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NEWS RELEASE

TSX: GPR

NYSE MKT: GPL

GREAT PANTHER SILVER INCREASES INDICATED RESOURCES BY 31% AND INFERRED RESOURCES BY 162% AT THE SAN IGNACIO MINE

GREAT PANTHER SILVER LIMITED (TSX: GPR) (NYSE MKT: GPL) ("Great Panther", the "Company") announces an updated Mineral Resource Estimate at the San Ignacio Mine, part of the Company's wholly-owned Guanajuato Mine Complex ("GMC") in Guanajuato, Mexico.

This updated Mineral Resource Estimate includes the most recent drill results at San Ignacio and the discovery of high grade silver-gold mineralization to the south of the 2014 mining area (see news releases October 30, 2014 and January 27, 2015).

- Indicated mineral resources at the San Ignacio Mine are estimated to comprise 180,300 tonnes at a grade of 159g/t silver ("Ag") and 3.49g/t gold ("Au"), containing 2,351,000 silver equivalent ounces ("Ag eq oz"), an increase of 31% from the July 31, 2014 resource estimate. Inferred resources comprise 787,800 tonnes at 160g/t Ag and 3.26g/t Au, containing 9,897,000 Ag eq oz, an increase of 162%.
- Updated Measured and Indicated ("M&I") mineral resources at the producing operations
 of the GMC (Guanajuato and San Ignacio Mines) comprise 400,800 tonnes at a grade of
 244g/t Ag and 3.26g/t Au, containing 6,108,800 Ag eq oz, an increase of 10% from the
 July 31, 2014 resource estimate. Various silver equivalent ("Ag eq") cut-offs were used
 in the different mineralized zones.
- Inferred mineral resources at the producing operations of the GMC are estimated to comprise 951,400 tonnes at a grade of 150g/t Ag and 3.28g/t Au, containing 11,679,200 Ag eq oz. Different cut-off grades were used for the mineralized zones as indicated in the tables below. Including the non-producing El Horcon Project, Inferred resources comprise 1,100,600 tonnes at 140g/t Ag and 3.31g/t Au, containing 13,760,400 Ag eq oz, an increase of 80% from the July 31, 2014 resource estimate.

"The substantial increase in resources at our San Ignacio Mine reflects the discovery of wider zones of higher grade silver-gold in late 2014," commented Robert Archer, President & CEO. "We have already started developing and mining this new southern extension and we expect this area to play an increasingly important role in the future of the GMC. San Ignacio has significant potential for further expansion and we anticipate continued success in our 2015 drilling."

The updated 2014 San Ignacio Mine Mineral Resource Estimate contains 2,351,000 Ag eq oz in the Indicated category, in the Intermediate and Melladito veins. Inferred mineral resources are estimated at 9,897,000 Ag eq oz and are contained in the Intermediate, Melladito, Melladito 2, Melladito 3, Nombre de Dios and Nombre de Dios II veins. Recent surface drilling at San Ignacio has discovered that the Intermediate and Melladito veins merge, just south of the previous resource block, into a thicker, higher grade lens of silver-gold mineralization. The Melladito 2 and Melladito 3 structures are splays along the west side of Melladito vein. The old mining areas along Melladito vein have been completely extracted from the mineral resource estimation.

Mining at San Ignacio in 2014 was focused on the Intermediate vein and, to a lesser degree, the Melladito vein. As the two merge to the south, the single vein will retain the Melladito name. Underground drilling in 2015 will be focused on improving the classification of the resource adjacent to exploitation along Melladito and Intermediate, while surface drilling will test the depth and strike continuity of all veins.

San Ignacio Mine: Mineral Resource Estimations and Contained Silver, Gold and Silver Equivalent

| INDICATED | | | | | | | | | |
|-------------------|---------|----------|-----------|----------|---------|-------------|------------|--|--|
| Vein | Tonnes | Ag (g/t) | Ag (oz) | Au (g/t) | Au (oz) | Ag eq (g/t) | Ag eq (oz) | | |
| Intermediate | 84,228 | 173 | 468,005 | 3.03 | 8,192 | 386 | 1,046,349 | | |
| Melladito | 96,061 | 148 | 456,108 | 3.89 | 12,025 | 423 | 1,305,086 | | |
| Total Indicated | 180,289 | 159 | 924,113 | 3.49 | 20,217 | 406 | 2,351,435 | | |
| Indicated Rounded | 180,300 | 159 | 924,100 | 3.49 | 20,220 | 406 | 2,351,000 | | |
| INFERRED | | | | | | | | | |
| Vein | Tonnes | Ag (g/t) | Ag(oz) | Au (g/t) | Au (oz) | Ag eq (g/t) | Ag eq (oz) | | |
| Intermediate | 91,632 | 250 | 736,214 | 2.79 | 8,221 | 447 | 1,316,614 | | |
| Melladito | 270,008 | 157 | 1,365,463 | 3.48 | 30,248 | 403 | 3,500,938 | | |
| Melladito 2 | 106,906 | 134 | 460,521 | 3.98 | 13,689 | 415 | 1,426,947 | | |
| Melladito 3 | 54,656 | 84 | 147,013 | 3.25 | 5,713 | 313 | 550,345 | | |
| Nombre de Dios | 175,265 | 145 | 818,312 | 2.71 | 15,269 | 337 | 1,896,288 | | |
| Nombre de Dios II | 89,332 | 185 | 532,602 | 3.32 | 9,541 | 420 | 1,206,168 | | |
| Total Inferred | 787,799 | 160 | 4,060,125 | 3.26 | 82,680 | 391 | 9,897,300 | | |
| Inferred Rounded | 787,800 | 160 | 4,060,000 | 3.26 | 82,680 | 391 | 9,897,000 | | |

Notes:

- All San Ignacio Mineral Resource Estimates used an effective date of December 15, 2014 and all used a metal price outlook of US\$17.00/oz silver and US\$1,200/oz gold.
- US\$100 NSR cut-off (~246g/t Ag Eq).
- 3. Mill recoveries 84% silver and 86% gold.
- 4. Silver equivalent was calculated using a 70.6 to 1 ratio of silver to gold value.
- 5. Rock Density for Intermediate and Melladito is 2.63t/m³, for Melladito 2, Melladito 3, Nombre de Dios, and Nombre de Dios II is 2.62t/m³.
- 6. Totals may not agree due to rounding.
- 7. Grades in metric units.
- 8. Contained silver and gold in troy ounces.
- 9. Minimum true width 1.0m.

The 2014 Guanajuato Mine Mineral Resource Estimate (see details reported in news release dated January 29, 2015) contains Measured and Indicated mineral resources of 3,757,800 Ag eq oz including 3,190,300 Ag eq oz in the Measured category and 567,500 Ag eq oz in the Indicated category. Inferred mineral resources are estimated at 1,782,200 Ag eq oz. These are all contained within the Cata Clavo (seven zones), Los Pozos (two zones), Santa Margarita, San Cayetano, Promontorio, Valenciana (five zones) and Guanajuatito (five zones) areas. The Guanajuatito ("GTTO") area has been expanded with the addition of the Intermediate zone located in the foot wall to the GTTO hanging wall zone. Resources in the Santa Margarita and Cata areas have also been increased.

The 2014 Mineral Resource Estimate for the El Horcon Project (see details reported in news release dated January 29, 2015) includes only the Inferred classification of 149,200 tonnes containing 375,300 oz silver, 16,830 oz gold, 9,275,000 lbs lead, and 13,024,500 lbs zinc. There has been no additional drilling since 2013 and the resource update reflects only updated metal pricing, which resulted in a 7% decrease compared to the previously reported mineral resource. The El Horcon Project is not in production and the Company has no specific plans to advance the project in 2015 except by completing various environmental permitting that is already underway.

Overall, from the last Mineral Resource Estimate for the GMC, (effective date July 31, 2014), the Measured and Indicated classification increased by 10% (+550,800 Ag eq oz), while the Inferred mineral resource increased by 80% (+6,122,700 Ag eq oz). The increases are due to the successful drill program at San Ignacio in late 2014 that has added substantial Indicated and Inferred Resources at that mine. The potential to further increase the resources at San Ignacio is highlighted by the three kilometres of mostly untested strike length and by the fact that the veins are still locally open to depth.

Summary Table of the Updated 2014 Mineral Resource Estimate for the Guanajuato Mine Complex¹

| MEASURED | | | | | | | |
|-------------------------|---------|----------|-----------|----------|---------|-------------|------------|
| Mine | Tonnes | Ag (g/t) | Ag (oz) | Au (g/t) | Au (oz) | Ag eq (g/t) | Ag eq (oz) |
| Guanajuato ¹ | 184,500 | 309 | 1,832,500 | 3.24 | 19,780 | 538 | 3,190,300 |
| Total Measured | 184,500 | 309 | 1,832,500 | 3.24 | 19,780 | 538 | 3,190,300 |

| INDICATED | | | | | | | |
|--------------------------|---------|----------|-----------|----------|---------|-------------|------------|
| Mine | Tonnes | Ag (g/t) | Ag (oz) | Au (g/t) | Au (oz) | Ag eq (g/t) | Ag eq (oz) |
| San Ignacio ¹ | 180,300 | 159 | 924,100 | 3.49 | 20,220 | 406 | 2,351,000 |
| Guanajuato ¹ | 36,000 | 335 | 387,900 | 2.20 | 2,540 | 490 | 567,500 |
| Total Indicated | 216,300 | 188 | 1,312,000 | 3.28 | 22,760 | 420 | 2,918,500 |

| MEASURED & INDICATED | | | | | | | | |
|--------------------------|---------|----------|-----------|----------|---------|-------------|------------|--|
| Mine | Tonnes | Ag (g/t) | Ag (oz) | Au (g/t) | Au (oz) | Ag eq (g/t) | Ag eq (oz) | |
| San Ignacio ¹ | 180,300 | 159 | 924,100 | 3.49 | 20,220 | 406 | 2,351,000 | |
| Guanajuato ¹ | 220,500 | 313 | 2,220,300 | 3.07 | 22,300 | 530 | 3,757,800 | |
| Total M & I | 400,800 | 244 | 3,144,400 | 3.26 | 42,520 | 474 | 6,108,800 | |

| INFERRED | | | | | | | |
|--------------------------|-----------|----------|-----------|----------|---------|-------------|------------|
| Mine | Tonnes | Ag (g/t) | Ag (oz) | Au (g/t) | Au (oz) | Ag eq (g/t) | Ag eq (oz) |
| San Ignacio ¹ | 787,800 | 160 | 4,060,000 | 3.26 | 82,680 | 391 | 9,897,000 |
| Guanajuato ¹ | 163,600 | 101 | 532,600 | 3.37 | 17,710 | 339 | 1,782,200 |
| SI & GTO Inferred | 951,400 | 150 | 4,592,600 | 3.28 | 100,390 | 382 | 11,679,200 |
| El Horcon ^{1,2} | 149,200 | 78 | 375,300 | 3.51 | 16,830 | 434 | 2,081,200 |
| Total Inferred | 1,100,600 | 140 | 4,967,900 | 3.31 | 117,220 | 389 | 13,760,400 |

¹ Mineral Resource Estimates for Guanajuato and El Horcon use an effective date of July 31, 2014 while San Ignacio uses an effective date of December 15, 2014; and all used a metal price outlook of \$17.00/oz silver and \$1,200/oz gold.

The estimates were classified according to 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 estimate was completed by Robert Brown, P. Eng. and Company, Q.P.

The Company's QA/QC program includes the regular insertion of blanks, duplicates, and standards into the sample shipments; diligent monitoring of assay results; and necessary remedial actions. Sample assaying was completed at the independent SGS-GTO lab in Guanajuato, GTO, Mexico. Silver assaying was completed with AAS12B technique, with over-limits (300g/t) completed by FAG323. Gold assaying was completed with FAA313 technique, with over-limits (10g/t) completed by FAG323. Where necessary lead, zinc, copper, arsenic and antimony assays were completed using atomic absorption spectroscopy.

The technical information contained in this news release has been reviewed and approved by Robert F. Brown, P. Eng. and Vice President of Exploration for the Company, who is the Qualified Person (QP) for the Guanajuato Mine Complex and the Mineral Resource Estimates under the meaning of NI 43-101. Aspects relating to mining and metallurgy are overseen by Ali Soltani, Chief Operating Officer for Great Panther and its Mexican subsidiary, Minera Mexicana El Rosario, S.A. de C.V.

ABOUT GREAT PANTHER

Great Panther Silver Limited is a primary silver mining and exploration company listed on the Toronto Stock Exchange trading under the symbol GPR, and on the NYSE MKT trading under the symbol GPL. The Company's current activities are focused on the mining of precious metals from its two wholly-owned operating mines in Mexico: the Guanajuato Mine Complex, which includes the San Ignacio satellite mine, and the Topia Mine in Durango. The Company also has two exploration projects in Mexico, El Horcon and Santa Rosa, and is pursuing additional mining opportunities in the Americas.

Robert Archer President & CEO

² Silver equivalent calculations for El Horcon include lead content but not zinc as the zinc would not be recovered in the Guanajuato plant. Recoveries and smelter terms are also factored into the calculation.

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 forwardlooking statements may include but are not limited to the Company's plans for production at its Guanajuato and Topia Mines in Mexico, exploring its other properties in Mexico, the overall economic potential of its properties, the availability of adequate financing and involve known and unknown risks, uncertainties and other factors which 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 potential political risks involving the Company's operations in a foreign jurisdiction, uncertainty of production and cost estimates and the potential for unexpected costs and expenses, physical risks inherent in mining operations, currency fluctuations, fluctuations in the price of silver, gold and base metals, completion of economic evaluations, changes in project parameters as plans continue to be refined, the inability or failure to obtain adequate financing on a timely basis, and other risks and uncertainties, including those described in the Company's Annual Information Form for the year ended December 31, 2013 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.

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