

NEWS RELEASE

Great Panther Files NI 43-101 Technical Report for the Guanajuato Mine Complex

Vancouver – December 22, 2020 – Great Panther Mining Limited (TSX:GPR; NYSE-A:GPL) (“Great Panther” or the “Company”) announces today it has filed a technical report for its 100%-owned Guanajuato Mine Complex (“GMC”) in Mexico. The new technical report entitled “NI 43-101 Mineral Resource Update Technical Report on the Guanajuato Mine Complex, Guanajuato and San Ignacio Operations, Guanajuato State, Mexico” (“Technical Report”) supports the Company’s updated Mineral Resource estimate for the GMC announced by news release on November 23, 2020.

Highlights

- Measured and Indicated (M&I) Mineral Resources contain 10.2 million (M) silver equivalent ounces (Ag eq oz), a 17% increase over the previous 2019 estimate
- M&I Mineral Resource silver grade increased 10% from 180 to 199 grams per tonne silver (g/t Ag) for an effective silver equivalent grade of 385 g/t inclusive of the gold grade of 2.07 g/t
- Inferred Mineral Resources contain 18.1M Ag eq oz, more than double the previous estimate reflecting successful exploration efforts in the Los Pozos and Purisima areas

The consolidated GMC Mineral Resource estimate is included below. The Technical Report has an effective date of July 31, 2020, and is available on SEDAR at www.sedar.com and on the Company’s website at www.greatpanther.com, and will be filed on EDGAR as soon as practicable at www.sec.gov.

Table 1 – Total GMC Mineral Resource Estimates at July 31, 2020

Classification	Tonnes	Grade Ag (g/t)	Contained Ag (oz)	Grade Au (g/t)	Contained Au (oz)	Grade Ag eq (g/t)	Contained Ag eq (oz)	Grade Au eq (g/t)	Contained Au eq (oz)
Measured	600,941	195	3,763,303	2.16	41,741	389	7,520,049	4.32	83,556
Indicated	220,910	209	1,483,209	1.83	12,951	373	2,651,863	4.15	29,465
Total M&I	821,851	199	5,246,512	2.07	54,693	385	10,171,912	4.28	113,021
Inferred	1,453,008	185	8,664,244	2.25	105,219	388	18,109,823	4.31	201,220

Notes:

1. This consolidated GMC Mineral Resource estimate includes the estimates of the San Ignacio and Guanajuato mines.
2. Totals may not agree due to rounding.
3. Grades have been estimated in metric units and contained silver and gold estimated in troy ounces (oz).
4. A minimum mining width of 0.50 metres (m) was used in the estimates.
5. For San Ignacio, a vein bulk density of 2.68 t/m³ was used and for Guanajuato, a vein bulk density of 2.64 t/m³ was used in the estimates.
6. For San Ignacio, Mineral Resources are estimated at a full cost cut-off net smelter return (NSR) of US\$100/t using metal prices of US\$17.64/oz Ag and US\$1,694/oz Au (based on CIBC 2021 forecast) and metallurgical recoveries of 85.5% for Ag and 83.9% for Au.
7. For Guanajuato, Mineral Resources are estimated using cut-offs based on the full operating costs per mining area of US\$115/t for Cata, US\$115/t for Santa Margarita/San Cayetano, US\$89/t for Los Pozos, US\$100/t for Guanajuato, US\$125/t for Promontorio, and US\$102/t for Valenciana.
8. For Guanajuato, metal prices US\$17.64/oz silver, and US\$1,694 gold (based on CIBC 2021 forecast).
9. For Guanajuato, block model grades converted to US\$ value using plant recoveries of 85.5% Ag, 83.9% Au, and net smelter terms negotiated for concentrates.



10. Ag eq oz were calculated using 90:1 Ag:Au ratio. The ratios are reflective of average metal prices for 2020.
11. Estimates have an effective date of July 31, 2020.
12. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
13. Inferred Mineral Resources have a great amount of uncertainty as to their existence and as to whether they can be mined economically. It cannot be assumed that all or part of the Inferred Mineral Resources will ever be upgraded to a higher category.

Permitting Update

As previously disclosed, Great Panther has been working with permitting authorities to expand the capacity of its existing GMC tailings storage facilities (TSF). In parallel, the Company has completed its review to identify technical alternatives to extend its tailings storage capacity utilizing existing permits and has begun modifying the tailings discharge using cyclones to extend the tailings capacity until June 30, 2021. This will allow more time for receipt of the pending expansion approval; however, if the expansion approval of the TSF has not been received prior to June 30, 2021, the Company may need to cease milling operations at the GMC until receipt of the CONAGUA expansion approval.

TECHNICAL DISCLOSURE AND QUALIFIED PERSONS

The Technical Report and the Mineral Resource update for the GMC included therein and herein were prepared by and under the supervision of Robert F. Brown, P. Eng., and Mohammad Nourpour, P. Geo., each a non-independent Qualified Person within the meaning of National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI 43-101”). Messrs. Brown and Nourpour have reviewed and approved the Mineral Resource estimate for GMC included in this news release.

The technical information regarding the GMC tailings storage and permitting in this news release has been reviewed and approved by Neil Hepworth, M.Sc., C. Eng., MIMM, Chief Operating Officer for Great Panther, a non-independent Qualified Person within the meaning of NI 43-101.

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ABOUT GREAT PANTHER

Great Panther is a growing gold and silver producer focused on the Americas. The Company owns a diversified portfolio of assets in Brazil, Mexico and Peru that includes three operating gold and silver mines, four exploration projects, and an advanced development project. Great Panther is actively exploring large land packages in highly prospective districts and is pursuing acquisition opportunities to complement its existing portfolio. Great Panther trades on the Toronto Stock Exchange under the symbol GPR, and on the NYSE American under the symbol GPL.

CAUTIONARY NOTES ON FORWARD-LOOKING STATEMENTS

This news release contains forward-looking statements within the meaning of the United States Private Securities Litigation Reform Act of 1995 and forward-looking information within the meaning of Canadian securities laws (together, “forward-looking statements”). Such forward-looking statements may include, but are not limited to, statements regarding: the GMC Mineral Resource estimates and the assumptions underlying the estimates; expectations around the Company’s ability to receive the permits and regulatory approvals necessary for an expansion of the existing GMC TSF (lifts 18 and 19) in a timely manner in order to prevent an interruption to milling operations at the GMC; expectations around the use of an alternative technical solution to extend the tailings



capacity until June 30, 2021 until CONAGUA expansion approval can be obtained; and the Company's plans to pursue acquisition opportunities to complement its existing portfolio.

These forward-looking statements and information reflect the Company's current views with respect to future events and are necessarily based upon a number of assumptions that, while considered reasonable by the Company, are inherently subject to significant operational, business, economic and regulatory uncertainties and contingencies. These assumptions include: the accuracy of the Company's Mineral Resource estimates and the assumptions upon which they are based discussed here and in the Technical Report; ore grades and recoveries, prices for silver, gold, and base metals and currency exchange rates remaining as estimated; capital, decommissioning and reclamation estimates; prices for energy inputs, labour, materials, supplies and services (including transportation) remaining as estimated; all necessary permits, licenses and regulatory approvals for the expansion of the existing GMC TSF (lifts 18 and 19) are received in a timely manner without condition; the Company's plan to extend the tailings capacity of the GMC TSF utilizing existing permits will be successful in extending the GMC tailings capacity until June 30, 2021 and that such extension will be sufficient to bridge the tailings capacity until CONAGUA approval can be obtained in order to prevent an interruption to milling operations at the GMC; the Company is able to procure equipment and supplies and complete construction for the extension of the GMC TSF without any technical or other difficulties; operations not being disrupted by issues such as mechanical failures, labour disturbances and workforce shortages, illegal occupations or mining, seismic events, and adverse weather conditions; the Company's expectations that metallurgical, environmental, permitting, legal, title, taxation, socio-economic, political, marketing or other issues will not materially affect the estimates of Mineral Resources or its future mining plans; and the Company's ability to comply with environmental, health and safety laws. The foregoing list of assumptions is not exhaustive.

These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, performance or achievements expressed or implied by such forward-looking statements to be materially different. Such factors include, among others, risks and uncertainties relating to: the impact of COVID-19 on the Company's ability to operate as anticipated, including the risk of an unplanned partial or full shutdown of the Company's mines and processing plants, whether voluntary or imposed, and the potential for a delay in receipt of permits necessary for the Company's GMC TSF expansion, which would adversely impact the Company's revenues, financial condition and ability to meet its production and cost guidance; the inherent risk that estimates of Mineral Resources and the assumptions upon which they are based may not be accurate; gold, silver and base metal prices may decline or may be less than forecasted; risk in variation in production and costs as the GMC does not have established Mineral Reserves; fluctuations in currency exchange rates may increase costs of operations; the Company's ability to obtain all necessary permits, licenses and regulatory approvals for its operations in a timely manner, including the uncertainty regarding the timing and approval of the expansion of the existing GMC TSF (lifts 18 and 19), which if not granted, delayed or conditioned could result in an interruption to milling operations at the GMC which could adversely impact the Company's revenues and financial condition; the alternative technical solution utilizing existing permits is not successful in extending the potential tailings capacity until CONAGUA expansion approval is obtained which could also result in an interruption to milling operations at the GMC; operational and physical risks inherent in mining operations (including pit wall collapses, tailings storage facility failures, environmental accidents and hazards, industrial accidents, equipment breakdown, unusual or unexpected geological or structural formations, cave-ins, flooding and severe weather) may result in unforeseen costs, shut downs, delays in production and exposure to liability; potential political and social risks involving Great Panther's operations in a foreign jurisdiction; the potential for unexpected costs and expenses or overruns; employee and contractor relations; relationships with, and claims by, local communities; changes in laws, regulations and government practices in the jurisdictions in which the Company operates; legal restrictions related to mining; changes in project parameters as plans continue to be refined; ability to maintain and renew agreements with local communities to support continued operations; there is no assurance that the Company will be able to identify or complete acquisition opportunities; and other risks and uncertainties, including those described in respect of Great Panther, in its annual information form for the year ended December 31, 2019 and material change reports filed with the Canadian Securities Administrators available at www.sedar.com and reports on Form 40-F and Form 6-K filed with the Securities and Exchange Commission and available at www.sec.gov.

There is no assurance that these forward-looking statements will prove accurate or that actual results will not vary materially from these forward-looking statements. Although the Company has attempted to identify important factors that could cause actual results to differ materially, there may be other factors that cause results not to be



as anticipated, estimated, described, or intended. Accordingly, readers are cautioned not to place undue reliance on forward looking statements. Forward-looking statements and information are designed to help readers understand management's current views of our near- and longer-term prospects and may not be appropriate for other purposes. The Company does not intend, nor does it assume any obligation to update or revise forward-looking statements or information, whether as a result of new information, changes in assumptions, future events or otherwise, except to the extent required by applicable law.

CAUTIONARY NOTE TO UNITED STATES INVESTORS CONCERNING ESTIMATES OF MEASURED, INDICATED AND INFERRED RESOURCES

The Company prepares its disclosure in accordance with the requirements of securities laws in effect in Canada, which differ from the requirements of U.S. securities laws. Terms relating to Mineral Resources in this news release are defined in accordance with NI 43-101 under the guidelines set out in Canadian Institute of Mining, Metallurgy, and Petroleum Definition Standards for Mineral Resources and Mineral Reserves 2014 ("CIM Standards").

The United States Securities and Exchange Commission (the "SEC") has adopted amendments effective February 25, 2019 (the "SEC Modernization Rules") to its disclosure rules to modernize the mineral property disclosure requirements for issuers whose securities are registered with the SEC under the United States Securities Exchange Act of 1934. The SEC Modernization Rules have replaced SEC Industry Guide 7, which will be rescinded following a transition period and after the required compliance date of the SEC Modernization Rules.

As a result of the adoption of the SEC Modernization Rules, the SEC will now recognize estimates of "Measured Mineral Resources", "Indicated Mineral Resources" and "Inferred Mineral Resources", which are defined in substantially similar terms to the corresponding CIM Standards. In addition, the SEC has amended its definitions of "Proven Mineral Reserves" and "Probable Mineral Reserves" to be substantially similar to the corresponding CIM Standards.

United States investors are cautioned that while the foregoing terms are "substantially similar" to corresponding definitions under the CIM Standards, there are differences in the definitions under the SEC Modernization Rules and the CIM Standards. Accordingly, there is no assurance any Mineral Resources that the Company may report as "Measured Mineral Resources", "Indicated Mineral Resources" and "Inferred Mineral Resources" under NI 43-101 would be the same had the Company prepared the resource estimates under the standards adopted under the SEC Modernization Rules.

United States investors are also cautioned that while the SEC will now recognize "Measured Mineral Resources", "Indicated Mineral Resources" and "Inferred Mineral Resources", investors should not to assume that any part or all of the mineral deposits in these categories would ever be converted into a higher category of Mineral Resources or into Mineral Reserves. Mineralization described by these terms has a great amount of uncertainty as to their existence, and great uncertainty as to their economic and legal feasibility. Accordingly, investors are cautioned not to assume that any "Measured Mineral Resources", "Indicated Mineral Resources", or "Inferred Mineral Resources" that the Company reports are or will be economically or legally mineable.

Further, "Inferred Resources" have a great amount of uncertainty as to their existence and as to whether they can be mined legally or economically. Therefore, United States investors are also cautioned not to assume that all or any part of the Inferred Resources exist. In accordance with Canadian securities laws, estimates of "Inferred Mineral Resources" cannot form the basis of feasibility or other economic studies, except in limited circumstances where permitted under NI 43-101.

In addition, disclosure of "contained ounces" is permitted disclosure under Canadian regulations; however, the SEC has historically only permitted issuers to report mineralization as in place tonnage and grade without reference to unit measures.