August 23, 2021

GR Silver Mining Announces Completion of Initial Resource Estimates at the Plomosas Project in Sinaloa, Mexico

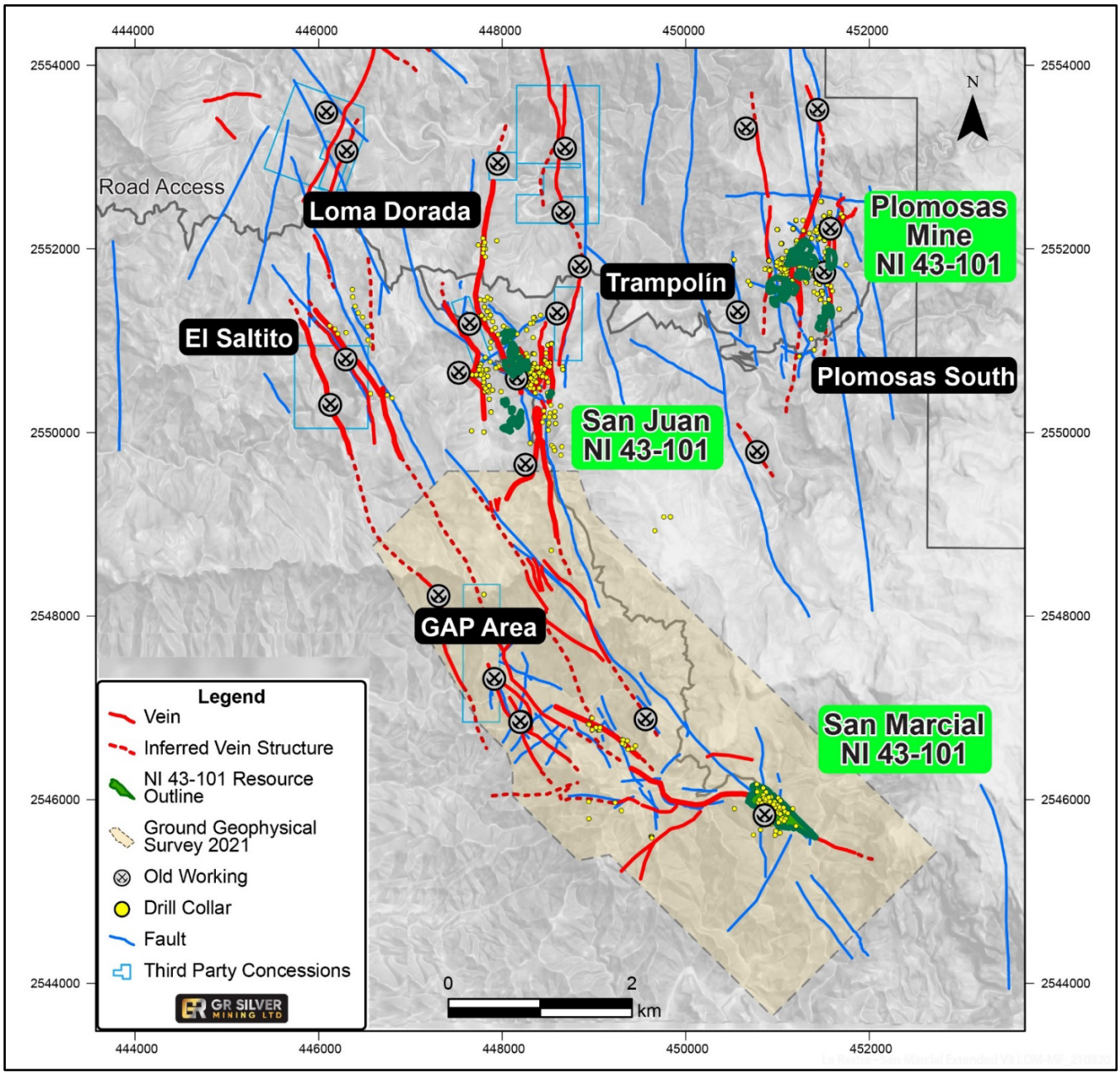
Vancouver, BC – GR Silver Mining Ltd. (**"GR Silver Mining"** or the **"Company"**) (TSXV|GRSL, OTCQB|GRSLF, FRANKFURT|GPE) – today announced the delivery of initial NI 43-101 mineral resource estimates on the Company's Plomosas Project ("Plomosas"), located in Sinaloa, Mexico.

Highlights

- **Indicated Resources: 10.3 Moz AgEq**[*] - 3.4 Moz Ag, 53 koz Au, 73 Mlbs Zn, and 48 Mlbs Pb
- **Inferred Resources: 21.0 Moz AgEq**[*] **-** 8.6 Moz Ag, 85 koz Au, 149 Mlbs Zn, and 116 Mlbs Pb
- The incorporation of extensive historical data and completion of the initial resource estimates at the Plomosas Project ("Plomosas") incremental to the nearby San Marcial NI 43-101 mineral resource estimate of 36.0 Moz AgEq[#] Indicated resources and 11.9 Moz AgEq[#] Inferred resources (see News Release dated June 12, 2020), represents a major milestone for GR Silver Mining
- Estimates include 80 new drill holes and 476 historic drill holes representing a total of 100,672 m of drilling covering two areas, the former Plomosas Mine and the San Juan area (Figure 1)
- The present resource included a sampling of historical drill holes completed by previous companies that was frequently selective, resulting in a large amount of drill core unsampled; this core is no longer available. Unsampled intervals within mineralized zones were assigned zero values for the resource estimation, including in areas with evidence of precious and base metals mineralization. Further drilling will address these blank spots to potentially continue resource growth at the Plomosas Mine and San Juan areas
- A 14,000m drill program employing seven rigs is in progress on newly identified, high priority Au–Ag targets outside the current resource areas (Figure 1)

GR Silver Mining President and CEO, Marcio Fonseca commented *"The publication of the initial resource estimates at the Plomosas Project is the result of a systematic collection of geological information, data review and analysis in a 3D model. This has also allowed for multiple discoveries of high-grade silver and gold mineralization outside of the main mineralized body and has encouraged the*

Figure 1 - Resource Estimation Areas – Plomosas Mine and San Juan Areas[1]



[1] New Au-Ag targets of the ongoing Drill Program are shown in black

Company to continue drilling on multiple targets outside of the resource area. These results, together with the existing NI 43-101 mineral resource estimate at the nearby San Marcial Project, represent a major milestone for the Company, increasing GR Silver Mining's combined AgEq Indicated resources by 29% and Inferred resources by 176% in the Rosario Mining District. The completion of the resource estimation and ongoing drilling creates a cornerstone for GR Silver Mining's goal to deliver further

discoveries and resource growth in Mexico.

"I would like to take this opportunity to thank all staff, who have embraced the challenge to complete two initial NI 43-101 resource estimates within a nine-month time frame during a pandemic, which today form the foundation for Plomosas' future growth. GR Silver Mining's strict protocols for COVID-19 mitigation have effectively reduced active cases amongst staff and contractors to nil, allowing us to accelerate exploration of the Company's core, 778 square kilometer Project."

Non-Executive Chairman, Eric Zaunscherb stated *"the compilation of data and initial mineral resource estimates for the Plomosas Mine and San Juan areas establish baselines for growth for these areas, much as the release of the initial San Marcial mineral resource estimate established a baseline for growth for that area in February 2019. We are excited by the geological model that has evolved from the bounty of historical data gleaned from the Company's district-scale consolidation. In particular, the model provides the robust rationale underlying the current drill program, designed to follow up high-grade precious metal intersections, as well as a cogent strategy for enhancing these initial mineral resource estimates."*

Geological Data

Data representing 556 core drill holes; 80 new drill holes and 476 historic drill holes - together with geological reconnaissance, underground mapping, and detailed geological mapping on surface, have proved valuable components to delineate an extensive precious metal-rich system.

Drill core from recent surface and underground resource drilling followed strict QAQC protocols and is stored on site at the project core storage facilities. Historical drill holes feature historical documentation and field evidence of drill hole collars to support full integration of both datasets. Validation drilling was completed at the Plomosas Mine and San Juan areas, with the Company drill testing some historical surface and underground drill sites in 2020 and 2021. These tests validated geochemical assay reports of mineralized zones previously intersected by historic diamond core drilling.

Sampling of historical drill core by previous companies was frequently selective with sampling only performed on specific core intervals, leaving many unsampled intervals within mineralized zones. Nearby underground geological investigations and channel sampling demonstrated that many of these unsampled intervals feature precious and base metal mineralization. For the purposes of the resource estimate, these unsampled intervals between mineralized zones have been conservatively assigned zero values by GR Silver Mining, which likely results in underestimation of grade for portions of the resource model. Further drilling will address this situation to potentially continue resource growth at the Plomosas Mine and San Juan areas. The entire dataset has been recently surveyed, including detailed laser surveying of all underground workings.

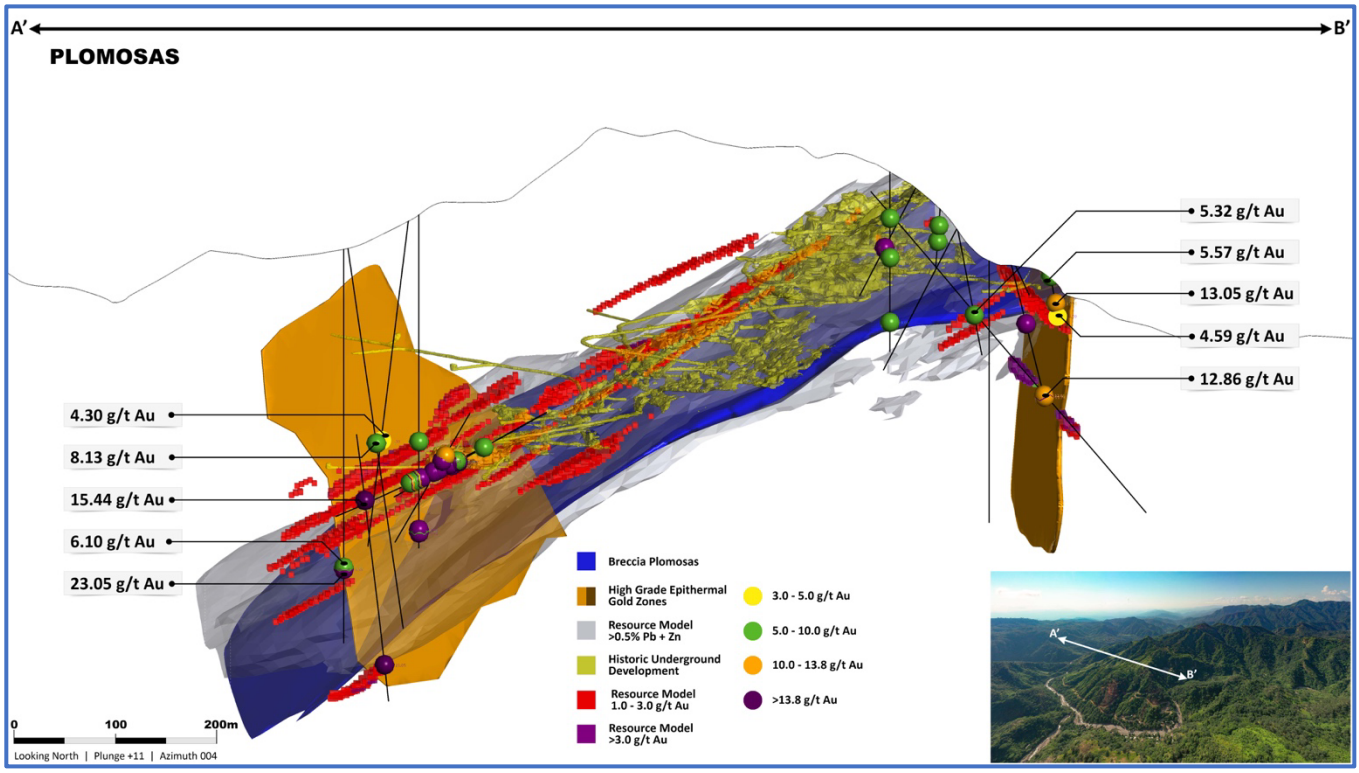
Geology

There are at least two distinct mineralizing events identified at the Plomosas Mine to date. The principal structure at the Plomosas Mine is the Plomosas Breccia, a low-angle N-S trending fault breccia ("Plomosas Fault"), which hosts the primary precious and base metal mineralized zone. This structure has a general dip angle of 30° to 40° to the west with dilatational features and wide mineralized sections that are between one and eight meters thick. Mineralization in the Plomosas Breccia is principally by replacement of pre-existing fault breccia and in the original wall rocks.

Precious metal-rich epithermal veins are hosted by steep NW-SE, N-S and NE-SW trending faults that crosscut the Plomosas Fault and commonly define high-grade zones by later enrichment at the intersections with, or proximal to, the Plomosas Breccia (Figure 2). In parts, precious metal mineralization is found in contact breccias of intrusive rhyolite and diorite dykes.

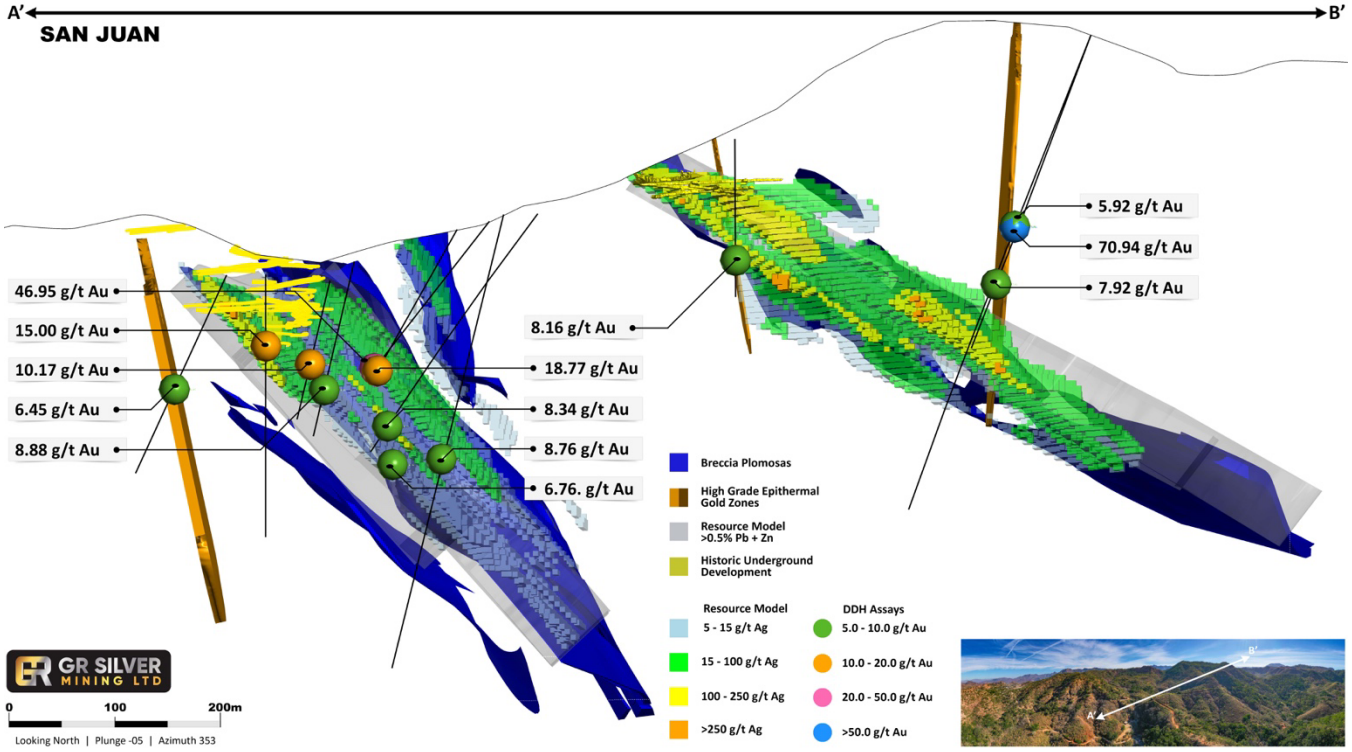
These late precious metal-rich mineralized zones are at a preliminary stage of exploration with only limited data incorporated into the 3D model to date. Further drilling is warranted to better define its full potential.

Figure 2 – 3D Representation of the Plomosas Mine Area



At the San Juan area, two veins were modelled based on shallow surface-only core drilling, namely the mineralized San Juan and La Colorada veins. The San Juan vein is hosted in a low-angle north-south trending fault breccia ("San Juan Fault") generally dipping at an angle of 40° to 50° to the east. The polymetallic silver-gold rich mineralization has a much narrower geometry than that observed at the Plomosas Mine. Similar to the Plomosas Mine, there is evidence supporting the presence of several precious metal-rich mineralized zones, which are at an early stage of modelling at San Juan (Figure 3). The La Colorada vein is hosted in a low-angle north-south trending fault ("La Colorada Fault") parallel to the San Juan Fault. Preliminary wide spaced surface core drilling has defined a predominantly gold-silver hydrothermal vein breccia.

Figure 3 – 3D Representation of the San Juan Area including the San Juan and La Colorada veins



The precious metal-rich zones recently identified in the geological models at both the Plomosas Mine and the San Juan areas have emerged as the primary focus of the current exploration drilling program, concentrating on targets and geological settings where there are indications of favorable geology for additional discoveries.

Mineral Resource Estimates

The mineral resource estimates for the Plomosas Mine and San Juan areas were provided by Dr. Gilles Arseneau, P.Geo. of ARSENEAU Consulting Services Inc. (ACS) using Geovia Gems Version 6.8.4. The

Plomosas Mine mineral resources were estimated by ordinary kriging into 5m cube blocks, and the San Juan mineral resources were estimated by the Inverse Distance Squared method. Grades were capped prior to compositing to 1 m. Block grades were estimated in three successive passes for the Plomosas Mine and four passes for the San Juan area. The historical Grupo Mexico drill holes were only used for passes two and three at the Plomosas Mine and for passes three and four at the San Juan area. Blocks estimated with Grupo Mexico drill holes were all classified as inferred mineral resources. Blocks estimated during Pass 1 with at least two drill holes or Pass 2 at San Juan, with at least four drill holes, were classified as Indicated.

Mineral resources are reported using a dollar equivalent based on the following metal prices and recoveries determined from recent metallurgical tests. The mineral resources are reported using pit constrained ("Whittle Pit Assessment") and Underground stope optimizer ("MSO") with operational cost assumptions reported in Table 1.

Table 1 – Summary Parameters Adopted for Resource Estimation and Mineral Resource Reporting - Plomosas Mine and San Juan Areas

Plomosas Project			
Metal Prices		Gold US$/oz	1,600
		Silver US$/oz	20
		Lead US$/lb	0.90
		Zinc US$/lb	1.10
Area		Plomosas Mine	San Juan
Grade Capping	Gold g/t	20	10
	Silver g/t	450	360
	Lead %	13	13
	Zinc %	11	8
Metallurgical Recoveries***	Gold	86 %	79 %
	Silver	74 %	71 %
	Lead	69 %	58 %
	Zinc	75 %	47 %
Preliminary Cost Assumptions Mineral Resource Reporting****	Open Pit ("OP")	36 US$/t	36 US$/t
	Underground ("UG")	50 US$/t	50 US$/t

*** Based on preliminary metallurgical testwork completed in 2021 with samples from both areas investigating potential production of precious metal-rich concentrate

**** Preliminary cost assumptions adopted in the Whittle assessment and MSO are based on similar type deposits in Mexico where underground and open pit operations are in progress for a throughput capacity of 1500 tpd

The reasonable prospect of economic extraction was defined by generating a Whittle optimized pit shell based on the above metal prices and recoveries and assuming a total open pit mining cost and processing cost of US$36/t. Underground resources were restricted to shapes defined by stope optimizer software and assumed combined underground mining and processing costs of US$50/t.

The mineral resource estimates are based upon drilling completed by the Company between 2020 and 2021, and earlier drilling by previous operators. The resource table for the Plomosas Project is detailed below.

Table 2 - Plomosas Project Mineral Resource Statement

Plomosas Mine Area Mineral Resource Statement ACS - August 23, 2021												
Resource Category	**Type**	**Tonnage MT**	**Au g/t**	**Au KOz**	**Ag g/t**	**Ag Moz**	**Pb %**	**Pb MLbs**	**Zn %**	**Zn MLbs**	**Ag Eq Moz**	**AgEq* g/t**
Indicated	OP	0.3	0.21	2	74	0.6	1.0	5.9	0.9	5.0	1.0	115
Inferred	OP	1.2	0.07	3	75	2.9	0.9	24.3	0.8	20.0	3.9	102
Indicated	UG	1.7	0.84	46	27	1.4	0.9	33.5	1.4	52.9	7.5	137
Inferred	UG	3.4	0.50	55	40	4.3	0.9	68.5	1.1	83.0	12.6	116
Total	**Indicated**	**2.0**	**0.76**	**48**	**33**	**2.1**	**0.9**	**39.4**	**1.3**	**57.9**	**8.5**	**134**
Total	**Inferred**	**4.6**	**0.39**	**58**	**49**	**7.2**	**0.9**	**92.8**	**1.0**	**103.0**	**16.5**	**112**
San Juan Area Mineral Resource Statement ACS - August 23, 2021												
Resource Category	**Type**	**Tonnage MT**	**Au g/t**	**Au KOz**	**Ag g/t**	**Ag Moz**	**Pb %**	**Pb MLbs**	**Zn %**	**Zn MLbs**	**Ag Eq Moz**	**AgEq* g/t**
Indicated	OP	0.1	0.19	0	115	0.3	0.3	0.5	0.6	1.1	0.3	111
Inferred	OP	0.2	0.37	3	92	0.7	0.6	3.0	0.7	3.4	0.8	111
Indicated	UG	0.4	0.35	4	87	1.1	1.0	8.2	1.7	13.8	1.6	132
Inferred	UG	1.0	0.77	24	22	0.7	0.9	19.9	2.0	42.2	3.6	116
Total	**Indicated**	**0.5**	**0.32**	**5**	**92**	**1.3**	**0.9**	**8.7**	**1.5**	**14.9**	**1.9**	**128**
Total	**Inferred**	**1.2**	**0.70**	**27**	**36**	**1.4**	**0.9**	**22.9**	**1.7**	**45.6**	**4.5**	**115**

Plomosas Project Total Resources Statement ACS - August 23, 2021												
Resource Category	**Type**	**Tonnage MT**	**Au g/t**	**Au KOz**	**Ag g/t**	**Ag MOz**	**Pb %**	**Pb MLbs**	**Zn %**	**Zn MLbs**	**Ag Eq Moz**	**AgEq* g/t**
Indicated	OP	0.3	0.20	2	83	0.9	0.8	6.4	0.8	6.1	1.3	114
Inferred	OP	1.4	0.12	5	78	3.6	0.9	27.3	0.7	23.5	4.8	103
Indicated	UG	2.1	0.76	50	38	2.5	0.9	41.7	1.5	66.7	9.1	136
Inferred	UG	4.4	0.57	79	36	5.0	0.9	88.4	1.3	125.1	16.2	116
Total	**Indicated**	**2.4**	**0.68**	**53**	**44**	**3.4**	**0.9**	**48.1**	**1.4**	**72.8**	**10.3**	**133**
Total	**Inferred**	**5.8**	**0.46**	**85**	**46**	**8.6**	**0.9**	**115.7**	**1.2**	**148.6**	**21.0**	**113**

* AgEq is based on parameters presented in Table 1

The following table illustrates the nearby San Marcial Project NI 43-101 Mineral Resource Estimates estimated by Marcelo Filipov, P.Geo of WSP Canada Inc. and Todd McCracken, P.Geo of WSP Canada Inc. Both Mr. Filipov and Mr. McCracken are Qualified Persons as defined by National Instrument 43-101 (link to San Marcial NI 43-101 Resource Report).

Table 3 - San Marcial Area Mineral Resource Table

San Marcial Resources Statement - February 7, 2019												
Resource Category	**Type**	**Tonnage MT**	**Au g/t**	**Au KOz**	**Ag g/t**	**Ag MOz**	**Pb %**	**Pb MLbs**	**Zn %**	**Zn MLbs**	**Ag Eq Moz**	**AgEq# g/t**
Indicated (OP+UG)	**OP+UG**	**7.6**	**na**	**na**	**117**	**29.0**	**0.3**	**53.0**	**0.5**	**86.0**	**36.0**	**147**
Inferred (OP+UG)	**OP+UG**	**3.4**	**na**	**na**	**91**	**10.0**	**0.1**	**8.0**	**0.4**	**26.0**	**12.0**	**108**

AgEq is based on long term silver, zinc and lead prices of US$18.50 per ounce silver, US$1.10 per pound zinc and US$0.95 per pound lead. The following average metallurgical recoveries are assumed as 85% silver, 85% zinc and 95% lead. A 30 gpt AgEq cut off for open pit and 80 gpt AgEq for underground resource classification completed by WSP Canada Inc. on February 06, 2019. OP is amenable for potential open pit development, UG is amenable for potential underground development. “na” = not estimated

Quality Assurance / Quality Control

All assay data are verified by means of a rigorous QA/QC program which included the insertion of

certified reference materials, blanks and duplicates into sample batches that are sent to SGS de México, S.A. de C.V. laboratory facilities in Durango, Mexico, for sample preparation and analysis. The results of the QA/QC program are monitored by GR Silver Mining personnel and the Qualified Person. For every sample with results above Ag >100 ppm (over limits), these samples are submitted directly by SGS de México to SGS Canada Inc. at Burnaby, BC. The analytical methods are 4-acid digestion and Inductively Coupled Plasma Optical Emission Spectrometry with Lead Fusion Fire Assay, with Gravimetric Finish for silver above over limits. For gold assays, the analytical methods are Lead Fusion and Atomic Absorption Spectrometry Lead Fusion Fire Assay, and Gravimetric Finish for gold above 10 ppm (over limits).

The recent drill holes completed by First Majestic from 2016 to 2018, followed QA/QC protocols reviewed and validated by GR Silver Mining, including insertion of blank and standard samples in all sample lots sent to First Majestic's Laboratorio Central facilities in La Parilla, Durango, for sample preparation and assaying. Additional validation and check assays were performed by an independent laboratory at SGS de México, S.A. de C.V. facilities in Durango, Mexico. The analytical methods applied for these recent holes for Ag and Au assays are comprised of Fire Assay with Atomic Absorption finish for samples above Au >10 ppm and Ag >300 ppm and Gravimetric Finish. Lead and zinc were analyzed using Inductively Coupled Plasma Optical Emission Spectrometry. GR Silver Mining has not received information related to the Grupo Mexico QA/QC and assay protocols and at this stage is considering the information historical for news release purposes.

Qualified Person

The mineral resource estimate was completed by independent consultant Dr Gilles Arseneau, P. Geo. of ARSENEAU Consulting Services Inc., a registered professional, who is an independent Qualified Person (QP) as defined by NI 43-101. Mineral resources are reported in accordance with CIM (2014) Definition Standards for Mineral Resources and Mineral Reserves in accordance with NI 43-101. Dr. Arseneau is a P. Geo. and is qualified as a Mineral Resource estimator and has over 25 years of relevant industry experience.

The scientific and technical data contained in this News Release related to the Plomosas Project was reviewed and/or prepared under the supervision of Marcio Fonseca, P. Geo. He has approved the disclosure herein.

About GR Silver Mining Ltd.

GR Silver Mining is a Canadian-based and Mexico-focused junior mineral exploration Company engaged in cost-effective silver-gold resource expansion on its 100%-owned assets, which lie on the eastern edge of the Rosario Mining District, in the southeast of Sinaloa State, Mexico. GR Silver Mining controls 100%

of two past producer precious metal underground and open pit mines within two contiguous areas; La Trinidad and Plomosas (which include the integrated San Marcial Area). Our Project represents a district scale 778 km^2 of advanced stage exploration property including over 75 km strike length in three distinct, parallel structural corridors. These corridors have preliminary evidence of deep-seated intrusives driving robust metal-bearing fluid flow through an extensive network of conduits with evidence of high-grade and bulk silver-gold and polymetallic mineralization in multiple events.

GR Silver Mining Ltd.

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