
NEWS RELEASE

March 9, 2020 – For Immediate Release

Great Panther Announces Its Inaugural Mineral Reserve & Mineral Resource Estimate for the Tucano Mine, Updated Mineral Resource Estimate at Guanajuato Mine Complex, and Update on Topia Mine Operations

GREAT PANTHER MINING LIMITED (NYSE American: GPL; TSX: GPR) (“Great Panther”, the “Company”) today announced its inaugural Mineral Resource and Mineral Reserve Estimate (the “MRMR”) for its 100% owned Tucano Gold Mine (“Tucano”) in Brazil and updated Mineral Resource Estimates for the two mines at its Guanajuato Mine Complex (“GMC”) in Mexico. The Company also provides an update on its Topia Mine in Mexico regarding potential near term interruption of operations as a result of temporary cessation of tailings deposition activities at the existing tailings storage facility.

The MRMR reflects the first mineral resource and reserve estimate undertaken by the Company for Tucano since the Company’s acquisition of the mine in March 2019. The MRMR has an effective date of September 30, 2019 and uses a more rigorous approach to mineral resource and reserve estimation at Tucano compared to the June 30, 2017 estimate of the previous operator. The MRMR reflects operating experience since acquiring the mine in 2019 and a better understanding of the mine’s geology, and is therefore expected to improve mine forecasting reliability. Internationally recognized mining consultants Roscoe Postle & Associates (“RPA”) acted as independent technical qualified persons for the MRMR.

At Tucano, after adjustments for mining depletion since June 30, 2017, Mineral Reserves are now estimated to be approximately 646,000 ounces, a decline of approximately 489,000 gold ounces relative to the June 30, 2017 estimate. Mineral Resources (excluding Mineral Reserves) declined by approximately 500,000 gold ounces.

At the GMC, estimated Mineral Resources (Measured and Indicated) for the Guanajuato Mine were approximately 3.7 million silver equivalent ounces, up by approximately 1.5 million silver equivalent ounces from the prior estimate dated August 31, 2017, due to a successful 2019 exploration program (see below for silver equivalency calculation). The mine was placed on care and maintenance in December 2018 pending the completion of a more focused exploration program. The Company believes that the increase in resources, together with ongoing drilling in 2020, could be the basis for a re-start of operations later this year.

Measured and Indicated Mineral Resources for the San Ignacio Mine were approximately 5.0 million silver equivalent ounces, a decline of approximately 6.4 million silver equivalent ounces from the prior estimate effective August 31, 2017, due primarily to mining depletion of 3.8 million silver equivalent ounces. The new Mineral Resource Estimates for the Guanajuato and San Ignacio mines feature higher silver equivalent grades as a result of the application of higher Net Smelter Return (“NSR”) cut off values.



“The completion of the MRMR is an important milestone following our acquisition of Tucano as it provides us with a more solid foundation for understanding the geology of Tucano,” said Jeffrey Mason, Interim President and CEO. “While our inaugural update has resulted in a lower reserve and resource estimate, it provides us with a higher level of confidence for future mine and operational planning and the increase in average grades provides additional operational flexibility.”

“Going forward we will be aggressively advancing opportunities for resource growth and mine life extension on multiple fronts,” added Mr. Mason. “At Tucano, we are drilling new near-mine and regional targets in our more than 2,000 square kilometre, largely under-explored land package. We are also evaluating the potential for upgrading confidence in resources for conversion to reserves, and looking to improve and enhance the existing Prefeasibility Study supporting the development of an underground mining operation at Tucano. At GMC, in addition to the potential re-start of the Guanajuato Mine, we are advancing expanded exploration programs at both the Guanajuato and San Ignacio mines.”

The Company expects to release 2019 financial results and provide its annual production and cost guidance by the end of March 2020. As part of the completion of its 2019 consolidated financial statements, and audit of those financial statements by the Company’s independent auditors, the Company will assess the carrying value of Tucano based on the March 2019 purchase price. The assessment of carrying value will consider the MRMR which could lead to a material reduction in the carrying value and a corresponding material charge to the Company’s income statement. Technical reports compliant with Canada’s National Instrument 43-101 Standards of Disclosure for Mineral Projects (“NI-43-101”) will be filed on the Company’s SEDAR profile within 45 days of this news release.

Opportunities for Mineral Resource Increases and Mine Life Extension at Tucano

Based on a preliminary analysis of the updated reserve estimate (without consideration of resource conversion or underground mining), the Company estimates that its current open pit Mineral Reserves will continue to be mined to the fourth quarter of 2021. The Company has identified four key priorities at Tucano to increase reserves and extend the mine life:

1. Near Mine Exploration

The Company has further refined its previously announced 2020 near mine exploration drilling program of approximately 28,000 metres. The focus of the program will be on replacing ounces to be mined in 2020 and extending the mine life. This further refinement involves the prioritization of ten prospective target areas close to the existing pits. The Company has initiated drilling and expects to evaluate the results of drilling by July 2020, noting that material drill results will be disclosed as received and analyzed. The evaluation will be used to determine whether to increase the program and/or reprioritize targets.

2. Potential Conversion of Existing Measured and Indicated Resources

The Company is pursuing the conversion of resources to reserves concurrent with ongoing mine planning and optimization. Of the approximately 150,000 ounces Measured and Indicated Resources incremental to the Mineral Reserves in table 1.1 below (excluding underground), the Company believes a portion located just below the reserve pit designs may prove to be economically viable if gold prices continue to prevail at or above the current level of approximately \$1,675 per ounce, which compares favourably with



gold prices used in the MRMR. In addition, the current Brazilian real to US dollar exchange rate is significantly more favorable than the rate of 3.80 used in the MRMR.

3. Underground Development

The Company continues to evaluate the potential for development of an underground mine below the Urucum North pit, which comprises the 288,000 ounces of underground Tucano Mineral Reserves (see table 1.3 below). A decision on whether to proceed with a Feasibility Study for an underground mine is anticipated in the fourth quarter of 2020, following an underground targeted drill program.

Current underground Mineral Reserves are based on previous designs, adjusted for current costs and cut-off grades (“COG”). Mining of up to 400,000 tonnes of ore per annum is contemplated, at an average grade of 4.13 g/t Au.

4. Regional Exploration

As disclosed in a news release dated February 6, 2020, the Company initiated a 27,000-metre regional exploration drilling program for 2020 on various concessions that Great Panther holds in an under-explored land package consisting of more than 2,000 km².

Beyond currently planned drilling, the Company is further collating, refining and reviewing all existing data from previous ownership to prioritize targets according to their geological potential and proximity to Tucano’s mill.

Urucum Central South (“UCS”) Pit Update

As noted in the Company’s news releases on October 7, 2019 and October 15, 2019, the west wall of the UCS pit underwent slope displacement on October 6, 2019. Since then, the pit has been closed to mining and the Company has deployed significant effort and resources toward a remediation plan with the assistance of the independent consulting firm Knight Piésold & Co.

Pending completion of the remediation plan, the UCS pit continues to be included in the Company’s MRMR, with a Mineral Reserve Estimate (Proven and Probable) of approximately 88,000 ounces of gold and potential for further conversion of Measured and Indicated Mineral Resources at higher gold prices than the Mineral Resource Estimate’s US\$1,500 per ounce. Current estimates for UCS include conservative adjustments to pit wall configurations based on preliminary geotechnical findings.

The Company believes that the reserves are recoverable but cautions that recovery is subject to further evaluation based on geotechnical data gathering now underway. The data gathering will include the collection of additional geotechnical information from five geotechnical core holes to be drilled commencing in April 2020.

Following completion of data collection, an assessment will be made as to whether remediation of the UCS pit to mine the current reserves will be completed. If the remediation plan is determined not to be feasible, then the current UCS pit reserves may not be mined.



If the remediation can be implemented as planned, the Company expects to be in a position to begin remedial work on the west wall of the UCS pit during the third quarter of 2020 and to resume ore mining in the fourth quarter of 2020.

Summary of Tucano Mineral Resources

A summary of the estimated 2019 Mineral Resources is shown in Table 1.1 and a comparison with the 2017 Mineral Resources is shown in Table 1.2. Summaries of the Measured and Indicated Mineral Resources are presented in Appendix 1 below.

Table 1.1 Summary of Mineral Resources as at September 30, 2019, Tucano

Location	Cut-off	Total Measured & Indicated			Inferred		
	Au (g/t) oxide or fresh	Tonnes (‘000’s)	Grade Au (g/t)	Ounces (‘000’s)	Tonnes (‘000’s)	Grade Au (g/t)	Ounces (‘000’s)
OPEN PITS OXIDE AND PRIMARY FRESH							
Urucum	0.40 or 0.55	4,364	2.08	291	7	3.94	1
Urucum East	0.40 or 0.55	143	2.09	10	0	0.00	0
Tap AB	0.40 or 0.55	1,607	2.33	120	0	0.00	0
Duckhead	0.40 or 0.55	183	2.87	17	12	2.79	1
Total Open Pits	0.40 or 0.55	6,296	2.16	438	18	3.21	2
STOCKPILES							
Open Pit	0.50	1,887	0.71	43	0	0	0
Spent Ore	0.50	37	0.70	1	0	0	0
ROM Expansion	0.50	522	0.70	12	0	0	0
Marginal Ore	0.30	1,340	0.42	18	0	0	0
Total Stockpiles		3,786	0.61	74	0	0	0
Total Open Pits & Stockpiles		10,083	1.58	512	18	3.21	2
UNDERGROUND							
Tap AB	1.60 or 2.10	357	4.63	53	5,767	2.13	395
Urucum - North	1.60 or 2.10	3,042	4.04	395	4,664	2.12	318
Urucum - Central	1.60 or 2.10				852	2.61	71
Urucum East	1.60 or 2.10				100	2.11	7
Duckhead	1.60 or 2.10				263	2.32	20
Total Underground		3,399	4.10	448	11,646	2.16	810
Grand Total Tucano		13,482	2.22	960	11,664	2.16	812

Notes:

1. CIM Definitions (2014) were followed for the Mineral Resources Estimate.
2. Mineral Resources are inclusive of Mineral Reserves.
3. Mineral Resources, which are not Mineral Reserves, do not have demonstrated economic viability.
4. The quantities and grades 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 and it is uncertain if further exploration will result in upgrading them to the Indicated or Measured Mineral Resource categories.
5. Mineral Resources are estimated at various cut-off grades depending on envisioned mining methods and mineralization style.
6. Mineral Resources are estimated using a long-term gold price of US\$1,500 per ounce, and a US\$/BRL exchange rate of 3.8.



7. A minimum width of 3 metres was used for preparation of mineralization wireframes.
8. Mineral Resource statements are prepared using constraining surfaces and volumes for open pit and underground Mineral Resources, respectively.
9. Mineral Resources for the TAP AB underground include both oxide-hosted and sulphide-hosted mineralization.
10. Numbers may not add due to rounding.

Table 1.2 Comparison of Current and Previous Mineral Resources Estimates, Tucano

Resource Estimates	Measured plus Indicated			Inferred		
	Tonnes ('000's)	Grade Au (g/t)	Ounces ('000's)	Tonnes ('000's)	Grade Au (g/t)	Ounces ('000's)
June 30, 2017	40,742	1.71	2,240	16,351	2.19	1,150
Depletion	5,681	1.49	271	0	0.00	0
Depleted June 2017 Model	35,061	1.75	1,969	16,351	2.19	1,150
September 30, 2019	13,482	2.22	960	11,664	2.16	812
Difference	-21,579	0.47	-1,009	-4,687	-0.02	-339
% Difference	-62%	27%	-51%	-29%	-1%	-29%

The 2019 Tucano Mineral Resource Estimate resulted in a 51% reduction in Measured & Indicated gold ounces after accounting for a 62% reduction in ore tonnage and a 27% increase in gold grades.

The 2017 Tucano estimation methodology

The 2017 estimate was made up of eight block models, two of which used a multiple indicator kriging or “MIK” geostatistical approach (Urucum and TAP AB open pit models). The other six block models (all other deposits, including Urucum North underground) used grade estimation domains and either ordinary kriging or inverse distance interpolation methods. Refer to the October 31, 2018 Technical Report, which was filed on SEDAR (www.SEDAR.com) on November 6, 2018.

The 2019 Tucano estimation methodology

The 2019 geological interpretation of the mineralized zones is the most significant factor explaining the reduction in resource tonnage. RPA and Great Panther interpreted mineralized zones as discrete lodes, which in turn were used to constrain the block grade estimates. The 2017 resource model used a geostatistical approach with limited manual interpretation, partially due to the predominance of oxide ore mining at the time of the report.

The 2019 tonnage of open pit resources was further reduced at the resource reporting stage given that the reporting pit shells optimized on the more laterally constrained 2019 model were shallower than those used in 2017.

Further reductions are due to changes in the following areas:

- The use of pit shells to report the Mineral Resources for the satellite zones, as opposed to an unconstrained approach not using pit shells in the previous estimate
- Additional drill hole information
- Higher, more conservative COG for creating the mineralization interpretation that reflects the current operations
- Use of more conservative grade capping to address outlier assays



- Revised compositing lengths and procedures

Summary of Tucano Mineral Reserves

Mineral Reserves were estimated for open pit and underground production based on the newly developed 2019 resource model as described above. Open pit reserves were developed from a Lerchs-Grossmann optimization algorithm using various gold prices, and incorporating updated operating cost assumptions, pit slope angles, dilution and mining loss factors, gold recovery and mining constraints.

Final designs were developed from selected pit shells in order to optimize mine design parameters and ore production schedules.

Underground reserves estimated for the Urucum North Deposit were based on the AMC PFS. RPA updated the underground COG based on current operating costs considering the underground operation running as a stand-alone operation after open pit mining is complete, and assuming a US\$1,250/oz gold price.

The underground Mineral Reserves are based on the AMC mine design adjusted for an increase in COG to 2.4 g/t gold (current) from 1.6 g/t gold (AMC PFS).

Table 1.3 Summary of the Mineral Reserve Estimate as at September 30, 2019, Tucano

	Proven Reserve			Probable Reserve			Total Mineral Reserve		
	Tonnes ('000's)	Grade Au (g/t)	Ounces ('000's)	Tonnes ('000's)	Grade Au (g/t)	Ounces ('000's)	Tonnes ('000's)	Grade Au (g/t)	Ounces ('000's)
Urucum	1,212	1.79	70	1,978	2.18	139	3,190	2.03	208
Urucum East				113	1.95	7	113	1.95	7
Tap AB				1,070	2.11	73	1,070	2.11	73
Duckhead				137	3.29	14	137	3.29	14
Total Open Pit	1,212	1.79	70	3,297	2.20	233	4,509	2.09	302
Open pit stockpile	1,887	0.71	43				1,887	0.71	43
Spent ore stockpile	37	0.70	1				37	0.70	1
ROM expansion stock.	522	0.70	12				522	0.70	12
Total Stockpiles	2,446	0.71	56	0	0.00	0	2,446	0.71	56
Total OP & Stock.	3,658	1.07	126	3,297	2.20	233	6,955	1.60	358
Urucum UG	189	3.78	23	1,976	4.17	265	2,164	4.13	288
Total UG	189	3.78	23	1,976	4.17	265	2,164	4.13	288
Grand Total Tucano	3,847	1.20	149	5,273	2.93	497	9,119	2.20	646

Notes:

1. CIM (2014) definitions were followed for Mineral Reserves.
2. Open Pit Mineral Reserves are estimated within designed pits above marginal cut-off grades that vary from 0.51 to 0.62 g/t Au for oxide ore and 0.65 to 0.72 g/t Au for sulphide ore. The cut-off grades are derived based on a gold price of US\$1250/oz and operating costs sourced from the current operations and mining contracts at an US\$/BR\$ exchange rate of 3.8:1.
3. Mineral Reserves incorporate estimates of dilution and mineral losses
4. Underground Mineral Reserves were estimated using an incremental COG of 2.4 g/t Au.
5. A minimum mining width of 20 m was used for Open Pit Mineral Reserves and 3 m was used for Underground Mineral Reserves.
6. Bulk density is 2.19 t/m³.
7. Numbers may not add due to rounding.



Table 1.4 Comparison of Current and Previous Mineral Reserves Estimates, Tucano

Reserve Estimate	Total Proven and Probable		
	Tonnes ('000's)	Grade (g/t Au)	Ounces ('000's)
June 30, 2017	24,470	1.79	1,406
Depletion	5,681	1.49	271
Depleted June 2017 Model	18,789	1.88	1,135
September 30, 2019	9,119	2.20	646
Difference	-9,670	0.32	-489
% Difference	-51%	17%	-43%

The 2019 Reserve Estimate resulted in a 43% reduction in gold ounces compared to the 2017 Reserve Estimate as the 51% reduction in ore tonnes is partly offset by a 17% improvement in average gold grades.

Tucano Qualified Persons

The estimation of the updated Tucano Mineral Reserves and Mineral Resources was completed by Reno Pressacco, P. Geo., Goran Andric, P. Eng., and Jason Cox, P. Eng., all of RPA, and all of whom are independent Qualified Persons as defined by National Instrument 43-101 and have reviewed, approved and verified the technical content of this news release.

Unless stated otherwise herein, all Tucano scientific and technical data contained in this press release has been reviewed, approved and verified by Mr. Neil Hepworth, C. Eng. and Fernando A. Cornejo, P. Eng. of Great Panther, who are Qualified Persons within NI 43-101. Mr. Hepworth serves as Chief Operating Officer (COO) and Mr. Cornejo serves as Vice-President, Projects & Technical Services.

Exploration Drilling Opportunities at GMC

For GMC, as disclosed on January 28, 2020, the Company plans to focus on developing new mineral resources and testing new targets at the Guanajuato Mine and to infill drill new mineralized zones and test new targets at the San Ignacio Mine. The Guanajuato Mine 2020 drilling exploration program consists of 14,400 metres and the San Ignacio Mine 2020 exploration drill program consists of up to 8,500 metres.

Summary of Guanajuato Mine Mineral Resources

At the Guanajuato Mine, Measured and Indicated Resources increased by 129,000 tonnes and silver equivalent average grades increased to 339 Ag eq g/t from 327 Ag eq g/t driven by higher gold grades. The changes are mainly attributable to positive exploration efforts which more than offset mine depletion, the use of narrower wireframes, and a higher NSR cut-off value (from a marginal ~US\$90/tonne to a full cost ~US\$107/tonne).

Over the period of August 31, 2017 to December 31, 2018 (effective dates of the last Mineral Resource Estimate and suspension of operations, respectively) a total of 133,189 tonnes (1.3 million silver equivalent ounces) was mined at the Guanajuato Mine.

The Guanajuato Mine was placed on care and maintenance following December 31, 2018 in order to conduct a focused exploration program to increase resources. This status remains in effect, however, the success of the exploration drilling has led to a renewed effort to generate a mine plan that may lead to a re-start of the mine later this year.



Table 2.1: Summary of the Updated 2019 Mineral Resource Estimate for the Guanajuato Mine

Category	Tonnes	Ag (g/t)	Ag (oz)	Au (g/t)	Au (oz)	Ag eq (g/t)	Ag eq (oz)
Total Measured	256,260	206	1,693,799	1.72	4,131	343	2,824,256
Total Indicated	87,476	199	560,673	1.62	4,553	329	924,903
Total Measured and Indicated	343,736	204	2,254,472	1.69	8,684	339	3,749,160
Total Inferred	208,609	168	1,129,416	2.32	15,561	354	2,374,341

Notes:

1. Cut-offs are based on the marginal operating costs per mining area being US\$113/tonne for Cata, US\$75/tonne for Santa Margarita / San Cayetano, US\$77/tonne for Los Pozos, US\$124/tonne for Guanajuatito, US\$60/tonne for Promontorio, and US\$197/tonne for Valenciana.
2. Block model grades converted to US\$ value using plant recoveries of 88% Ag, 87% Au, and net smelter terms negotiated for concentrates.
3. Bulk Density for all veins is 2.68 t/m³.
4. Totals may not agree due to rounding.
5. Grades in metric units; contained silver and gold in troy ounces.
6. Ag eq oz were calculated using 80:1 Ag:Au ratio. The ratios are reflective of average metal prices for 2019.
7. Minimum true width 0.5m.
8. Metal Prices US\$15.80/oz silver, and US\$1,290 gold (based on 3 year back averages).
9. Effective date of October 31, 2019.

Table 2.2: Comparison of Mineral Resource Estimates, Guanajuato Mine – 2019 versus 2017

Category	Tonnes	Ag (g/t)	Ag (oz)	Au (g/t)	Au (oz)	Ag eq (g/t)	Ag eq (oz)
Total Measured 2019	256,260	206	1,693,799	1.72	14,131	343	2,824,256
Total Measured 2017	170,978	227	1,245,568	1.50	8,268	333	1,829,281
Measured Difference	50%	-9%	36%	14%	71%	3%	54%
Total Indicated 2019	87,476	199	560,673	1.62	4,553	329	924,903
Total Indicated 2017	43,929	215	383,530	1.25	2,088	303	428,190
Indicated Difference	99%	-7%	46%	30%	118%	8%	116%
Total M&I 2019	343,736	204	2,254,472	1.69	18,684	339	3,749,160
Total M&I 2017	214,907	224	1,629,098	1.45	10,356	327	2,257,472
M&I Difference	60%	-9%	38%	16%	80%	4%	66%
Total Inferred 2019	208,609	168	1,129,416	2.32	15,561	354	2,374,341
Total Inferred 2017	158,846	136	694,917	2.04	10,432	280	1,431,334
Inferred Difference	31%	24%	63%	14%	49%	26%	66%

Notes:

1. 2019 Mineral Resources Ag eq oz were calculated using 80:1 Ag:Au ratio. The ratios are reflective of average metal prices for 2019.
2. 2017 Mineral Resources Ag eq oz were calculated using 70.6:1 Ag:Au ratio and metal prices of US\$17/oz Ag and US\$1,200/oz Au.

The above estimates were classified per the CIM Definition Standards on Mineral Resources and Mineral Reserves and, as such, are consistent with the requirements of NI 43-101. 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 stated Mineral Resources are a categorized compilation of blocks greater than the full operational costs of the various mining areas.

Summary of San Ignacio Mine Mineral Resources

At the San Ignacio Mine, Measured and Indicated Resources decreased by 612,000 tonnes, however, grade increased to 401 Ag eq g/t from 354 Ag eq g/t. The change is primarily attributable to mine



depletion, the use of narrower wireframes, and an increase in the Net Smelter Return (“NSR”) cut-off from a marginal ~US\$71/tonne to a full cost ~US\$100/tonne.

Over the period of August 31, 2017 to July 31, 2019 (effective dates of the last and this Mineral Resource Estimate, respectively) a total of 382,728 tonnes (3.8 million silver equivalent ounces) was mined at the San Ignacio Mine, representing the majority of the decrease in Mineral Resources.

Table 3.1: Summary of the Updated 2019 Mineral Resources Estimate for the San Ignacio Mine

Category	Tonnes	Ag (g/t)	Ag (oz)	Au (g/t)	Au (oz)	Ag eq (g/t)	Ag eq (oz)
Measured	314,863	156	1,574,848	3.06	30,984	400	4,053,537
Indicated	71,554	173	398,172	2.87	6,613	403	927,201
Total M&I	386,417	159	1,973,021	3.03	37,596	401	4,980,737
Inferred	501,870	149	2,405,484	2.69	43,398	364	5,877,391

Notes:

1. Vein bulk density of 2.64 tonnes / m³.
2. Measured, Indicated, and Inferred Mineral Resources are reported at a full cost cut-off Net Smelter Return (NSR) of US\$100/tonne.
3. Totals may not agree due to rounding.
4. Grades in metric units and contained silver and gold in troy ounces.
5. A minimum mining width of 0.50 metres was used.
6. Mineral Resources are estimated using metal prices of US\$15.80/oz Ag and US\$1,290/oz Au (based on 3 year back averages); and metallurgical recoveries of 88% for Ag, 87% for Au.
7. 2019 Mineral Resources Ag eq oz were calculated using 80:1 Ag:Au ratio. The ratios are reflective of average metal prices for 2019.
8. Report effective date of July 31, 2019.

Table 3.2: Comparison of Mineral Resource Estimates, San Ignacio Mine – 2019 over 2017

Category	Tonnes	Ag (g/t)	Ag (oz)	Au (g/t)	Au (oz)	Ag eq (g/t)	Ag eq (oz)
Total Measured 2019	314,863	156	1,574,848	3.06	30,984	400	4,053,537
Total Measured 2017	801,468	142	3,655,447	3.09	79,724	360	9,283,955
Measured Difference	-61%	10%	-57%	-1%	-61%	11%	-56%
Total Indicated 2019	71,554	173	398,172	2.87	6,613	403	927,201
Total Indicated 2017	196,949	139	878,805	2.68	16,991	328	2,078,368
Indicated Difference	-64%	25%	-55%	7%	-61%	23%	-55%
Total M&I 2019	386,417	159	1,973,021	3.03	37,596	401	4,980,737
Total M&I 2017	998,417	141	4,534,252	3.01	96,715	354	11,362,323
M&I Difference	-61%	12%	-56%	0%	-61%	13%	-56%
Total Inferred 2019	501,870	149	2,405,484	2.69	43,398	364	5,877,391
Total Inferred 2017	573,431	130	2,395,220	2.44	44,911	302	5,565,972
Inferred Difference	-12%	15%	0%	10%	-3%	21%	6%

Notes:

1. 2019 Mineral Resources Ag eq oz were calculated using 80:1 Ag:Au ratio. The ratios are reflective of average metal prices for 2019.
2. 2017 Mineral Resources Ag eq oz were calculated using 70.6:1 Ag:Au ratio and metal prices of US\$17/oz Ag and US\$1,200/oz Au.

Analyses from the Guanajuato and San Ignacio Mines’ 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.

The Company’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 was independently run and certified by SGS until December 2018 and run by Great Panther qualified personnel thereafter, consistently using the following analytical techniques:



ASS12B for silver with over-limits (300 g/t) completed by FAG323; FAA313 for gold with over-limits completed by FAG323; and lead, zinc, copper, arsenic and antimony analyses completed using atomic absorption spectroscopy (“AAS”). QA/QC monitoring of the GMC laboratory includes shipping all exploration drill hole pulps to SGS-DGO for re-analysis. Statistical comparison using correlation coefficients shows excellent correlations in both gold and silver.

Qualified Persons for the Guanajuato Mine and the San Ignacio Mine

The technical information for the Guanajuato Mine and the San Ignacio Mine in this news release has been reviewed and approved by the Company’s employees Robert F. Brown, P. Eng., and Mohammad Nourpour, P. Geo., who are the Qualified Persons for GMC under the meaning of NI 43-101. Aspects relating to mining and metallurgy are overseen by Great Panther’s COO, Neil Hepworth, C. Eng.

Update on Topia Mine Operations

Great Panther reports that it has temporarily ceased tailings deposition at its Topia Mine Phase II tailings storage facility (“TSF”). The Company’s decision follows the receipt of a report on the TSF from the independent tailings management and geotechnical consultants engaged by the Company to evaluate the TSF. The report recommended that stacking of tailings of the Phase II area of the TSF be discontinued based on evidence of mass movement underlying Phase I and Phase II of the TSF.

The Company has accepted this recommendation pending further discussions with the geotechnical consultants regarding their observations and conclusions. These further discussions will include a review of the consultant’s findings and an assessment of whether mitigation measures are available to permit the continued use of Phase II of the TSF pending the Company’s ability to commence tailings deposition at Phase III of the TSF.

Phase II of the TSF is currently operating within its design capacity, which provides for several years of additional tailings deposition, as recommended and approved by a previous independent consulting firm. The Company is implementing precautionary measures to mitigate the risk of movement of the TSF material, including notification and relocation of certain inhabitants who moved back to live below the TSF after having previously been relocated away from the TSF.

Mining and processing activities at Topia are expected to continue at current levels for several more days, with tailings being deposited at a permitted alternative location. Thereafter, processing activities, and potentially mining activities, will temporarily cease unless an alternative temporary tailings storage solution can be found. Any temporary tailings storage solution would be an interim measure pending the Company receiving approval for depositing tailings on Phase III of the TSF, or recommencement of stacking on Phase II of the TSF if mitigation measures are available to permit its continued use.

The Company is in the process of permitting a Phase III TSF site for continuing operations at Topia in the longer term. Phase III is above and adjacent to an existing TSF that has been closed for many years, but has suffered from erosion and will require remediation as part of Phase III of the TSF. The Phase III permit is expected to provide several years of stacking capacity for tailings from Topia, that would enable continued employment for a workforce of 280 employees and contractors, and would ensure adequate environmental remediation of the storage facility after usage.



The Company is reviewing alternatives to store tailings (permanent or transitional) until Phase III is permitted. It will also evaluate the continuation of mining and stockpiling of ore in the event alternatives are not found and processing is suspended until Phase III is permitted. While the Company cannot be certain of the timeline to permit the Phase III TSF, it expects it can obtain the necessary permit within the next three to six months.

Topia accounts for approximately 15% of the Company's consolidated production on a gold equivalent ounce basis. Great Panther has operated the Topia Mine continuously since 2005 with the exception of brief stoppages for upgrades and permitting. In 2017, a filtration plant was added and the operation transitioned to dry stacking of tailings. The Company is assessing the impact of potential lost production on its 2020 production guidance which will be released at the end of March 2020, and expects to provide further updates prior to or at that time.

The Company is developing a new Mineral Resource Estimate for Topia Mine which it expects to announce by June 30, 2020. This estimate will supersede a prior estimate which was effective July 31, 2018.

ABOUT GREAT PANTHER

Great Panther Mining Limited is an intermediate gold and silver mining and exploration company listed on the Toronto Stock Exchange trading under the symbol GPR, and on the NYSE American under the symbol GPL. Great Panther owns an operating gold mine in Brazil and two operating primary silver mines in Mexico. It also owns two mines on care and maintenance, one in each of Mexico and Peru.

ABOUT ROSCOE POSTLE ASSOCIATES INC.

RPA is a group of technical professionals who have provided advice to the mining industry for more than 30 years. During this time, RPA has grown into a highly respected organization regarded as the specialty firm of choice for resource and reserve work. RPA provides services to the mining industry at all stages of project development from exploration and resource evaluation through scoping, prefeasibility and feasibility studies, financing, permitting, construction, operation, closure, and rehabilitation. RPA has extensive experience in estimating, auditing, and reviewing Mineral Resources and Mineral Reserves using both manual and geostatistical methods.

CAUTIONARY STATEMENT 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 (i) the accuracy of the Company's estimated mineral reserves and resources, (ii) the Company's open pit mine plan for Tucano and plans to re-start the Guanajuato mine, (iii) the Company's plans to convert existing resources to reserves and its future mining plans, (iv) the Company's plans for remediation and continued mining of the UCS open pit, (v) the completion of a further feasibility study on the Urucum underground mine, (vi) the impact on the MRMR reduction on the Company's financial statements; (vii) the Company's near-mine and regional exploration programs and ability to discover new resources, (viii) the Company's expectations that metallurgical, environmental, permitting, legal, title, taxation, socio-economic, political, marketing or other issues will not materially



affect the estimates or mineral reserves and mineral resources or its future mining plans, and (ix) expectations regarding the receipt of a permit for the Topia Phase III tailings facility, ability to find alternatives to store tailings until Phase III is permitted and continue operations, and/or mitigation measures for Phase II to address the consultant's findings.

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 reserve and mineral resource estimates and the assumptions upon which they are based; ore grades and recoveries; prices for silver, gold, and base metals remaining as estimated; currency exchange rates remaining as estimated; capital, decommissioning and reclamation estimates; prices for energy inputs, labour, materials, supplies and services (including transportation); all necessary permits, licenses and regulatory approvals for the Company's operations are received in a timely manner, including the permit for the Phase III Topia TSF; the Topia TSF can be remediated as planned 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 inherent risk that estimates of mineral reserves and resources may not be accurate and accordingly that mine production will not be as estimated or predicted; gold, silver and base metal prices may decline or may be less than forecasted; fluctuations in currency exchange rates (including the U.S. dollar to Brazilian real exchange rate) may increase costs of operations; 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; employee relations; relationships with, and claims by, local communities and indigenous populations; the Company's ability to obtain all necessary permits, licenses and regulatory approvals in a timely manner; changes in laws, regulations and government practices in the jurisdictions in which the Company operates; legal restrictions related to mining; the inability to remediate the USC pit at Tucano and the Topia TSF as planned; diminishing quantities or grades of mineral reserves as properties are mined operating or technical difficulties in mineral exploration, changes in project parameters as plans continue to be refined, and other risks and uncertainties, including those described in respect of Great Panther, in its annual information form for the year ended December 31, 2018 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 US Investors Regarding References to Mineral Reserves and Mineral Resources

This news release has been prepared in accordance with the requirements of Canadian securities laws, which differ from the requirements of U.S. securities laws. Unless otherwise indicated, all mineral reserve and resource estimates included in this news release have been disclosed in accordance with Canadian National Instrument 43-101 - Standards of Disclosure for Mineral Projects ("NI 43-101") and the Canadian Institute of Mining, Metallurgy and Petroleum Definition Standards. NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. Canadian public disclosure standards, including NI 43-101, differ significantly from the requirements of the United States Securities and Exchange Commission (the "SEC"), and information concerning mineralization, deposits, mineral reserve and resource information contained or referred to herein may not be comparable to similar information disclosed by U.S. companies. Investors are cautioned not to assume that any part of a "measured resource" or "indicated resource" will ever be converted into a "reserve". Investors should also understand that "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 "inferred resources" exist, are economically or legally mineable or will ever be upgraded to a higher category.

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APPENDIX 1. Summary of Measured and Indicated Mineral Resources as at September 30, 2019, Tucano Mine

	Cut-off	Measured			Indicated		
	Au (g/t)	Tonnes ('000)	Grade Au (g/t)	Ounces ('000)	Tonnes ('000)	Grade Au (g/t)	Ounces ('000)
OPEN PIT OXIDE AND FRESH							
Urucum Open Pit Total	blend	1,775	1.76	100	2,589	2.30	191
Urucum East Open Pit total	blend	0	0	0	143	2.09	10
Tap AB Open Pit total	blend	0	0	0	1,607	2.33	120
Tap C Open Pit total	blend	0	0	0	0	0	0
Duckhead Open Pit total	blend	0	0	0	183	2.87	17
Total Oxide & Primary Open Pit	blend	1,755	1.76	100	4,521	2.32	338
STOCKPILE							
Open pit stockpile	0.50	1,887	0.71	43	0	0	0
Spent ore stockpile	0.50	37	0.70	1	0	0	0
Rom expansion stockpile	0.50	522	0.70	12			
Marginal ore stockpiles	0.30	1,340	0.42	18	0	0	0
Total stockpiles	blend	3,786	0.61	74	0	0	0
Total Tucano Open Pit & Stockpiles	blend	5,562	0.97	174	4,521	2.32	338
UNDERGROUND							
Tap AB Underground*	blend	0	0	0	357	4.63	53
Urucum Underground primary - north	1.60	0	0	0	3,042	4.04	395
Urucum Underground primary - central	1.60	0	0	0	0	0	0
Urucum East Underground primary	1.60	0	0	0	0	0	0
Duckhead Underground primary	1.60	0	0	0	0	0	0
Tap C Underground primary	1.60	0	0	0	0	0	0
Total Tucano Underground	1.60	0	0	0	3,339	4.10	448
Grand Total Tucano	blend	5,562	0.97	174	7,920	3.09	786

Notes:

1. CIM Definitions (2014) were followed for the Mineral Resources Estimate.
2. Mineral Resources are inclusive of Mineral Reserves.
3. Mineral Resources, which are not Mineral Reserves, do not have demonstrated economic viability.
4. The quantities and grades of reported Inferred Resources in this estimation is uncertain in nature and there has been insufficient exploration to define these Inferred Resources as Indicated or Measured Mineral Resources and it is uncertain if further exploration will result in upgrading them to the Indicated or Measured Mineral Resources category.
5. Mineral Resources are estimated at various cut-off grades depending on envisioned mining methods and mineralization style.
6. Mineral Resources are estimated using a long-term gold price of US\$1,500 per ounce, and a US\$/BRL exchange rate of 3.8.
7. A minimum width of 3 m was used for preparation of mineralization wireframes.
8. Mineral Resources statements are prepared using constraining surfaces and volumes for open pit and underground Mineral Resources, respectively.
9. Mineral Resources for the TAP AB underground include both oxide-hosted and primary-hosted mineralization.
10. Numbers may not add due to rounding.