holes totaling 45,608 m, of which 220 are NQ size and 42 HQ size, on a drill grid spaced 30.5 by 15 m.

Selection of cut-off grades and base case resource estimate

The table below, prepared by G Mining, shows the sensitivity of constrained underground resource estimates to the cut-off grade for the 543S resource.

Sensitivity of the 543S Project - Constrained Underground Mineral Resource Estimate by Cut-Off Grades

Cut Off Grade % Cu Eq.	Indicated						Inferred					
	Tonnage (‘000 t)	Grade Cu Eq.(%)	Grade Cu (%)	Copper Contained (‘000 lbs)	Grade Ag (g/t)	Silver Contained (‘000 oz)	Tonnage (‘000 t)	Grade Cu Eq.(%)	Grade Cu (%)	Copper Contained (‘000 lbs)	Grade Ag (g/t)	Silver Contained (‘000 oz)
5.0%	163	6.21	6.16	22,166	7.1	37	14	5.87	5.83	1,776	5.2	2
4.5%	246	5.71	5.67	30,790	6.4	51	27	5.30	5.27	3,163	5.1	4
4.0%	364	5.24	5.20	41,748	6.1	71	41	4.96	4.93	4,464	5.0	7
3.5%	508	4.81	4.78	53,532	5.7	94	59	4.58	4.55	5,960	4.8	9
3.0%	715	4.36	4.32	68,101	5.4	126	82	4.21	4.18	7,533	4.6	12
2.5%	995	3.90	3.87	84,838	5.3	169	112	3.81	3.78	9,359	4.8	17
2.0%	1,406	3.41	3.38	104,817	5.1	231	173	3.24	3.21	12,290	4.8	27
1.9%	1,518	3.31	3.27	109,514	5.1	248	193	3.12	3.08	13,116	4.8	30
1.5%	2,070	2.87	2.84	129,809	4.8	320	332	2.52	2.49	18,256	4.2	45
1.0%	3,136	2.31	2.29	158,142	4.4	444	751	1.79	1.77	29,267	4.0	97
0.5%	4,993	1.72	1.70	187,130	3.9	621	1,493	1.25	1.23	40,616	3.2	152

Mineral Resource Estimate Methodology

G Mining undertook the Mineral Resource estimate based on data provided by Highland. The estimate was conducted in a block model limited by eighteen mineralized domains interpreted and modelled as 3D wireframes. Capped raw assays were composited into regular 2.5-meter run lengths within each domain. Isotropic cubic blocks of 2.5 meters were used in the block model. Bulk densities were first estimated in each block based on regressions calculated from the correlation of 1,100 specific gravity measurements with their copper content, for three major rock types (flow-tops, dyke and basalt/host rock). Secondly, blocks within a 50 meter radius from specific gravity measurements, within the same rock type, were interpolated using those samples and were given a higher priority. Resulting estimated specific gravity of blocks inside domains varies from 2.52 g/cm³ to 3.04 g/cm³. Overburden density was set to a uniform 2.35 g/cm³. Copper and silver grades were estimated using the Inverse Distance Cube (ID³) interpolation method in three successive passes, which led to Indicated and Inferred Resources, limited by mineralized domains. The underground scenario resources were constrained by blocks with a minimum threshold value of 1.9% Cu equivalent, where isolated clusters of blocks were removed and an upper hard boundary was set at 15 m below the bedrock surface. Mineral Resources were classified according to the CIM Definition Standards on Mineral Resources and Mineral Reserves.

Metallurgical Work

A.C.A. Howe International first completed historical preliminary metallurgical studies in 1991 at the Institute of Materials Processing of Michigan Technological University on three samples of chalcocite from the 543S deposit. Concentrate grades from conventional flotation tests demonstrated over 40% Cu and recoveries over 90% were achievable at grinds between 200 and 270 mesh when combined with cleaning and re-cleaning of the rougher concentrates. A ball mill grindability work index of a composite of 19.36 KWh/t was also reported.

In February 2014 seven flotation tests were conducted on composite samples of drill core from the 543S deposit at SGS Laboratories in Lakefield, Ontario under the supervision of Ahmed Bouajila, Vice President, Metallurgy and Ore Processing for G Mining. The composite grade was 2.61% Cu and 3.9 g/t Ag. Copper recoveries reported for this work neglect the copper distribution contained in the cleaner tailings. In a continuous circuit the cleaner tailings would be re-circulated back to the rougher and cleaner flotation stages, respectively and a substantial part of it would be recovered in the final concentrate. The effect of this recirculation cannot be determined without running locked cycle tests or continuous pilot plant trials. It is concluded that reasonable expectation from an equivalent optimized and closed circuit would be:

- Recoveries: 90% Cu, 80% Ag;
- Concentrate grades: 44%Cu, 59g/t Ag ; and
- Mass Pull: 5.5%.

Those numbers are used for the base case reported in this news release.

Geology of the 543S Deposit.

The 543S copper deposit is located within a zone of chalcocite-dominated copper mineralization that is unique to the Keweenaw Peninsula. The known chalcocite deposits in the Keweenaw region occur in a 30 kilometer long northeast-southwest trending belt located between the native copper-bearing lodes and the underlying Keweenaw Fault and hosted by the Portage Lake Lava series. Chalcocite mineralization primarily occurs as open space fillings in amygdaloidal and fragmental basalt flow tops. Historically, this type of mineralization has not been a major exploration target. The 543S deposit is the largest chalcocite occurrence found to date.

The basalt flows in the area of the 543S deposit are covered by up to 50 meters of glacial till and do not outcrop in the vicinity of the deposit. The flows have an average thickness of approximately 33 meters and are cut by two fine grained sill-like dacitic to andesitic subvolcanic intrusives (see Fig. 2). At the 543S copper deposit, more than 99% of the copper occurs in the mineral chalcocite and <1% is present as bornite, chalcopyrite, or as native copper. Traces of native silver are also present. Approximately 80 to 90% of chalcocite mineralization is concentrated in flow top breccias and amygdaloids where grades are the highest.

Future Plans

The 543S deposit is one of two lava flow top-hosted chalcocite deposits that have been subject to recent drilling programs by Highland, the other is the G-2 deposit located about 20 kilometers northeast of 543S. Highland plans to complete a resource estimate for G-2 in 2014. Although the possibility of an independent milling complex at 543S treating mineralization from both 543S and G-2 will be considered, Highland plans to evaluate alternatives that would treat mineralization from 543S and other undeveloped copper deposits in the Western Upper Peninsula of Michigan recently acquired by Highland, in a single center of metallurgical operations. Planned studies will evaluate an alternative that would involve transportation to and processing of mineralization from these deposits in a central mine and metallurgical complex, the location of which remains to be determined.

Qualified Persons

Rejean Sirois, Vice President of Geology and Resources for G Mining is the qualified person, as defined in National Instrument 43-101, responsible for the mineral resource estimate for the 543S deposit as reported herein. He has read and approved the relevant technical portions of this news release related to the mineral resource estimate for which he is responsible.

Ahmed Bouajila, Vice President, Metallurgy and Ore Processing for G Mining is the qualified person, as defined in National Instrument 43-101, responsible for supervising initial metallurgical test work on samples from the 543S deposit as reported herein. He has read and approved the relevant technical portions of this news release related to the metallurgical work for which he is responsible.

The balance of the technical information contained in this news release has been reviewed and approved by Ross R. Grunwald, PhD., VP Exploration for the Company. Dr. Grunwald is a qualified person as defined in NI 43-101.

G Mining is completing a National Instrument 43-101 technical report for the mineral resource estimate to be filed on SEDAR within 45 days of this press release.

Keweenaw Copper Project

The 543S deposit is part of the Keweenaw Copper Project that covers approximately 9,000 acres of mineral rights and is being explored under a Mining Venture Agreement between Highland and BRP LLC. The agreement allows Highland to earn a 65 percent interest by spending US\$11.5 million on the project (which amount has been spent) and providing a feasibility study by October 26, 2015. The Keweenaw Project is approximately 180 km northeast of the White Pine North Project and 250 km of the Copperwood Project by road access.

Cautionary Statement

Mineral resources are not mineral reserves and do not have demonstrated economic viability. The terms "inferred" and "indicated" resources contains in this press release are recognized and required by NI 43-101 under Canadian regulations, but not recognized by the U.S. Securities and Exchange Commission ("SEC"). The SEC requires mining companies in their filings with the SEC to disclose only those mineral deposits that a company can economically and legally extract or produce. "Inferred resources" have a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an "inferred resource" will ever be upgraded to a higher category. Investors are cautioned not to assume that all or part of an inferred resource exists, or is economically or legally mineable and that all or any part of mineral deposits in the "measured" or "indicated" resource categories will ever be converted into reserves.

This press release contains 'forward-looking information' within the meaning of applicable Canadian securities legislation. Forward looking information in this news release includes information with respect to: the mineral resource estimate; the Company's plans to complete a mineral resource estimate at the G2 deposit; the timing and results of future studies; the geological and economic potential of the Keweenaw Project, including the possibility of developing an underground operation there; the potential to process mineralization with other deposits in a central mine; the completion of a feasibility study to earn 65% of the Keweenaw Project, and other statements and information regarding anticipated results regarding the Company's operations and exploration. Actual results may be materially different from those currently anticipated. Many factors, known and unknown, could cause the actual results to be materially different from those expressed or implied by such forward looking statements. Such risks include, but are not limited to: the volatility of copper price; the uncertainty of exploration results and mineral resource estimates, capital expenditure requirements and other costs; the uncertainties related to the Company's ability to acquire a 65% interest in the Keweenaw Project; currency fluctuations; the availability of financing for additional capital requirements, cost of exploration and development programs; mining risks; risks associated with governmental and environmental regulation and obtaining all the necessary permits for the development of the Project; and risks associated with global economic growth. The Company does not intend, and does not assume any obligation, to update these forward-looking statements and information, except as required by law. Accordingly, readers are advised not to place undue reliance on forward-looking statements.

About Highland

[Highland Copper Company Inc.](#) is a Canadian exploration company focused on exploring and developing copper projects within the Upper Peninsula of Michigan, U.S.A. Highland has recently completed the acquisition of the Copperwood Project and the interim closing of the White Pine Project. The common shares of Highland trade on the TSX Venture Exchange under the symbol 'HI'. Additional information about the Company is available on the Company's website at www.highlandcopper.com and on SEDAR at www.sedar.com.

Figures are available at the following address: http://file.marketwire.com/release/hi_0825.pdf

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