

NEWS RELEASE

(All dollar amounts expressed in US dollars unless otherwise noted)

Great Panther Announces Updated Mineral Resource Estimates at GMC; Measured and Indicated Resources Increase by 17% and Inferred Resources More than Double

Vancouver – November 23, 2020 – Great Panther Mining Limited (TSX:GPR; NYSE-A:GPL) (“Great Panther” or the “Company”) has completed updated Mineral Resource estimates for its 100%-owned Guanajuato Mine Complex (“GMC”) in Mexico. These estimates have an effective date of July 31, 2020 and are based on 199 holes totalling 19,913 metres of drilling since the previous Mineral Resource estimate.

GMC is comprised of the Guanajuato and San Ignacio underground mines and the 1,000 tonne-per-day Cata processing plant, located in the prolific Guanajuato mining district.

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 grade increased 10% from 180 to 199 grams per tonne silver (g/t Ag)
- Inferred Mineral Resources contain 18.1M Ag eq oz, more than double the previous estimate
- At Guanajuato, Inferred Mineral Resources increased from 2.3M to 6.0M Ag eq oz, reflecting successful exploration efforts in the Los Pozos area
- At San Ignacio, Inferred Mineral Resources increased from 5.9M to 12.1M Ag eq oz, reflecting successful exploration efforts in the Purisima area

Great Panther President and CEO Rob Henderson commented: “We are pleased to have completed another productive drilling campaign at GMC, successfully outlining new resources and demonstrating the quality of the orebody. GMC has been in our portfolio since 2005 and has cumulatively produced nearly 30 million silver equivalent ounces for Great Panther. We also expect to report updated reserve and resource estimates at Tucano before year end.”

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. See detailed notes in Tables 2 and 3 below for the key assumptions, parameters and methods used for each of the underlying estimates

San Ignacio

Compared to the previous Mineral Resource estimate with an effective date of July 31, 2019, Inferred tonnage increased 98%, silver grades increased 14%, and Ag eq oz increased 106%. These changes reflect the use of higher metal prices, mine depletion, and expansion and addition of zones in the Purisima vein area due to successful exploration drilling.

Between August 1, 2019 and July 31, 2020, a total of 139,583 tonnes were mined at San Ignacio.

Table 2 – San Ignacio 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	314,802	142	1,435,252	2.64	26,746	384	3,842,386	4.27	42,693
Indicated	73,096	144	338,246	2.19	5,135	349	800,416	3.87	8,894
Total M&I	387,898	142	1,773,498	2.56	31,881	377	4,642,801	4.19	51,587
Inferred	992,835	169	5,406,142	2.33	74,530	384	12,089,792	4.27	134,331

Notes:

1. Totals may not agree due to rounding
2. Grades have been estimated in metric units and contained silver and gold estimated in troy ounces (oz)
3. A minimum mining width of 0.50 metres (m) and a vein bulk density of 2.68 t/m³ were used in the estimates
4. 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
5. Ag eq oz were calculated using 90:1 Ag: Au ratio. The ratios are reflective of average metal prices for 2020
6. Estimates have an effective date of July 31, 2020
7. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability
8. 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

Guanajuato

Compared to the previous Mineral Resource estimate with an effective date of October 31, 2019, M&I tonnage increased 26%, silver grades increased 22%, and Ag eq oz increased 47%. Inferred tonnage increased 121%, silver grades increased 31%, and Ag eq oz increased 154%. These changes reflect the use of higher metal prices, minor mine depletion, significant changes (up and down) in total operating costs in several mining areas, and expansion of zones at Los Pozos due to successful exploration drilling.

Between August 1, 2019 and July 31, 2020, a total of 23,175 tonnes were mined at Guanajuato.

Table 3 – Guanajuato 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	286,139	253	2,328,051	1.63	14,995	400	3,677,663	4.44	40,863
Indicated	147,814	241	1,144,963	1.65	7,816	390	1,851,448	4.33	20,572
Total M&I	433,953	249	3,473,014	1.64	22,811	396	5,529,111	4.40	61,435
Inferred	460,174	220	3,258,101	2.07	30,689	407	6,020,031	4.52	66,889



Notes:

1. Totals may not agree due to rounding
2. Grades have been estimated in metric units and contained silver and gold estimated in troy ounces (oz)
3. A minimum mining width of 0.50 m and a vein bulk density of 2.64 t/m³ were used in the estimates
4. 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
5. Block model grades converted to US\$ value using plant recoveries of 85.5% Ag, 83.9% Au, and net smelter terms negotiated for concentrates
6. Ag eq oz were calculated using 90:1 Ag:Au ratio. The ratios are reflective of average metal prices for 2020
7. Metal prices US\$17.64/oz silver, and US\$1,694 gold (based on CIBC 2021 forecast)
8. Estimates have an effective date of July 31, 2020
9. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability
10. 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

A technical report will be filed within 45 days on SEDAR at www.sedar.com, on EDGAR at www.sec.gov/edgar, and on the Company's website at www.greatpanther.com.

Exploration Update

Since the cut-off date of July 31, 2020 for this Mineral Resource estimate, Great Panther has drilled an additional 63 holes totalling 9,560 metres. Drilling at Guanajuato and San Ignacio is continuing with three underground rigs at Guanajuato (two in the Los Pozos area and one in the Valenciana area), and one surface rig at San Ignacio continuing in-fill and step out drilling along the Purisima vein system.

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) beyond January 2021. Approval from the environmental permitting authority Secretaría del Medio Ambiente y Recursos Naturales (SEMARNAT) for expansion of the GMC TSF (lifts 18 and 19) has been received, subject to also receiving approval by the national water authority, Comisión Nacional del Agua (CONAGUA) which is outstanding. In parallel, the Company has been pursuing a permit from SEMARNAT for a one-metre high center-line raise of the existing embankment of the TSF (lift 17) to extend tailings capacity until April 2021 and provide more time for the receipt of approval from CONAGUA of the lift 18 and 19 expansion. SEMARNAT has advised Great Panther that its permit application for the one-metre raise on lift 17 will not be approved.

The Company has also been exploring alternatives with its technical consultants and legal advisors for tailings storage to continue processing beyond January 2021, including a review of technical alternatives which utilize existing permits. The technical alternatives under consideration have the potential to extend tailings capacity for two to five months and provide more time for receipt of the pending CONAGUA expansion approval. If the CONAGUA approval of expansion of the TSF has not been received and an alternative tailing storage solution does not get resolved prior to January 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 GMC Mineral Resource estimates included in this news release were classified per the CIM Definition Standards on Mineral Resources and Mineral Reserves (CIM Standards) and are consistent with the requirements of National Instrument 43-101 – Standards of Disclosure for Mineral Projects (NI 43-101). The Mineral Resource Estimates were completed under the supervision of Robert F. Brown, P. Eng., and Mohammad Nourpour, P. Geo. (each a Qualified Person within the meaning of NI 43-101 and together, the Company Qualified Persons). The Mineral Resource estimates were completed using MicroMine 3D geological software, and the inverse distance cubed estimation technique for estimation



of grade to each of the block model blocks. The estimated Mineral Resources are a categorized compilation of blocks greater than the full operational costs of the various mining areas.

Analyses from San Ignacio and Guanajuato underground sampling, operational and exploration drilling are completed at the Company's GMC laboratory. Exploration drill core is re-assayed by SGS in Durango, Mexico.

Great Panther's QA/QC program for drill core includes the regular insertion of blanks, standards, and duplicates into the sample shipments, diligent monitoring of assay results, and necessary remedial actions. The GMC laboratory uses the following analytical techniques: atomic absorption spectroscopy (AAS) for silver with over-limits (300 g/t) completed by fire assay, AAS for gold with over-limits (10 g/t) completed by fire assay, and lead, zinc, copper, arsenic and antimony analyses completed using AAS. QA/QC monitoring of the GMC laboratory includes shipping all exploration drill hole pulps to SGS-DGO for re-analysis and statistical comparison of assay values using correlation coefficients.

The technical information contained in this news release, including the sampling, analytical, and test data underlying the Mineral Resource estimates, has been reviewed and approved by Robert F. Brown, P. Eng., and Mohammad Nourpour, P. Geo., who are the non-independent Qualified Persons for the GMC under the meaning of NI 43-101. Aspects relating to mining and metallurgy are overseen by Neil Hepworth, M.Sc., C. Eng., Chief Operating Officer for Great Panther. Great Panther's Qualified Persons confirm there were no limitations from the Company in verifying the drilling and sample data underlying the mineral resource estimate which were verified through site visit observations and monitoring of the QA/QC program.

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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 potential to use alternative technical solutions to extend the tailings capacity for two to five months until CONAGUA expansion approval can be obtained; expectations around



the timing of Mineral Resource and Reserve reporting for the Tucano mine 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; 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 and that efforts to extend tailings capacity beyond January 2021 until such receipt of CONAGUA approval are successful in order to prevent an interruption to milling operations; alternative storage solutions will have the potential to extend the tailings capacity of the GMC TSF two to five months and that such extension will be sufficient to bridge the tailings capacity until CONAGUA approval can be obtained; the ability to procure equipment and operating supplies and that there are no material unanticipated variations in the cost of energy or supplies; the accuracy of the geological, operational and price and exchange rate assumptions on which the production and cost guidance is based; 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 or delayed could result in an interruption to milling operations at the GMC which could adversely impact the Company's revenues and financial condition; the potential alternative storage solutions being considered are 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; even though the geotechnical consultant have approved the restart of mining in the Urucum Central South (UCS) pit, there is no assurance that the Company will be able to continue mining and be able to access the UCS Mineral Reserves which may adversely impact the Company's production plans and future revenues; 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; planned exploration activities may not result in conversion of existing mineral resources into Mineral Reserves or discovery of new Mineral Resources; 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 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.