

# Open Pit and Underground Mineral Resource Statement for the Prognoz Project

---

<b>To:</b>	Akamov A.	<b>Date:</b>	October 5 <sup>th</sup> , 2018
<b>Company:</b>	LLC Prognoz-Serebro	<b>From:</b>	Robin Simpson
<b>Copy to:</b>	Polar Silver Resources Limited	<b>Project #:</b>	RU00591
<b>Subject:</b>	Prognoz Mineral Resource Estimate		

---

## 1 Introduction

In May 2017, SRK Consulting (Russia) Ltd (“SRK”) signed an agreement with LLC Prognoz-Serebro (“PS”) to carry out a review of the information used and work done by PS towards preparing a Mineral Resource update for the Prognoz deposit, to the extent that a Competent Person from SRK would accept responsibility for signing off on the Mineral Resource statement under the JORC Code. The contract also covers a similar review for the Ore Reserves, to be completed in 2019.

Resource geology specialists from SRK visited the offices of the LLC Prognoz-Serebro in Yakutsk on June 5 and June 9, 2017, and the site itself on June 6-8, 2017. At this time a drilling campaign was underway, with the purpose of verifying and infilling the information used to prepare the previous Mineral Resource estimation (by Micon International Ltd, in 2009). Following the June 2017 site visit, SRK’s delivered a report, presenting observations and recommendations regarding sampling and data collection practices.

The program of verification and infill drilling was completed in 2018. From August 30, 2018, LLC Prognoz-Serebro transferred reports, data and models to SRK for review. The effective date agreed to for the updated Mineral Resource estimation is August 1, 2018.

### 1.1 Competent Person

The review was carried out Robin Simpson, who is employed full-time by SRK Consulting (Russia) Ltd, as a Principal Consultant (Resource Geology). He visited site in June 2017. Mr Simpson is a Member of the Australian Institute of Geoscientists (AIG), and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined by the 2012 edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves” (JORC Code).

### 1.2 Statement of SRK Independence

Neither SRK nor the author of this Report have any material present or contingent interest in the outcome of this Report, nor do they have any pecuniary or other interest that could be reasonably regarded as being capable of affecting their independence or that of SRK.

SRK’s fee for completing this Report is based on its normal professional daily rates plus reimbursement of incidental expenses. The payment of that professional fee is not contingent upon the outcome of the Report.

## 2 Review Approach and Results

### 2.1 Input Data

The first batch of report chapters delivered by PS described the input data used for the Mineral Resource estimation. SRK is satisfied that the data collection methods used by PS are among the best practises internationally, and these methods are reported in sufficient detail to meet the reporting requirements of the JORC Code.

SRK's review of data quality began with the 2017 site visit and report. Subsequently, no errors were identified by SRK during the course of working with the database of drilling and trenching information.

## 2.2 Block Model Estimate

The second batch of chapters related to the modelling and estimation, and these were supported by files for the drill hole database, wireframes and block models. Additional information about PS's modelling methods was provided in subsequent email exchanges with SRK.

SRK carried out visual and statistical checks on the modelling files, and prepared verification estimates for key mineralised domains. SRK is satisfied that there are no material errors in the PS's block models.

SRK also visually and statistically compared the information collected by PS since 2017, against the historical (2009 and earlier) sampling, and agrees with Polymetal that it is reasonable to include the historical information in the database used for the current estimation.

SRK also reported from csv versions of the PS's block models (originally in Datamine format), and obtained a close match to the results in PS's resource statement.

Choices of modelling methods and parameters, and decisions on correlation and extrapolation always vary somewhat between individual resource geologists, but overall SRK is satisfied that PS estimation is reasonable, complies with the definitions of the JORC Code, and does not materially differ from the results that would be obtained if SRK carried out the entire estimation process using the same input data.

## 2.3 Classification and Reporting

LLC Prognoz-Serebro constructed wireframes of Indicated and Inferred boundaries, guided by geostatistical criteria, and then used these wireframes to code the block model. No Measured zones were defined. SRK considers that Polymetal has appropriately applied the Indicated and Inferred categories, as defined by the JORC Code, and that the classification adequately accounts for all the data quality, geological, and geostatistical factors that need to be considered.

In order to comply with the JORC Code requirement that Mineral Resources must have "reasonable prospects for eventual economic extraction", an open pit component of the Mineral Resource is reported at a 106 g/t Ag cut-off grade, and within an optimised pit shell, based on the parameters listed in Table 2-1. An additional underground component of the Mineral Resource, below the pit shell, is reported at a cut-off grade of 240 g/t Ag. The parameters these cut-off grades are based on are supported by independent price forecasts, and analogous costs from more advanced projects.

The Mineral Resources reported at these cut-off grades are summarised in Table 2-2.

SRK also prepared grade-tonnage curves for total silver Mineral Resources in all Prognoz domains (Figure 2-1).

The Mineral Resource results reported from the block model estimate are not particularly sensitive to higher price assumptions (lower cut-off grades), nor to reporting at a metal equivalent cut-off instead of a simple silver cut-off. A relatively minor proportion of the mineralised blocks are both outside the \$16/oz pit shell and have grade estimates less than 240 g/t Ag (the underground Mineral Resource cut-off). Furthermore, the mineralised contacts are sharp, and the volume of mineralised bodies is not sensitive to moderate variations from the 100 g/t threshold used for modelling the wireframes.

Lead is the only element included in the Mineral Resource statement. Test work on the metallurgical samples collected so far implies that zinc is unlikely to be recoverable as an economic product.

In SRK Consulting's opinion, the Mineral Resource estimates shown in Tables 2.2 have been estimated, classified and reported in a manner consistent with the guidelines of The JORC Code. The Mineral Resource figures are provided at the appropriate level of precision for public reporting.



Table 2-2: Summary statement of Mineral Resources for Prognoz Deposit, as of August 1<sup>st</sup>, 2018.

Mineral Resources	Tonnage	Content			Metal		
	kt	Ag, g/t	Pb, %	Ag eq, g/t	Ag, Moz	Pb, kt	Ag eq, Moz
<b>Indicated</b>							
<b>Open Pit</b>	<b>2 930</b>	<b>779</b>	<b>2.4</b>	<b>833</b>	<b>73</b>	<b>70.9</b>	<b>79</b>
Main Zone	2 220	788	2.8	851	56	62.6	61
Swamp Zone	660	758	1.2	785	16	7.8	17
South Zone	50	680	0.9	700	1	0.5	1
<b>Underground</b>	<b>2 640</b>	<b>842</b>	<b>1.9</b>	<b>917</b>	<b>71</b>	<b>49.0</b>	<b>78</b>
Main Zone	1 670	734	1.9	809	39	32.5	43
Swamp Zone	770	1 076	1.8	1 147	27	13.6	28
South Zone	200	847	1.5	906	5	2.9	6
<b>Total Indicated</b>	<b>5 570</b>	<b>808</b>	<b>2.2</b>	<b>873</b>	<b>145</b>	<b>119.8</b>	<b>156</b>
<b>Inferred</b>							
<b>Open Pit</b>	<b>1 770</b>	<b>610</b>	<b>2.2</b>	<b>660</b>	<b>35</b>	<b>39.7</b>	<b>38</b>
Main Zone	630	783	3.1	853	16	19.6	17
Swamp Zone	340	496	1.7	534	5	5.7	6
South Zone	30	533	0.5	544	1	0.1	1
Small zones	770	520	1.9	563	13	14.2	14
<b>Underground</b>	<b>2 730</b>	<b>650</b>	<b>1.4</b>	<b>682</b>	<b>57</b>	<b>38.2</b>	<b>62</b>
Main Zone	920	645	1.3	696	19	12.2	21
Swamp Zone	510	654	1.5	713	11	7.6	12
South Zone	240	607	1.6	670	5	4.0	5
Small zones	1 060	662	1.4	717	23	14.5	24
<b>Total Inferred</b>	<b>4 500</b>	<b>635</b>	<b>1.7</b>	<b>673</b>	<b>92</b>	<b>77.9</b>	<b>99</b>
<b>Indicated + Inferred</b>							
<b>Open Pit</b>	<b>4 700</b>	<b>715</b>	<b>2.4</b>	<b>769</b>	<b>108</b>	<b>110.6</b>	<b>116</b>
Main Zone	2 850	787	2.9	853	72	82.2	78
Swamp Zone	1 000	669	1.4	701	21	13.6	23
South Zone	80	625	0.7	641	2	0.6	2
Small zones	770	520	1.9	563	13	14.2	14
<b>Underground</b>	<b>5 370</b>	<b>744</b>	<b>1.6</b>	<b>807</b>	<b>128</b>	<b>87.2</b>	<b>140</b>
Main Zone	2 590	702	1.7	769	59	44.7	64
Swamp Zone	1 280	908	1.7	975	37	21.2	40
South Zone	440	714	1.6	777	10	6.8	11
Small zones	1 060	662	1.4	717	23	14.5	24
<b>Total Indicated + Inferred</b>	<b>10 070</b>	<b>731</b>	<b>2.0</b>	<b>789</b>	<b>237</b>	<b>197.8</b>	<b>256</b>

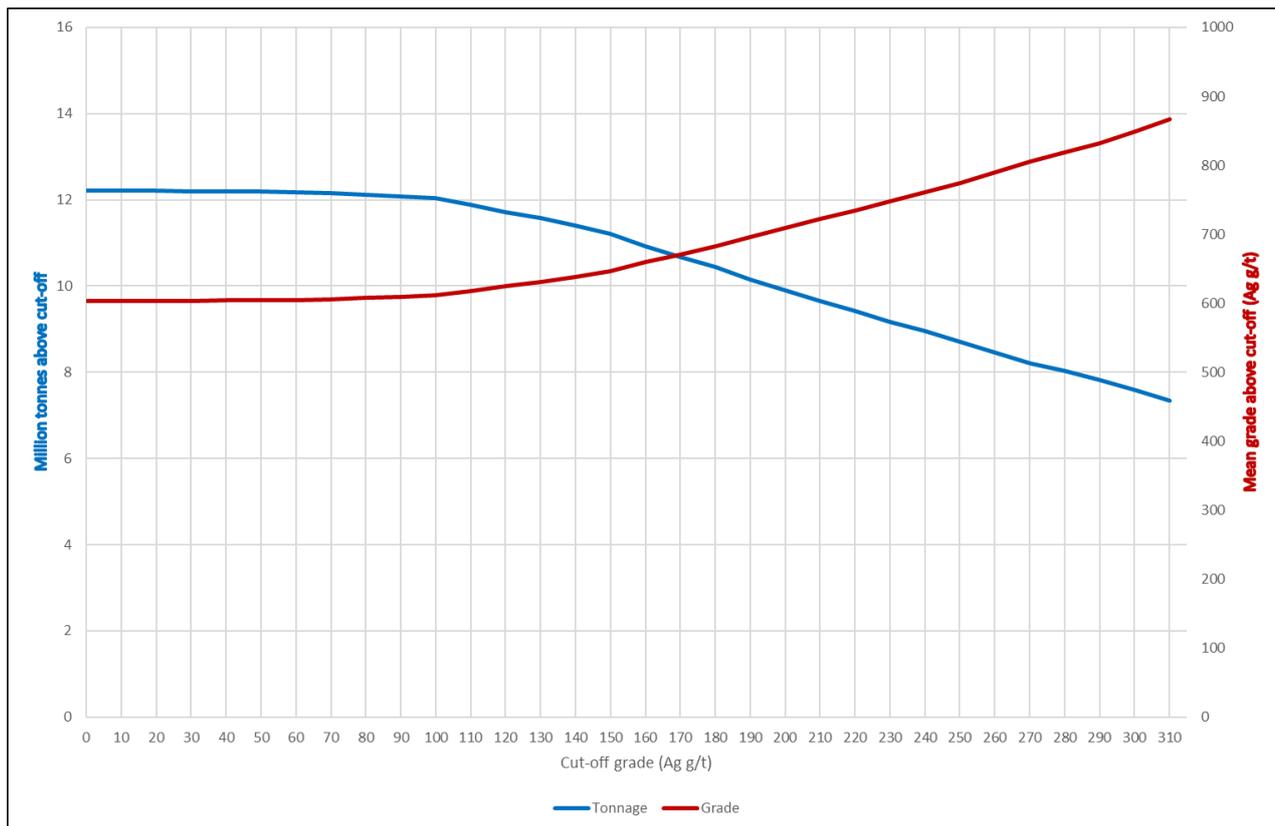


Figure 2-1: Grade-tonnage curves for total Mineral Resource above cut-off (all Prognoz domains, Indicated plus Inferred)

### 3 Comparison to previous estimate

The resource statement from the previous estimate, prepared by Micon in 2009, is presented in Table 3-1.

Table 3-1: Mineral Resource estimate for the Prognoz Property, as of May 30, 2009, prepared by Micon and reported at 100 g/t Silver cut-off

Mineral Resources	Tonnage	Grade	Metal
	kt	Ag, g/t	Ag, Moz
<b>Indicated</b>	<b>5 860</b>	<b>773</b>	<b>146</b>
<b>Inferred</b>	<b>9 640</b>	<b>473</b>	<b>147</b>
<b>Total Indicated + Inferred</b>	<b>15 500</b>	<b>586</b>	<b>293</b>

Subsequent to the 2009 estimate, PS additions to the sampling database are entirely from infill drilling along strike. Some of the PS drilling tested the potential for moderate down dip extensions of the known mineralisation, but overall PS drilling offers no potential for defining new zones or adding along-strike extensions of existing zones.

There are two main reasons for decrease in total silver metal from the Micon estimate (293 Moz Ag) to the PS's estimate (237 Moz):

- 1) LLC Prognoz-Serebro used an optimised pit shell to constrain reporting of Mineral Resources. Within the pit, a cut-off grade of 106 g/t was applied to the block model to define the Open Pit component of the Mineral Resources, and below the pit, a cut-off grade of 240 g/t was applied to define the Underground component. Micon reported the Mineral Resource without a pit shell constraint, and instead applied a 100 g/t cut-off to all the block model. SRK agrees with the PS's approach; in recent years, the use of pit shells has become widely accepted internationally as the standard approach for resource reporting. For comparative purposes only though, SRK reported from the Polymetal block model using a simple 100 g/t cut-off. The total metal above cut-off was 250 Moz (150 Moz Indicated, 100 Moz Inferred). Therefore, PS approach to defining cut-offs accounts for 13 Moz of the total metal difference.

- 2) There is a substantial volumetric difference between the wireframes of the mineralised bodies modelled by Polymetal (4.0 million cubic metres) and Micon (5.2 million cubic metres), even though both were modelled using a nominal 100 g/t Ag threshold. Locally, some differences are due to the new PS drilling showing that the bodies are less continuous than interpreted by Micon. However, there are also volume reductions by PS in areas where no new drilling was added. PS took a more conservative approach to extrapolation, and more rigidly applied conditions of minimum thickness, minimum grade, and consistency of strike, which led to less continuity between mineralised intersections. SRK has reviewed the main areas of difference between PS and Micon wireframe interpretations, and in most cases concurs with the PS interpretation.

These sources of metal decreases in the Mineral Resource are somewhat offset by the higher densities used for the PS model (varies by domain, but approximately 3.2 dry bulk density on average for mineralisation, compared to constant 3.0 for Micon model).

The other key addition to the Polymetal resource statement is reporting of Pb, which is not reported for the Micon resource.

Regards

This signature has been scanned. The author has given permission to its use for this particular document. The original signature is held on file.

Robin Simpson  
Principal Consultant (Resource Geology)

**SRK Consulting (Russia) Ltd**

## 4 Appendix: JORC Code Table 1 for Prognoz Deposit

### 4.1 Section 1 Sampling Techniques and Data

Criteria	Commentary
<i>Sampling techniques</i>	<p>The database used for Mineral Resource estimation is based on three main phases of sampling:</p> <ul style="list-style-type: none"> <li>• 2017-2018 (269 core holes for 34,245m, and 1,042m of channel sampling in trenches)</li> <li>• 2006-2009 (873 core holes for 78,925m, 4 exploration adits developed to extract metallurgical samples, and 6,207m of channel sampling in trenches and the adits)</li> <li>• 1990-1998 (66 core holes for 13,872m, and 10,638m of channel sampling in trenches)</li> </ul> <p><b><u>Drilling 2017-2018</u></b></p> <ul style="list-style-type: none"> <li>• In 2017 and the first quarter of 2018, half-core was sampled. The sampling boundaries were chosen according mineralogical composition, and structural and textural characteristics. Within zones identified by the geologists as mineralised (and for 5m either side into the host rocks), the maximum sampling interval was 1.3 m, the minimum interval was 0.3 m, and the average 0.8 m. For barren rocks, the average sampling length was 3.5 m, with a maximum of 5 m. The samples from the barren intervals were made up of 15-20 evenly-spaced chips with a size of 1-2 cm.</li> <li>• In the mineralised zones, sample weights range from 2 to 15 kg, with an average of 5 kg. The chip samples from the barren zones average 0.5 kg. Sampling correctness was ensured by weighing of all samples, selective weighing of the</li> </ul>

Criteria	Commentary
	<p>retained core halves, and submitting retained halves to primary laboratory for 5% of samples.</p> <ul style="list-style-type: none"> <li>From April 2018, full core was sampled. The average sample weight was 9-11 kg.</li> </ul>
	<p><b><u>Channel sampling 2017-2018</u></b></p> <ul style="list-style-type: none"> <li>Zones identified as potentially mineralised were sampled with a profile of 5 x 10 cm across the entire mineralisation thickness, extended by 5 m either side into the host rocks. This sampling represents 40% of the length exposed by the trenches. Individual sample lengths range from 0.3 to 1.3 m, with an average length of 0.9 m. The sampling boundaries were chosen according to mineralogical composition, and structural and textural characteristics. The unmineralised host rocks were chip sampled, with sampling lengths from 2.2 to 5.0 m, and 4.5 m average.</li> <li>The mass of the channel samples equals from 5.0 to 15 kg, average 13.8 kg; the chip samples from the host material range from 0.5 to 1.1 kg, average 0.7 kg.</li> <li>Sampling was carried out under the supervision of a geologist.</li> <li>Sampling was done manually with the use of hammer and chisel. Weight measurements in the field were a quality control. The discrepancy between actual and theoretical weights did not exceed 10%.</li> <li>Representativeness of channel sampling was controlled by parallel channels with a cross-section of 5 x 20 cm.</li> </ul>
	<p><b><u>Drilling 2006-2009</u></b></p> <ul style="list-style-type: none"> <li>Half-core was sampled, and the sampling boundaries were chosen according to mineralogical composition, and structural and textural characteristics. The maximum sampling interval was 1.0 m, the minimum interval was 0.3 m.</li> <li>All samples were weighed. Sample weights ranged from 0.5 kg to 3.6 kg, with an average of 1.7 kg. The actual weight of the core samples was compared against the theoretical weight; deviation between actual and theoretical weights did not exceed 20%.</li> </ul>
	<p><b><u>Channel sampling 1990-1998, and 2006-2009</u></b></p> <ul style="list-style-type: none"> <li>All areas of hydrothermal alteration, mineralisation, veins, crushing zones and fracture zones uncovered by trenches were channel-sampled. Trench exposures were sampled along the entire length. Channels were cut on the trench walls after thorough cleaning. The channel profiles were 10 x 3 cm.</li> <li>The length of channel samples in mineralised zones ranged from 0.2 to 1.2 m, the average was 1.0 m. In unmineralised rocks the sample lengths were up to 5 m. Vein bodies and crushing zones with a thickness of 0.01-0.2 m were sampled by extracting chips from the exposed vein along a length of 1 m and width of 3 cm. Sample weights ranged from 1.6 to 13.5 kg with an average of 8.5 kg.</li> <li>Sampling was done manually with the use of hammer and chisel. Weight measurements in the field were a quality control. The discrepancy between actual and theoretical weights did not exceed 10%.</li> </ul>
	<p><b><u>Drilling 1990-1998</u></b></p> <ul style="list-style-type: none"> <li>From 1990 to 1993, half-core was sampled. From 1994 onwards, full core was sampled.</li> <li>The average length of core samples was 0.8 m with a range of 0.2 to 1.5 m. Average weight of samples is 5.9 kg.</li> <li>Each drill run of core was split into samples according to geological boundaries. For holes with a core recovery of less than 70%, the entire core-barrel was usually taken as one sample, along with the sludge from the same sampling interval.</li> </ul>

Criteria	Commentary
<i>Drilling techniques</i>	<ul style="list-style-type: none"> <li>• Drilling operations for the 2017-2018 campaign were carried out by the contracting organization “OGK-Group” JSC, and then by their subsidiary “HGRP” LLC. Drilling machines Christensen CS14, Christensen CS5 were used for these works. Hole depths ranged from 30.0 m to 340 m. The primary diameter used for core drilling was HQ, with NQ occasionally used where a reduced diameter was needed for hole completion.</li> <li>• Drilling during 2006-2009 was performed by SKB-4, ZIF - 650, Dimec-262 machines. Hole diameters of HQ and NQ were used.</li> <li>• Core drilling in 1990-1998 was performed by SKTO-65 machines.</li> <li>• Drill core was not oriented.</li> </ul>
<i>Drill sample recovery</i>	<ul style="list-style-type: none"> <li>• For all campaigns, core recovery was quantified by length measurements, with weight measurements used as a quality control check. Methods used to maximize recovery included reduced air flow, drilling speed and pressure on the drill face, and shorter intervals between retrieving the core-barrel.</li> <li>• For the 2017-2018 campaign, recovery is reported to average 95% in the mineralised zones, and 96% in the host rocks. Holes were re-drilled if recovery in the mineralised zone was below 90%.</li> <li>• For the 2006-2008 campaign, recovery for all rocks is reported to be mainly in the range of 95-100%, and rarely less than 90%.</li> <li>• For the 1990-1998 campaign, the average recovery of the mineralised core was 83%, and average recovery in the host rocks was 87%.</li> <li>• Statistical analysis showed there is no significant correlation between recovery and Ag grade, therefore low recoveries are considered unlikely to be a source of significant bias in the sampling results.</li> </ul>
<i>Logging</i>	<ul style="list-style-type: none"> <li>• Core and channel samples have been logged at a level of detail appropriate to support Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>• The key logging fields are qualitative in nature.</li> <li>• All core drilled by Polymetal has been photographed in wet form, and the archive of photographic documentation for core from previous campaigns gives close to 100% coverage.</li> </ul>
<i>Sub-sampling techniques and sample preparation</i>	<ul style="list-style-type: none"> <li>• Half-core sampling, with sawing along the axis, was used for most campaigns. The exceptions are full-core sampling during 1990-1993, and during the latter part of the 2017-2018 campaign. Also, for the 2017-2018 campaign, intervals identified as barren (and more than 5m from potential mineralisation) were chip sampled instead of core sampled.</li> <li>• For the 2017-2018 campaign, sample preparation was done by “Verkhoyanskoye Serebro” LLC using Rocklabs equipment. The general preparation scheme was: crushing on a Boyd jaw crusher crushing to -3 mm, attrition on a flow mill to -0.5 mm, attrition on a standard mill to a grade -0.074 mm. Appropriate sub-sample weights were calculated according to the Richards-Chechchet formula.</li> <li>• For the 2006-2009 campaign, samples were prepared on site using crushing equipment from RockLab company. Samples weighing more than 2 kg were split and reduced in accordance with the Richards-Chechchet formula; samples weighing less than 2 kg were processed without splitting. These geochemical samples were then processed by single-stage crushing-grinding cycle to reduce the particle size to under 0.074 mm without further splitting.</li> <li>• For the 1990-1998 campaign, samples were prepared at the grinding facility of EKL of “Yangeologiya” State Unitary Mining and Geological Enterprise. Samples with a weight up to 13.5 kg were consequently split and reduced at the appropriate stages of grinding in accordance with the Richards-Chechchet formula.</li> <li>• In the opinion of the Competent Person, the sample preparation techniques are appropriate for the mineralisation characteristics of the deposit, and for the grain size of the material being sampled.</li> <li>• During the sub-sampling stages, quality control procedures used included duplicates, blanks and size fraction analysis.</li> <li>• For the samples taken from half-core, sampling of the second half-core was used to ensure representativeness of the in situ-material.</li> </ul>

Criteria	Commentary
<i>Quality of assay data and laboratory tests</i>	<ul style="list-style-type: none"> <li>• Samples collected by LLC Prognoz-Serebro in 2017-2018 were analysed in two stages. The first stage was on-site analysis of test aliquots using an ElvaX Geo CEP-01 portable XRF analyser. For samples that returned a grade of &gt;50 g/t Ag, analytical subsamples (250g) were sent for fire assay: SGS Laboratory at Chita was the laboratory used for the initial part of the campaign; later samples were sent to OJSC IRGIREDMET (Irkutsk).</li> <li>• The samples sent to SGS or IRGIREDMET were analysed by fire assay for Ag and Au, and by AAS for Pb, Zn, Cu, Sb and Mn.</li> <li>• For the earlier campaigns, the first stage of screening was done using semi-quantitative spectral analysis, XRF analysis, or gamma-activation analysis. Samples selected for fire assay were analysed at JSC Yangeologiya (Batagai) or OJSC IRGIREDMET (Irkutsk).</li> <li>• SRK reviewed methods and results of the two stages of sample analysis, and considers the risk is low that a materially significant proportion of mineralised samples did not proceed to the fire assay stage.</li> <li>• Quality control procedures included the use of certified reference materials, duplicates, blanks, and analysis of check samples by other laboratories. From reviewing the results of the control samples, SRK concluded that acceptable levels of accuracy and precision have been established for the Mineral Resource classifications subsequently applied to the deposit.</li> </ul>
<i>Verification of sampling and assaying</i>	<ul style="list-style-type: none"> <li>• SRK geologists examined a selection of significant intersections during the 2017 site visit.</li> <li>• The 2017-2018 campaign included 10 twin holes, to verify the previous drilling. The results from the twin holes were sufficiently aligned with the earlier drilling to support a decision to include the previous sampling in the current Mineral Resource estimation.</li> <li>• The systems used at Prognoz for documentation of primary data, data entry, data verification, and data storage followed LLC Prognoz-Serebro internal protocols. The work done by Polymetal included conversion of the paper-based information from previous sampling campaigns into the combined digital database. In SRK's opinion, LLC Prognoz-Serebro protocols are in accordance with the best practices internationally.</li> <li>• No adjustments were made to the assay data.</li> </ul>
<i>Location of data points</i>	<ul style="list-style-type: none"> <li>• From 2016 to 2018 LLC Prognoz-Serebro engaged specialist companies NMK LLC, SIPROEN LLC, GINGEO LLC and HGRP LLP to establish reference points over the deposit area, survey historical collars and workings, and collect information to build a topographic model.</li> <li>• OGK Group was responsible for setting up of PS boreholes and instrumental surveying of their actual positions after completion of drilling. Hole collars were marked out and georeferenced using a Nikon Npl-322 total station. Surveying accuracy was checked by a PS surveyor using the Sokkia CX-105L total station. Accuracy of marking and surveying of actual drillhole positions were checked by LLC Prognoz-Serebro surveyors on a regular basis.</li> <li>• Deviation measurements were performed in all PS's drill holes. From mid-May 2017, the magnetometric inclinometer IMMN 32A was used for directional survey and then the optical inclinometer Reflex Maxibor II 210-243 was employed, which enables surveying inside the drill pipe string. Survey measurements were taken every 10 m.</li> <li>• The grid system used is a local system based on the Pulkovo 1942 datum. NMK LLC developed a key to transform this system to the MSK-14 system (Zone 5, Yakutia). Elevations are reported relative to the Baltic 1977 datum.</li> <li>• In SRK's opinion, location data and topographic control are of high quality, and do not impede confidence in the Mineral Resource estimation.</li> </ul>
<i>Data spacing and distribution</i>	<ul style="list-style-type: none"> <li>• Most of the Prognoz deposit is covered by drilling at a spacing of 40m x 40m to 80m x 80m, to a depth of about 200m below surface. The thickest part of the Main zone has 20m x 20m coverage, to a depth of 300m.</li> <li>• The spacing and distribution of the data are sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation procedures and classifications applied.</li> <li>• Composite samples were used during the 2006-2009 campaign, for the purposes of</li> </ul>

Criteria	Commentary
	analyzing grades within the mineralised zones, for elements other than silver (Pb, Zn, Au, Cu, Cd, Bi).
<i>Orientation of data in relation to geological structure</i>	<ul style="list-style-type: none"> <li>The mineralisation generally is steeply dipping (70° or greater). The drill holes are directed perpendicular to the strike, and inclined 55 to 65 degrees in the opposite direction to the dip of the mineralisation</li> <li>For the style of mineralisation at Prognoz, the high angle between the sampling and mineralisation means that there is a low risk of the sampling orientation introducing a material bias.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li>The remote location of the site limits the potential for external interference in the exploration activities at Prognoz.</li> <li>The site is under constant guard during exploration, and LLC Prognoz-Serebro has secure facilities in place for sample storage, and strong protocols to control the transfer of samples from site to the laboratory.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>Work up to 2009 was reviewed by the consulting company Micon. The results of this review are discussed in Micon's technical report, and were taken into account by Micon during the course of preparing the 2009 Mineral Resource estimation for Prognoz.</li> <li>In June 2017 specialists from SRK Consulting (Russia) Ltd, including the Competent Person for the 2018 Mineral Resource estimation update, visited the Prognoz deposit and the office of the management company "Verkhoyanskoye Serebro" in Yakutsk. The scope of this visit included an independent audit of exploration works being conducted at the Prognoz deposit. The overall conclusion from SRK's review was that exploration data for the project were generally collected in line with best practices internationally, and there were no deficiencies that could have a material impact on confidence of the Mineral Resource estimate.</li> </ul>

## 4.2 Section 2 Reporting of Exploration Results

Criteria	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>Silver-polymetallic deposit Prognoz is located in the North-Eastern part of the Republic of Sakha (Yakutia), on the territory of the Verkhoyansk khannate.</li> <li>The only user of mineral resources on the territory of the silver-polymetallic deposit Prognoz is LLC Prognoz-Serebro. Works at the deposit are carried out under the License number 14002 YaKU BE issued to LLC Prognoz-Serebro on 27/03/2007, valid until 09/30/2025, which can be extended until 2039 with a commitment to put a mining enterprise into operation not later than 31/12/2022.</li> <li>The allocated subsoil area has the status of mining lease. The license area is 56.0 km<sup>2</sup>, with a depth limit of 1,500 m below the surface.</li> <li>At the time of reporting, there are no known impediments to obtaining a licence to operate in the area.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>Exploration done prior to LLC Prognoz-Serebro work, relevant to the 2018 Mineral Resource estimation update, is described above in Section 1 of this table.</li> <li>The 1990-1998 campaign was carried out by State Unitary Mining and Geological enterprise Yangeologiya, culminating in the definition of C2 Reserves (under the Russian classification system).</li> <li>The 2006-2009 campaign was carried out by Buryatzoloto JSC, culminating in the definition of C1 and C2 Reserves (under the Russian classification system), and Indicated and Inferred Mineral Resources (in the estimate prepared by Micon, and classified according to the JORC Code).</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>The Prognoz silver-polymetallic deposit is located in the upper reaches of the Sytygan Stream, a right tributary of the Nelgese River. The deposit is within a downthrown tectonic block, bounded from the west and east by overthrust faults, and from the north and south by secondary structures of the Sredne-Sartansky Fault.</li> <li>Country rocks are represented by a terrigenous sequence of the Middle Triassic age. The sequence is composed of sandstones with subordinate layers of siltstones and mudstones. Within the deposit area, the sequence forms a north-south trending anticline fold. Intrusive</li> </ul>

Criteria	Commentary
	<p>formations within the deposit area are represented by rare acidic dykes and have no impact on the location of mineralised zones.</p> <ul style="list-style-type: none"> <li>Mineralised crush zones are confined to the east-west striking faults. These zones dip towards north and south at 70-90°, and are composed of sandstones brecciated to a various degree, with quartz-carbonate-sulphide-sulphosalt veinlets. Carbonates are primarily represented by siderite, sulphide-galenite and occasionally by sphalerite.</li> <li>A total of 30 mineralised crushed zones were identified within the deposit. The largest zones are named Main and Swamp.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>The Mineral Resource estimation reported here makes details of individual drill holes and trenches immaterial, therefore these results are excluded from this report.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>Individual Exploration Results are not Material and are excluded from this report.</li> </ul>
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li>Individual Exploration Results are not Material and are excluded from this report.</li> </ul>
<i>Diagrams (for any significant discovery)</i>	<ul style="list-style-type: none"> <li>This report refers to a Mineral Resource estimation update based on infill drilling, with no significant discoveries.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li>Individual Exploration Results are not Material and are excluded from this report.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li>During LLC Prognoz-Serebro campaign, approximately 400 bulk density measurements, using the method of hydrostatic weighing, were collected from pieces of core (up to 20 cm) representing mineralised and host rocks.</li> <li>Hydrostatic weighing measurements were also collected during the previous exploration campaigns: 59 measurements from core, and 53 measurements from material extracted from the underground workings during the 2006 – 2009 campaign; 80 measurements during the 1990 – 1998 campaign.</li> <li>In 2017, LLC Prognoz-Serebro prepared 8 metallurgical samples (total weight 1,709 kg) from retained half core. These samples were analysed by AO Polymetal Engineering.</li> <li>Metallurgical samples were also prepared during the 2006-2009 campaign. Core, channel samples, and material from the underground workings were combined to make a 5 t sample (analysed by IRGIREDMET in Irkutsk) and a 12 t sample (analysed by VNIITSVETMET, Ust-Kamenogorsk, Kazakhstan).</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li>Following the effective date of the Mineral Resource estimation reported here (August 1<sup>st</sup>, 2018), LLC Prognoz-Serebro have planned a further 23,600m of core drilling, and 2,455m of trenching. This sampling is primarily designed to infill parts of the Glavanaya zone, with the objective of supporting an upgrade of the classification from Inferred to Indicated, and to test depth extensions of the Main and Swamp zones.</li> </ul>

### 4.3 Section 3 Estimation and Reporting of Mineral Resources

Criteria	Commentary
<i>Database integrity</i>	<ul style="list-style-type: none"> <li>The electronic database is maintained on site, and updated as new information becomes available.</li> <li>Logging is done directly into computers, using AGR software, which removes the possibility of transcription errors during manual entry of paper logs into electronic format.</li> <li>SRK compared the contents of the database to a selection of primary information, and found no inconsistencies during these verification checks.</li> <li>The database has been uploaded and reviewed using several pieces of mining software,</li> </ul>

Criteria	Commentary
	by both Polymetal and SRK. These programs have automated functions to check for inconsistencies and absent information. The database delivered to SRK was found to be clean, with no significant errors detected by SRK's modelling software.
<i>Site visits</i>	<ul style="list-style-type: none"> <li>In 2017 specialists from SRK Consulting (Russia) Ltd, including the Competent Person for this 2018 Mineral Resource estimation update, visited the Prognoz deposit (June 6-8, 2017) and the office of the management company "Verkhoyanskoye Serebro" in Yakutsk (June 5 and 9, 2017).</li> </ul>
<i>Geological interpretation</i>	<ul style="list-style-type: none"> <li>The contacts of the mineralised zones are sharp, can usually be at least approximately located by logging, and are clearly identified by sampling results.</li> <li>A nominal Ag threshold of 100 g/t was used to define the contacts of the mineralisation zones. The contacts are not sensitive to moderate variations in this choice of threshold.</li> <li>The amount and spacing of information available does not leave room for interpretations to substantially differ from the general east-west striking, steeply dipping orientation used to model the mineralised zones.</li> <li>Where there are two or more subparallel mineralised zones, separated by only a few metres of waste, then there is sometimes scope to model alternative correlations between intersections, but such alternative interpretations would have no substantial effect on the overall Mineral Resource estimation.</li> </ul>
<i>Dimensions</i>	<ul style="list-style-type: none"> <li>About 30 steeply-dipping, approximately east-west striking, mineralised zones have been identified within the deposit. The two largest zones are Main (4,500m strike length) and Swamp (3,150m strike length). The other zones have strike lengths down to a few hundred metres.</li> <li>Thicknesses mostly range from tens of centimetres to several metres. The thickest parts of the Main zone are up to 25m.</li> <li>The mineralised zones are covered by no more than a few metres of alluvium.</li> <li>The depth limit of the larger mineralised zones is not reached by the drilling coverage (which mostly extends up to 200m or 300m below surface).</li> </ul>
<i>Estimation and modelling techniques</i>	<ul style="list-style-type: none"> <li>Modelling and estimation was carried out using Leapfrog GEO, Datamine, and Micromine software.</li> <li>Grade estimation was by Ordinary Kriging, from 1m composites, into 10m x 2m x10m blocks.</li> <li>Estimation was constrained by hard boundaries, to within a wireframe interpretation of the mineralised zones, modelled based on a nominal 100 g/t Ag threshold.</li> <li>Prior to estimation, the blocks and composites for each separate zone were flattened into a simple planar configuration.</li> <li>The elements estimated were silver, gold, lead, and zinc. Separate variogram models were prepared for each element in each mineralised domain.</li> <li>Grade capping was applied to the silver and lead composites, based on probability plots, quantile analysis, and review of coefficient of variation statistics. The capping thresholds chosen varied by the component segments of the mineralised zones, but usually between 1 and 10% of the composites within each segment were capped.</li> <li>For Main, the effect of capping was to reduce the mean composite grade from 785 g/t Ag to 732 g/t Ag, and from 2.93% Pb to 2.79% Pb.</li> <li>For Swamp, the effect of capping was to reduce the mean composite grade from 974 g/t Ag to 856 g/t Ag, and from 1.72% Pb to 1.64% Pb.</li> <li>A multi-pass search was used for estimation. The radii of the search ellipsoid for the first pass were 30m x 30m in the flattened plane of the mineralisation, and 1.5m perpendicular to this plane (Y-direction). The minimum number of samples required was 5, and two drill holes. No maximum was set.</li> <li>The subsequent search passes were multiples of the first pass radii, at factors of 1.5, 2.5, 4 and 50.</li> <li>The results of the estimation were validated visually and statistically by LLC Prognoz-Serebro and SRK.</li> <li>SRK prepared check estimates, using 2D Ordinary Kriging, for several of the largest domains, and found the results to be acceptably close to the LLC Prognoz-Serebro estimates.</li> <li>The previous (Micon 2009) estimation was also available as a check.</li> </ul>

Criteria	Commentary
	<ul style="list-style-type: none"> <li>No mining has occurred at Prognoz, therefore no production records are available for comparison.</li> <li>No deleterious elements or non-grade variables of economic significance were estimated.</li> <li>Within the blocks estimated by Ordinary Kriging, the estimates were not further processed to account for likely selective mining units.</li> <li>The elements were estimated independently, and no methods based on correlations (eg. Co-kriging) were employed.</li> <li>The geological interpretation, of strong structural control on mineralisation by the steeply dipping fault zones, set the choice of estimation domains with hard boundaries.</li> </ul>
<i>Moisture</i>	<ul style="list-style-type: none"> <li>Tonnages are estimated on a dry basis. Moisture content measurements, based on weight difference after drying, and averaged by rock type, are in the range of 1 to 5%.</li> </ul>
<i>Cut-off parameters</i>	<ul style="list-style-type: none"> <li>The Mineral Resources are reported on the basis of a 106 g/t Ag cut-off for the open pit component (within an optimized pit shell, based on a USD 16/oz silver price), and a 240 g/t Ag cut-off for the underground component (below the pit shell). The detailed costs and assumptions used for the optimization and cut-off grade calculation are presented in Table 2-1 of this report.</li> </ul>
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> <li>No substantial mining study has yet been undertaken. It is assumed that mineralised material can be extracted by widely used open pit and underground mining methods, and that the continuity, and typical width of the major mineralised zones (several metres), means that no special considerations need to be made at the Mineral Resource stage in regard to dilution and minimum mining width.</li> </ul>
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> <li>Metallurgical samples were collected by Polymetal and during the 2006-2009 campaign. The results from testing these samples indicate that silver and lead will be amenable to extraction by applying widely used processing technologies. Silver recoveries are forecast to be 90.2% for the open pit component of the Mineral Resource and 88.2% for the underground component. For lead, the open pit and underground recoveries are forecast to be 45.0% and 76.5% respectively. The silver recoveries are used as input parameters for the resource pit shell optimization and cut-off grade calculations. Silver and lead recoveries are used for metal equivalent calculations.</li> </ul>
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> <li>No substantial environmental studies have yet been undertaken for the project. For the purposes of reporting Mineral Resources, it is assumed that environmental constraints do not pose a material risk to the project proceeding, and that viable solutions will be found for storing waste and process residue.</li> </ul>
<i>Bulk density</i>	<ul style="list-style-type: none"> <li>The database of bulk density data contains several hundred measurements on core pieces, using the hydrostatic weighing method, collected by LLC Prognoz-Serebro and during earlier campaigns. The core used for these measurements come from locations sufficiently dispersed through the deposit for the database to be considered representative of the deposit.</li> <li>The dry bulk density factors used for converting Mineral Resource volumes into tonnes are based on the average of the measurements for each mineralisation or host rock type. For the mineralised zones, the following dry bulk densities are used: <ul style="list-style-type: none"> <li>Main 3.18 g/cm<sup>3</sup></li> <li>Swamp: 3.21 g/cm<sup>3</sup></li> <li>South: 3.12 g/cm<sup>3</sup></li> <li>Tikhaya and Vesennyaya: 3.26 g/cm<sup>3</sup></li> <li>Other Mineralised zones: 3.18 g/cm<sup>3</sup></li> </ul> </li> <li>For host rocks, eight different types are coded; the two major types are sandstone and siltstone, both with an estimated dry bulk density of 2.69 g/cm<sup>3</sup></li> </ul>
<i>Classification</i>	<ul style="list-style-type: none"> <li>The mineralised domains within the block model were classified based on wireframes, prepared by LLC Prognoz-Serebro, of the boundary between Indicated and Inferred. The position of the boundary was set so that the Indicated component corresponded to zones where most blocks had been estimated in the first pass of kriging (the 30m x 30m x 1.5m search).</li> <li>No Measured component was defined.</li> <li>In choosing the classification criteria, appropriate account has been taken of all relevant</li> </ul>

Criteria	Commentary
	<p>factors (estimation confidence, reliability of input data, confidence in continuity of geology and grade, quantity and spacing of the data).</p> <ul style="list-style-type: none"> <li>The classification appropriately reflects the Competent Person's view of the deposit.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li>The work done by LLC Prognoz-Serebroto prepare this Mineral Resource estimation update was reviewed by Robin Simpson, a Principal Consultant from SRK Consulting (Russia) Ltd. He accepts the responsibility of Competent Person for this Mineral Resource estimation update.</li> </ul>
<i>Discussion of relative accuracy/confidence</i>	<ul style="list-style-type: none"> <li>Relative accuracy and confidence level in the Mineral Resource is sufficiently described by the Indicated and Inferred classifications applied to the block model and resource statement for the deposit.</li> <li>The deposit has not been mined, so no production data are available for comparison to the Mineral Resource estimate.</li> </ul>