

# RPMGLOBAL

## BAIYUNPU GOLD-LEAD-ZINC PROJECT Hunan Province, China

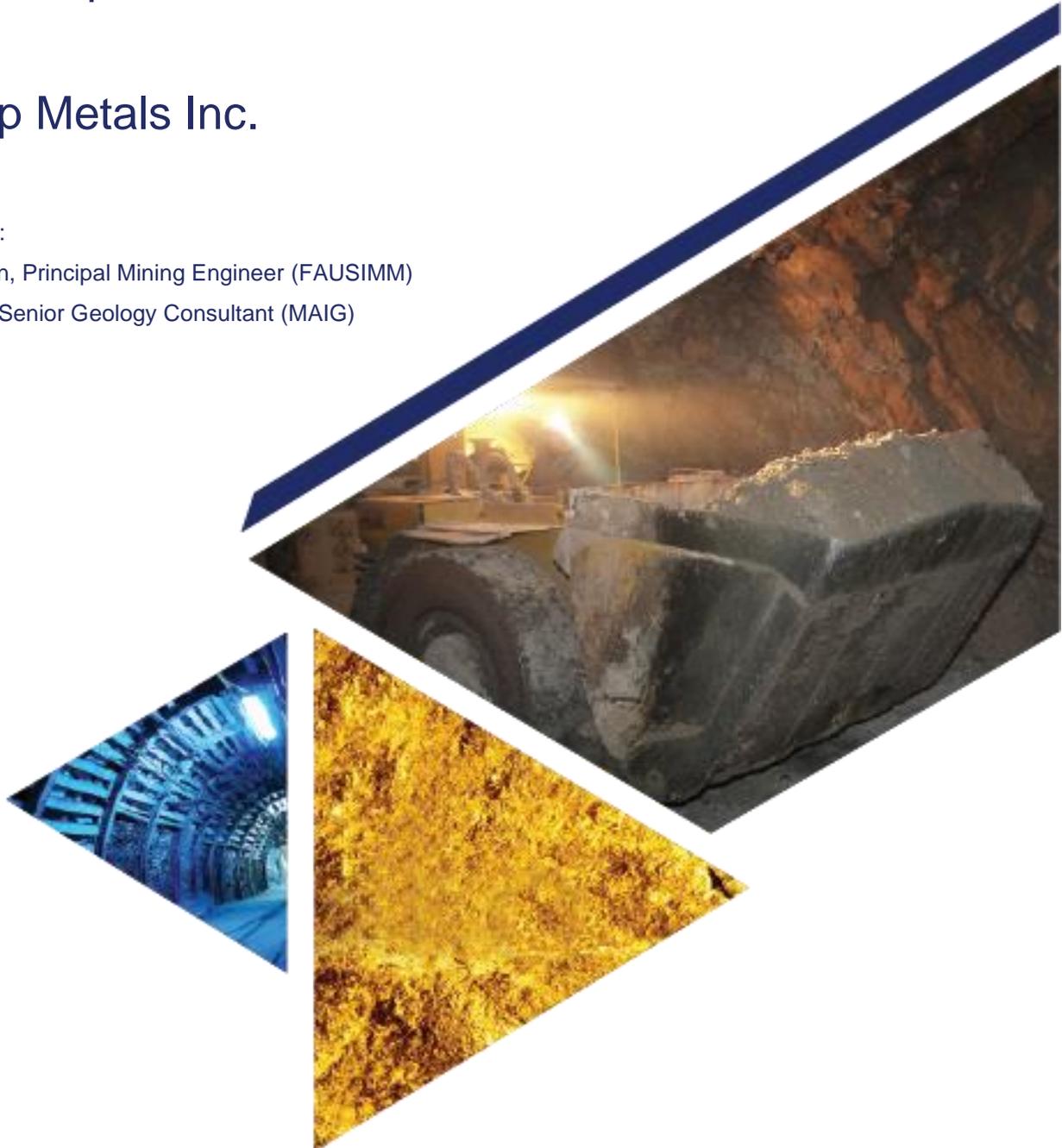
### National Instrument 43-101 Mineral Resource Technical Report

Silvercorp Metals Inc.

Qualified Persons:

Mr. Tony Cameron, Principal Mining Engineer (FAUSIMM)

Mr. Song Huang, Senior Geology Consultant (MAIG)



**Job Number:** ADV-HK-00157  
**Date:** 30<sup>th</sup> June 2024

## Tony Cameron

RPMGlobal Asia Limited  
Room 1118, Level 11, China World Office 1,  
1 Jianguomenwai Avenue,  
Chaoyang District, Beijing 100004 China  
Phone: +86 10 5387 6410  
[TCameron@rpmglobal.com](mailto:TCameron@rpmglobal.com)

I, Tony Cameron am working as a Consultant for RPMGlobal Asia Limited, Room 1118, Level 11, China World Office 1, 1 Jianguomenwai Avenue, Chaoyang District, Beijing 100004 China.

This certificate applies to the National Instrument 43-101 Mineral Resource Technical Report of Baiyunpu Gold-Lead-Zinc Project, Hunan Province, China, prepared for Silvercorp, dated 30<sup>th</sup> June 2024 (the "Technical Report"), do hereby certify that:

1. I am a professional Mining Engineer having graduated with an undergraduate degree of Bachelor of Engineering (Mining) from the University of Queensland in 1988. In addition, I have obtained a First Class Mine Manager's Certificate (No. 509) in Western Australia, a Graduate Diploma in Business from Curtin University (Western Australia) in 2000, and a Masters of Commercial Law from Melbourne University in 2004.
2. I am a Fellow of the Australasian Institute of Mining and Metallurgy ("AusIMM"), Membership No. 108264.
3. I have worked as a mining engineer for a total of thirty-five years since my graduation from university. Over the last twenty-three years I have worked as a consulting mining engineer on mine planning and evaluations for base metals operations and development projects worldwide.
4. I have read the definition of "qualified person" as set out in National Instrument 43-101 – Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that, by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I am a "qualified person" for the purposes of NI 43-101.
5. I visited the BYP Gold-Lead-Zinc Project site between the 19<sup>th</sup> and 21<sup>st</sup> of September, 2018.
6. I am responsible for the preparation of Sections 1, 15 and 16 of the Technical Report.
7. I have had no prior involvement with the properties that are the subject of the Technical Report.
8. I am independent of Silvercorp in accordance with the application of Section 1.5 of NI 43-101.
9. I have read NI 43-101 and Form 43-101F1 and the Technical Report has been prepared in compliance with that instrument and form.
10. I consent to the filing of the Technical Report with any stock exchange or any other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their website and accessible by the public, of the Technical Report.
11. To the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading as of the effective date of the report, 30<sup>th</sup> June, 2024.

Dated at Beijing, China, 31<sup>st</sup> July, 2024

*/s/ Tony Cameron*

Tony Cameron, FAusIMM (QP)

## Song Huang

RPMGlobal Asia Limited  
Room 1118, Level 11, China World Office 1,  
1 Jianguomenwai Avenue,  
Chaoyang District, Beijing 100004 China  
Phone: +86 10 5387 6410  
[Shuang@rpmglobal.com](mailto:Shuang@rpmglobal.com)

I, Song Huang am working as a Consultant for RPMGlobal Asia Limited, Room 1118, Level 11, China World Office 1, 1 Jianguomenwai Avenue, Chaoyang District, Beijing 100004 China.

This certificate applies to the National Instrument 43-101 Mineral Resource Technical Report of Baiyunpu Gold-Lead-Zinc Project, Hunan Province, China, prepared for Silvercorp, dated 30<sup>th</sup> June 2024 (the "Technical Report"), do hereby certify that:

1. I am a registered member of the Australian Institute of Geoscience ("AIG"), Membership No. 6157.
2. I am a graduate of the University of Science & Technology Beijing and hold a D.Sc in Geology, which was awarded in 2020.
3. I have been continuously and actively engaged in the assessment, development, and operation of mineral Projects since my graduation from university in 2009.
4. I am a Qualified Person for the purposes of the National Instrument 43-101 of the Canadian Securities Administrators ("NI 43-101").
5. I conducted a three day visit to the BYP Project site between the 19<sup>th</sup> and 21<sup>st</sup> of November, 2018, and another one day visit to the BYP Project site between the 16<sup>th</sup> and 27<sup>th</sup> of March, 2024.
6. I am responsible for the preparation of Sections 1 to 14 and 17 to 27 of the Technical Report.
7. I have had no prior involvement with the properties that are the subject of the Technical Report.
8. I am independent of Silvercorp in accordance with the application of Section 1.5 of NI 43-101.
9. I have read NI 43-101 and Form 43-101F1 and all related Sections of the Technical Report have been prepared in compliance with that instrument and form.
10. I consent to the filing of the Technical Report with any stock exchange or any other regulatory authority and any publication by them for regulatory purposes, including electronic publication in the public company files on their website and accessible by the public, of the Technical Report.
11. To the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading as of the effective date of the report, 30<sup>th</sup> June, 2024.

Dated at Beijing, China, 31<sup>st</sup> July, 2024

/s/ Song Huang

Song Huang, MAIG (QP)

## TABLE OF CONTENTS

<b>1</b>	<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
1.1	Introduction .....	1
1.2	Scope and Terms of Reference.....	1
1.3	Project Summary.....	2
1.4	Statement of Mineral Resources .....	3
1.5	Recommendations .....	5
1.6	Opportunities and Risks .....	5
<b>2</b>	<b>INTRODUCTION AND TERMS OF REFERENCE.....</b>	<b>7</b>
2.1	Background.....	7
2.2	Source of Information .....	7
2.3	Participants .....	8
2.4	Limitations and Exclusions .....	8
2.5	Capability and Independence .....	8
<b>3</b>	<b>RELIANCE ON OTHER EXPERTS .....</b>	<b>10</b>
<b>4</b>	<b>PROPERTY DESCRIPTION AND LOCATION.....</b>	<b>11</b>
4.1	Property Ownership.....	14
4.2	Review of Ownership Documents.....	15
<b>5</b>	<b>ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY .....</b>	<b>16</b>
5.1	Accessibility and Infrastructure.....	16
5.2	Climate and Physiography.....	16
<b>6</b>	<b>HISTORY.....</b>	<b>17</b>
6.1	Exploration History .....	17
6.2	Mineral Resource Estimation History.....	17
6.3	Mining History .....	18
<b>7</b>	<b>GEOLOGICAL SETTING AND MINERALIZATION .....</b>	<b>20</b>
7.1	Regional Geology.....	20
7.2	Project Geology.....	20
7.3	Mineralization .....	21
<b>8</b>	<b>DEPOSIT TYPES .....</b>	<b>27</b>
8.1	Mississippi Valley Type (MVT) Deposits.....	27
8.2	Carlin Type Deposits.....	28
<b>9</b>	<b>EXPLORATION.....</b>	<b>29</b>
9.1	Geological Mapping.....	29
9.2	Geochemical Surveys .....	29
9.3	Geophysical Surveys.....	29
9.4	Tunneling Program.....	29
<b>10</b>	<b>DRILLING.....</b>	<b>31</b>

10.1	Pre-2011 Drilling .....	31
10.2	Post-2011 Drilling .....	31
<b>11</b>	<b>SAMPLE PREPARATION, ANALYSIS AND SECURITY .....</b>	<b>39</b>
11.1	Sample collection .....	39
11.2	Sample Handling Protocols and Security .....	39
11.3	Assay Laboratory Sample Preparation and Analysis .....	39
11.4	Quality Control Data .....	40
<b>12</b>	<b>DATA VERIFICATION.....</b>	<b>49</b>
12.1	Validation of Mineralization.....	49
12.2	Drill Hole Location Validation.....	50
12.3	Sample Pulp Validation .....	50
12.4	Database validation.....	51
12.5	Assessment of Data .....	51
<b>13</b>	<b>MINERAL PROCESSING AND METALLURGICAL TESTING .....</b>	<b>52</b>
13.1	Historical Production .....	52
13.2	Test Samples .....	52
13.3	Mineralogy and Occurrences of the Payable Elements .....	53
13.4	Metallurgical Test Results .....	55
13.5	Summary of Mineral Processing and Metallurgical Testing.....	59
<b>14</b>	<b>MINERAL RESOURCE ESTIMATES .....</b>	<b>62</b>
14.1	Data .....	62
14.2	Geology and Resource Interpretation.....	64
14.3	Preparation of Wireframes.....	64
14.4	Compositing and Statistics .....	68
14.5	Geospatial Analysis.....	80
14.6	Mineral Resource Estimation.....	88
<b>15</b>	<b>MINERAL RESERVE ESTIMATES .....</b>	<b>109</b>
<b>16</b>	<b>MINING METHODS.....</b>	<b>110</b>
<b>17</b>	<b>RECOVERY METHODS.....</b>	<b>111</b>
<b>18</b>	<b>PROJECT INFRASTRUCTURE .....</b>	<b>112</b>
18.1	Tailings Management .....	112
18.2	Waste Rock Storage .....	112
18.3	Power Supply .....	112
18.4	Access .....	113
18.5	Water Supply.....	113
18.6	Other .....	113
<b>19</b>	<b>MARKET STUDIES AND CONTRACTS .....</b>	<b>114</b>
<b>20</b>	<b>ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL AND COMMUNITY IMPACT.....</b>	<b>115</b>
20.1	Introduction .....	115

20.2	Laws and Regulations .....	115
20.3	Waste and Tailings Disposal Management.....	116
20.4	Site Monitoring .....	117
20.5	Status with Project E&S Approvals and Permitting Requirements .....	117
20.6	Social .....	118
20.7	Biodiversity.....	118
20.8	Remediation and Reclamation.....	118
20.9	Site Closure Plan.....	119
<b>21</b>	<b>CAPITAL AND OPERATING COSTS .....</b>	<b>120</b>
<b>22</b>	<b>ECONOMIC ANALYSIS .....</b>	<b>121</b>
<b>23</b>	<b>ADJACENT PROPERTIES .....</b>	<b>122</b>
<b>24</b>	<b>OTHER RELEVANT DATA AND INFORMATION.....</b>	<b>123</b>
<b>25</b>	<b>INTERPRETATION AND CONCLUSIONS.....</b>	<b>124</b>
<b>26</b>	<b>RECOMMENDATIONS .....</b>	<b>125</b>
<b>27</b>	<b>REFERENCES .....</b>	<b>126</b>

## LIST OF TABLES

Table 1-1	BYP Project Mineral Resource Estimate as at 30 <sup>th</sup> June 2024 (1.2 g/t Au and 2.2% Zn <sub>Eq</sub> cut-off) .....	4
Table 4-1	Application Mining License of Baiyunpu Gold, Lead and Zinc Mine.....	14
Table 4-2	Coordinates of adjusted Corner Points of BYP Mine (National 2000 Coordinate System) .....	15
Table 6-1	Mineral Resources for Gold Zones as of December 2011 (AMC) .....	18
Table 6-2	Mineral Resources for Lead and Zinc Zones as of December 2011 (AMC).....	18
Table 6-3	Mineral Resources for Gold Zones as of December 2019 (RPM, 1.6 g/t Au cut-off) .....	18
Table 6-4	Mineral Resources for Lead&Zinc and Overlap Zones as of December 2019 (RPM, 3% Pb <sub>Eq</sub> cut-off) .....	18
Table 7-1	Lead-Zinc mineralized Zone Orientation Summary .....	25
Table 7-2	Gold mineralized Zone Orientation Summary .....	26
Table 7-3	Mineralized Zone Numbering by Exploration Stage .....	26
Table 9-1	Historical Tunneling Program .....	29
Table 9-2	Significant Intersections from Underground Sampling .....	30
Table 10-1	Historical Drilling Programs .....	31
Table 10-2	Significant Intercepts of the Pre-2011 Drilling Programs.....	32
Table 10-3	Significant Intercepts of the 2011-2014 Drilling Program .....	33
Table 11-1	Details of External Standards Used for the Project Post 2011 .....	41
Table 13-1	Historical Metallurgy and Production (2011).....	52
Table 13-2	Gold Samples Used for Gold Metallurgical Testing (2010) .....	53
Table 13-3	Gold Samples Used for Gold Metallurgical Testing (2018) .....	53
Table 13-4	Samples Used for Lead and Zinc Metallurgical Testing (2010).....	53
Table 13-5	Summary of Mineralogy of the Gold Samples (2010).....	53
Table 13-6	Summary of Mineralogy of the Gold Samples (2018).....	54
Table 13-7	Summary of Gold Mineralogical Analysis .....	54
Table 13-8	Summary of Mineralogy of the Samples .....	55
Table 13-9	Summary of Lead Mineralogy .....	55
Table 13-10	Summary of Zinc Mineralogy.....	55
Table 13-11	Mass Balance of BYP Gold Mineralization Flotation Tests - 2010.....	57
Table 13-12	Mass Balance of BYP Gold Mineralization Flotation Tests - 2018.....	57
Table 13-13	Flotation Results of Locked Cycle Test (1971-1977) .....	57

Table 13-14	Head Grade of the Blended Test Sample .....	57
Table 13-15	Comparison of Locked Cycle Test Results (Grade) .....	58
Table 13-16	Comparison of Locked Cycle Test Results (Metal Recovery) .....	58
Table 13-17	Mass Balances of Pb Zn Flotation tests (Option 3) (%) .....	58
Table 13-18	PbS Concentrate Composition (%) (Option 3) .....	59
Table 13-19	ZnS Concentrate Composition (%) (Option 3).....	59
Table 13-20	Mass Balances of Pb-Zn Flotation Tests Using Recycled Water (Option 3).....	59
Table 14-1	BYP Project - Summary of Data Used in the Mineral Resource Estimate .....	63
Table 14-2	Bulk Density Summary.....	64
Table 14-3	BYP Project – Lead-Zinc Deposit Metals Correlation Matrix .....	69
Table 14-4	Summary Statistics for 2m Composites for Au in Au Mineralization Domain .....	71
Table 14-5	Summary Statistics for 2m Composites for Pb in Pb-Zn Mineralization Domain (obj 1-15) .....	72
Table 14-6	Summary Statistics for 2m Composites for Pb in Pb-Zn Mineralization Domain (obj 16-31) ....	73
Table 14-7	Summary Statistics for 2m Composites for Zn in Pb-Zn Mineralization Domain (obj 1-15) .....	74
Table 14-8	Summary Statistics for 2m Composites for Zn in Pb-Zn Mineralization Domain (obj 16-31) ....	75
Table 14-9	BYP Project – Top-Cuts Applied to Domains .....	77
Table 14-10	BYP Project – Interpreted Variogram Analysis.....	80
Table 14-11	BYP Au-Pd-Zn Project - Block Model Parameters .....	88
Table 14-12	Block Model Coding – Type.....	88
Table 14-13	Block Model Coding – Domain .....	89
Table 14-14	Block Sizes Assessment .....	89
Table 14-15	Search Radii Assessed .....	90
Table 14-16	Maximum Number of Samples Assessed .....	90
Table 14-17	BYP Project – OK Estimation Parameters for Au.....	92
Table 14-18	BYP Project – OK Estimation Parameters for Pb and Zn .....	92
Table 14-19	Average Composite Input v Block Model Output – Gold Zone.....	94
Table 14-20	Average Composite Input v Block Model Output – Lead and Zinc Zone .....	95
Table 14-21	Reconciliation Summary Table.....	97
Table 14-22	BYP Project Mineral Resource Estimate as at 30 <sup>th</sup> June 2024 (1.2 g/t Au and 2.2% Zn <sub>Eq</sub> cut-off) .....	103
Table 14-23	Mineral Resource Estimate at Various Au Cut-offs .....	104
Table 14-24	Mineral Resource Estimate at Various Zn <sub>Eq</sub> Cut-offs .....	104

## LIST OF FIGURES

Figure 4-1	General Location map of the BYP Project .....	12
Figure 4-2	Detailed Location map of the BYP Project .....	13
Figure 7-1	Regional Geology Map .....	22
Figure 7-2	Project Geology Map .....	23
Figure 7-3	Mineralization Zones on the Property .....	24
Figure 8-1	Deposit Models of MVT Deposits from Morocco (A) and Spain (B) (Leach et al, 2010) .....	27
Figure 8-2	Carlin Type Deposit Formation (Hofstra and Cline, 2000).....	28
Figure 10-1	Plan Map Showing Collar Locations by Exploration Stage .....	32
Figure 10-2	Drill Rig XY-42T at Hole ZK2110.....	36
Figure 10-3	Underground Drill Rig XY-4 .....	36
Figure 10-4	Core Storage Room and Core Boxes.....	37
Figure 10-5	Typical Cross-Section for the-lead-zinc Deposit .....	38
Figure 11-1	ALS External Standards Results for Au Post 2011 .....	42
Figure 11-2	ALS External Standards Results for Pb Post 2011 .....	43
Figure 11-3	ALS External Standards Results for Zn Post 2011 .....	44
Figure 11-4	Internal Blank Results for Au Post 2011.....	45
Figure 11-5	Internal Blank Results for Pb Post 2011 .....	45
Figure 11-6	Internal Blank Results for Zn Post 2011 .....	45
Figure 11-7	ALS internal Check Samples for Au Post 2011 .....	47
Figure 11-8	Zhengzhou Laboratory External Check Samples for Au Post 2011 .....	47
Figure 11-9	Field Duplicate Samples Analysis .....	48
Figure 12-1	Gold mineralized Core Intervals from 72.73m to 77.95m Showing Argillaceous Siltstone and Quartz Sandstone (ZK19-102) .....	49
Figure 12-2	Pb and Zn mineralized Core Interval from 192m to 198m Showing Limestone and Dolomites (ZK2110) .....	49

Figure 12-3	Sample Pulp Re-assay Results for Au .....	50
Figure 13-1	Locked Cycle Flow sheet for 2010 and 2018 Flotation Studies .....	56
Figure 13-2	Locked Cycle Flow sheet for Pb-Zn Flotation (Option 3) .....	61
Figure 14-1	Regression analysis results .....	63
Figure 14-2	Log Histogram and Log Probability Plot for All Assays at BYP Project .....	65
Figure 14-3	3D Views of Mineralization Domains .....	66
Figure 14-4	3D View of Underground Developments .....	67
Figure 14-5	3D View of Underground Depletions .....	67
Figure 14-6	3D View of Topography .....	68
Figure 14-7	Sample Lengths inside Wireframes .....	69
Figure 14-8	Domain Groupings .....	70
Figure 14-9	Log Histogram and Probability Plots for Au, Pb, Zn .....	76
Figure 14-10	Histogram and Probability Plots for Gold Domain 6 .....	77
Figure 14-11	Histogram and Probability Plots for Lead Domain 2, 3, 6 .....	78
Figure 14-12	Histogram and Probability Plots for Zinc Domain 2, 3, 6 .....	79
Figure 14-13	Variogram Maps and Continuity Models – Au (Object 6) .....	81
Figure 14-14	Variogram Maps and Continuity Models – Pb (Object 2) .....	82
Figure 14-15	Variogram Maps and Continuity Models – Pb (Object 3) .....	83
Figure 14-16	Variogram Maps and Continuity Models – Pb (Object 6) .....	84
Figure 14-17	Variogram Maps and Continuity Models – Zn (Object 2) .....	85
Figure 14-18	Variogram Maps and Continuity Models – Zn (Object 3) .....	86
Figure 14-19	Variogram Maps and Continuity Models – Zn (Object 6) .....	87
Figure 14-20	Block Size Analysis Chart .....	89
Figure 14-21	Search Radii Analysis Chart .....	90
Figure 14-22	Maximum Number of Samples Analysis Chart .....	91
Figure 14-23	Au Block Grades – Sectional Validation .....	93
Figure 14-24	Block Model Validation by easting and elevation for Au pod 6 .....	98
Figure 14-25	Block Model Validation by easting and northing for Pb & Zn pod 2 .....	99
Figure 14-26	Au Mineral Resource Classification - Plan View .....	101
Figure 14-27	Pb - Zn Mineral Resource Classification – Plan View .....	102
Figure 14-28	Tonnage and Grade Curves .....	106
Figure 14-29	Tonnage and Bench Curves .....	107

## LIST OF APPENDICES

Appendix A.	Glossary
Appendix B.	RPM Team Experience

# 1 Executive Summary

## 1.1 Introduction

RPMGlobal Asia Limited (“RPM”) was requested by Silvercorp Metals Inc. (“Silvercorp”, the “Client”) to complete an Updated Mineral Resource Technical Report (“MRTR” or the “Report”) of the Baiyunpu (“BYP”) Gold-Lead-Zinc Project (the “Project”, “Property” or “Relevant Asset”), in March 2024 for the purpose of the Report’s filing update on SEDAR in accordance with the requirements of Canadian National Instrument 43-101 (“NI 43-101”) of the Canadian Securities Administrators and the Company’s reporting obligations as a Reporting Issuer in Canada. This updates the information in the NI 43-101 Report dated 30<sup>th</sup> April 2019 which was also compiled by RPM.

On November 8<sup>th</sup>, 2010, Silvercorp, through its wholly owned subsidiary Wonder Success Ltd, acquired a 70% equity interest in Xinshao Yunxiang Mining Co. Ltd. (“Yunxiang Mining”, the “Company”), a private mining company in Hunan Province, China, which owns the BYP Gold-Lead-Zinc mine as its primary asset. The mine was previously permitted to extract lead and zinc. The Company hold the surface land rights which cover the main mine areas until 2063, precluding other entities from applying for the surface and sub-surface rights of the mine areas.

RPM understands the Company has submitted the 2018 BYP resource reconciliation report which is required and has been reviewed and filed by the Hunan Provincial Department of Land and Resources. In 2018 the most recent development and utilization report was prepared for the Company by the Hunan Lantian Survey and Design Co.Ltd, a registered Design Institute. An application for renewal of the mining licence was postponed from 2018 to 2023 due to the establishment of an adjacent natural scenic area which overlapped a portion of the licence area. As the southern portion of the tenement overlapped the new scenic areas, the mining license boundary was adjusted to remove the overlap, and the mining licence renewal application was planned to be submitted in late 2024 including the extraction of gold in addition to lead and zinc.

## 1.2 Scope and Terms of Reference

This Report includes an independent Mineral Resource estimate update for the BYP Gold-Lead-Zinc Project completed by RPM and a review of the potential processing options reviewed subsequent to the previous NI 43-101 Report dated 30<sup>th</sup> April 2019. RPM considers that the medium to low grade nature of the combined gold, lead and zinc mineralization and the substantial thickness and size of the deposit suggest reasonable expectations that the Project has potential for eventual economic extraction using underground mining techniques and employing conventional mineral processing methods to recover the gold, lead and zinc.

RPM’s technical team (“the Team”) consisted of geologists, mining engineers and processing engineers. In September 2018, Tony Cameron (Mining Engineer, QP), Song Huang (Geology Consultant) and Zhao Hong (Resource Geologist), undertook a site visit to the Project to familiarise themselves with site conditions, sampling and sample handling procedures and had open discussions with the Company personnel on technical aspects relating to the Project as a part of this Report. In March 2024, Song Huang (Senior Geology Consultant, QP) undertook a second site visit to the project to assess the condition of project infrastructure and better understand the impact on the project due to the establishment of the adjacent natural scenic area.

Since the latest Mineral Resource estimate, the subject of the previous Technical Report dated 30<sup>th</sup> April 2019, the Company has not undertaken any mining or processing activities or carried out any additional exploration work. RPM found the Company management and technical personnel to be cooperative and open in facilitating RPM’s work during the site visits.

In addition to the work undertaken by RPM to generate an estimate of Mineral Resources, this Report includes information provided by the Client and the Company and verified by RPM where applicable, either directly from the site and other offices, or from reports by other organisations whose work is the property of the Client. The data used for the Mineral Resource estimate completed by RPM and contained in this Report, has been provided by the Client and the Company and verified by the Qualified Persons. The Report specifically excludes all aspects of legal issues, marketing, commercial and financing matters, insurance,

land titles and usage agreements, and any other agreements/contracts that the Client and the Company may have entered into except to the extent required pursuant to NI 43-101.

In RPM's opinion, the information provided by the Client and the Company was reasonable and nothing was discovered during review of the data and the preparation of this Report that indicated there was any material error or miss-representation in respect of that information.

RPM has independently assessed the Relevant Asset by reviewing historical technical reports, drill hole databases, original sampling data, sampling methodology, development potential and metallurgical test work resulting in a Mineral Resource estimate. All opinions, findings and conclusions expressed in the report are those of the Qualified Persons named herein and are not warranted in any way, expressed or implied.

## 1.3 Project Summary

- The BYP Gold-Lead-Zinc ("Au-Pb-Zn") project is located in Hunan Province, China, approximately 23 km northwest of Shaoyang city. A paved provincial highway, S217, runs across the south margin of the Property. The BYP mill, underground entrance and tailings storage areas are connected to the S217 provincial highway by a 3 km paved road.
- The Project was in operation between 2006 and 2014 to commercially extract Pb and Zn, as such significant infrastructure is located on-site including an underground mine, processing plant, and tails storage facility along with various supporting infrastructure to support mining.
- The Company holds the surface land use rights over the Mining License area until 2063, however the latest Mining License which was approved for lead and zinc mining only was last renewed by the Hunan Provincial Department of Land and Resources on April 8th, 2013 and expired on October 8th, 2017. The Company is in the process of applying to renew the mining license to permit extraction of Au, Pb, and Zn following adjustment of the boundary to exclude the southern section that overlapped the adjacent natural scenic area.
- Exploration works undertaken within the BYP Gold-Lead-Zinc deposit area by several geology institutes and mining companies since the 1970s has established that the mineralization is a combined fine-disseminated Carlin-type gold and carbonate-hosted Mississippi Valley Type ("MVT") lead-zinc mineralized system. During the 1972-1977 exploration stage, 84 drill holes totaling 31,032.58 m and related geological mapping, geophysical and geochemical works were used to define the lead-zinc deposit; the gold deposit was identified in the 1990-1992 exploration stage with 21 holes totaling 5,120.62 m. All later exploration stages focused on both gold and lead-zinc mineralization. During the 2002-2008 exploration stage, a total of 5,404.58 m of channel samples were taken. The latest exploration stage was completed in 2011-2014 by Yunxiang Mining whose 70% equity interest was acquired by Silvercorp in November, 2010. During this stage, 64 new infill and extensional diamond core holes (including 42 holes drilled during 2011-2012 and 22 holes drilled during 2013-2014) were drilled with a total length of 13,334.92m at the BYP deposit and 4,959 m of channel samples (including 3,882m in 2011-2012 and 1,077m in 2013-2014) were taken, forming the updated Mineral Resource estimate stated in this Report.
- Lead and zinc mining commenced in 2006, and gold pilot mining commenced in 2011. All production from the mine ceased in July 2014. The operation produced 307,000 tons of lead-zinc mineralized material at an average recovered grade of 0.46% Pb and 2.9% Zn for 1,403 tons of recovered lead and 8,936 tons of recovered zinc, plus 221,000 tons of gold mineralized material at an average recovered grade of 3.56 g/t Au for 788 kg of recovered gold.
- The Property is located in an uplift belt that is part of the accretionary wedge of the subduction zone between the Yangtze and South China Plates. The regional sedimentary sequence comprises Precambrian-Cambrian glacial and pyroclastic rocks, Ordovician-Silurian flysch facies rocks and Devonian clastic and carbonate rocks. Concealed intrusions have been detected in some areas. Parts of the Precambrian formations contain abundant volcanic material and are geochemically anomalous in gold, antimony, tungsten and arsenic. Mineralization on the Property consists of gold and lead-zinc. To date, eleven gold and thirty lead-zinc mineralized zones have been defined.
- Gold mineralized zones occur as stratiform or lenticular zones in fractured clastic rocks in the lower portion of the Middle Devonian sedimentary sequence. The distribution of gold mineralization is structurally controlled by two major NE-trending faults: F3 and F5. The average grade of the zones is generally in the range of 2 g/t to 3 g/t Au. Zone 6 is the most important gold zone, containing more than

70% of the total current estimated gold resource at BYP. Lead and zinc zones show characteristics of strata-bound mineralization and occur within the thickly bedded carbonate rocks in the upper portion of the Middle Devonian sedimentary sequence. However, the form, occurrence and size of individual zones are controlled and affected by pre-mineralization and post-mineralization faults and folds. The general trend of mineralized zones is conformable with the host rock, with dip angles ranging from 0° to 30°.

- RPM conducted a review of the sampling, sample preparation, analysis, and security control procedures on a desktop basis and during the site visits between 19<sup>th</sup> and 21<sup>st</sup> September, 2018 and 26<sup>th</sup>/27<sup>th</sup> March, 2024. RPM found the results of analytical work completed by the Company to be acceptable for Mineral Resource estimation purposes.
- The processing facility on site operated between 2006 and 2014 and had a capacity of 500 tpd. This plant was able to produce separate flotation concentrates for both lead-zinc and gold mineralized material. Historical records indicate a 50% lead concentrate was produced at 82% lead recovery while a 45% zinc concentrate was produced at 90% zinc recovery from a feed grade averaging 0.46% Pb and 2.9% Zn. Gold mineralized material with a feed grade of 3.56g/t Au was made into a pyrite concentrate grading 40g/t gold with a reported 90% gold recovery. This processing plant has not operated for 10 years and was noted to be in poor state of repair during the 2018 and 2024 site visits.
- The processing test work which underpins the Company's restart plans has generally shown a good response. The average gold recovery based on producing a pyrite concentrate (48.61 g/t Au) was found to be 87.41% from a feed grade of 3.20 g/t Au, which is similar to the historical records.
- The test work employed a higher feed grade (1.24% Pb and 4.08% Zn) than the historical average which resulted in significantly better concentration grades, namely 56% Pb and 52% Zn. The average recoveries for lead and zinc were 85.87% and 92.71%, which are similar to the historical metallurgical results.
- In order to accommodate the increased power and water requirements, infrastructure upgrades will be required.

## 1.4 Statement of Mineral Resources

RPM has independently updated the estimation of the Mineral Resources contained within the Project, based on the data as of 30th June, 2024 and the proposed mining license boundary. The Mineral Resource estimate and underlying data complies with the guidelines provided in the CIM Definition Standards under NI 43-101 RPM therefore considers it is suitable for public reporting. The Mineral Resources update was completed by Mr. Song Huang of RPM. The Mineral Resources are reported at a number of Au or Zn equivalent ("ZnEq") cut-off grades.

The Statement of Mineral Resources has been constrained by the topography and historical depletion wireframes, and with cut-off grades of 1.2 g/t Au for the gold domain and 2.2% Zn equivalent for the lead-zinc domain inside the mining license area.

Two physically separate domains are reported by RPM:

- Gold Area: This resource area is physically separate from the Lead and Zinc Area and hosts Carlin style gold mineralization which was the focus of the recent resource drilling and underground development.
- Lead and Zinc Area: This resource area is physically separate from the Gold Area and hosts primarily Mississippi Valley Type lead zinc mineralization.

The results of the Mineral Resource estimate for the BYP deposit are presented in **Table 1-1** below,

**Table 1-1      BYP Project Mineral Resource Estimate as at 30<sup>th</sup> June 2024 (1.2 g/t Au and 2.2% Zn<sub>Eq</sub> cut-off)**

Area	Classification	Au Mineral Resource		
		Quantity	Au	Au
		Mt	g/t	koz
Gold area	Measured	3.3	2.7	294
	Indicated	1.8	2.8	162
	Measured & Indicated	5.1	2.8	456
	Inferred	1.6	2.2	116

Area	Classification	Pb and Zn Mineral Resource				
		Quantity	Pb	Zn	Pb Metal	Zn Metal
		Mt	%	%	kt	kt
Lead and Zinc area	Indicated	3.8	0.6	2.3	25	87
	Inferred	2.8	0.7	2.5	19	71

**Note:**

- The Statement of Estimates of Mineral Resources has been compiled under direction of Mr. Song Huang, who is a full-time employee of RPM and Member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity that they have undertaken to qualify as a Qualified Person as defined in the CIM Standards of Disclosure.
- All Mineral Resources figures reported in the table above represent estimates based on drilling completed up to 30<sup>th</sup> June 2024. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
- Silvercorp holds a 70% equity interest of BYP project, the Statement of Mineral Resources is reported on a 100% basis and does not reflect the ownership status.
- Zn Equivalent (Zn<sub>Eq</sub>) calculated using long term "Energy & Metals Consensus Forecasts" June 2024 average of USD\$2,220/oz for Au, USD\$2,370/t for Pb, USD\$3,110/t for Zn (increasing 20% by prediction) and processing recovery of 87.41% Au, 85.87% Pb and 92.71% Zn based on 2018 BYP development and utilization plan report. Based on grades and contained metal for Au, Pb and Zn, it is assumed that all commodities have reasonable potential to be economically extractable.
  - The formulas used for equivalent grade is:  $Zn_{Eq} = Zn + Pb * 0.7058 + Au * 2.1638$
  - The formula used for Au ounces is:  $Au\ Oz = [Tonnage \times Au\ grade\ (g/t)] / 31.1035$
- Mineral Resources are reported on a dry in-situ basis.
- Mineral Resources are reported at a 1.2 g/t Au cut-off or a 2.2% Zn equivalent cut-off. Cut-off parameters were selected based on an RPM internal cut-off calculator in which the gold price of USD\$2,220 per ounce, Lead price of USD\$2,370/t and Zinc price of USD\$3,110/t, inflated by 120% of prices from "Energy & Metals Consensus Forecasts" to reflect long term price movements were applied, and the mining cost of USD\$41 per tonne, processing cost of USD\$16 per tonne milled and processing recovery of 87.41% Au, 85.87% Pb and 92.71% Zn.
- Mining license depth limit of "Above RL -220m" was applied for the Mineral Resource reporting.
- The Mineral Resources referred to above have not been subject to detailed economic analysis and therefore have not been demonstrated to have actual economic viability.

RPM used a 1.2 g/t Au cut-off grade and a 2.2% Zn<sub>Eq</sub> cut-off grade for reporting the Mineral Resource estimates. These cut-off grades were calculated using mining and processing cost and recovery parameters developed for the Project. In developing these parameters RPM has utilised operating costs based on in-house databases of similar operations in the region and processing recoveries based on latest preliminary test work as outlined in **Section 13**, along with the prices noted above in determining the appropriate cut-off grades.

It is further noted that in the development of any mine it is likely, given the location of the Project, that CAPEX will be required, and this is not included in the mining costs assumed.

Given the above analysis, RPM considers the mineralization reasonable for eventual economic extraction by underground mining methods, however, highlights that additional studies and drilling are required to confirm economic viability.

## 1.5 Recommendations

The recommendations provided in this Report are based on observations made during the site visits and subsequent geological and metallurgical reviews undertaken as part of the Mineral Resource estimation detailed in **Section 14**.

- Approximately 50% of gold mineralized bodies have been classified as Measured, 26% of the gold mineralized bodies and 55% of the lead-zinc mineralized bodies have been classified as Indicated, and 24% of the gold mineralized bodies and 45% of the lead-zinc mineralized bodies have been classified as Inferred. Mineral Resources are estimated with insufficient confidence to allow the application of Modifying Factors to support mine planning and evaluation of the economic viability of the remainder of the deposit. RPM recommends additional drilling to increase confidence in the existing Inferred Mineral Resource, focusing on the areas with widely spaced drilling and resultant low levels of confidence. RPM considers a total of 24 drill holes for around 9,000 m (12 drill holes for extensional drilling and 12 drill holes for infill drilling) would be appropriate. Drill holes could be drilled from underground levels to reduce the total exploration cost. RPM estimates a minimum exploration cost of around USD 500,000 to 800,000.
- Further monitoring of the slight bias, overestimation and underestimation observed in two standard samples of high-grade assays at the ALS Laboratory is recommended. RPM suggests more frequent use of internal standard samples to closely monitor the accuracy of assays.
- RPM recommends that the Company continue recording density measurements which would cost approximately USD 25,000, ensuring that the density measurement intervals correspond directly with geological logging and sampling intervals. It is recommended that density measurements be obtained from all 1 m intervals through the mineralized zone in order to continue compiling a dataset with sufficient spatial distribution to validate and apply regression formulae for density calculation or geostatistical estimation, rather than assigning average density values.
- Following on from the increased geological understanding of the mineralization styles and likely run of mine feed grades of any operation, RPM recommends the Company undertake processing test work on samples from different areas that are representative of the deposit, which would cost approximately USD 60,000. This test work would identify the grinding requirements, as well as gold recoveries and processing requirements based on conventional flow sheets as well as the potential for recovering the metals into marketable products.
- At the successful completion of the recommended exploration work and metallurgical test work program RPM recommends the Company undertake a Pre-Feasibility Study (“PFS”) which should consider the various opportunities for the Project’s development. The successful completion of a PFS showing positive economics would allow for the reporting of Mineral Reserves. The proposed PFS would take 6 to 12 months to complete inclusive of drilling with an approximate cost of USD 600,000.

## 1.6 Opportunities and Risks

The key opportunities for the Project include:

- RPM considers there is good potential to expand the currently defined resource with further drilling. Mineralization is open along strike and dip directions for both the gold and the lead-zinc zones. Extensional drilling of the main zones has potential to delineate continuations of the known mineralization. A cost estimate has been provided in **Section 1.5** above.
- There were some mineralized samples taken from lower elevations without adequate exploration control. Based on this, there is potential for underground exploration to discover additional Mineral Resources.
- There is an opportunity to increase the level of confidence in the Inferred Mineral Resource with closer spaced extensional and infill drilling within the main mineralized zones.

The key risks to the Project include:

- Considering the variable market price the deposit may not be economically extractable if the metal prices decrease or operating costs increase.

- RPM considers that sampling and assaying methodology and procedures were satisfactory for the recent drilling. Quality Assurance/Quality Control (“QA/QC”) protocols were adequate, and a review of the data did not show any consistent bias or reasons to doubt the assay data. Standard gold sample Gau-18a returned assays with slightly lower grades than the standard values at around -3D limit lines. All other CRMs show good correlation with original values and assays inside the  $\pm 3D$  limit lines. Due to a slight bias shown by a few CRM samples and an inadequate number of total samples, there is a low risk to the accuracy and representativeness of the QA/QC samples.
- A total of 104 density measurements were obtained from core drilled at the Project. Among the 104 samples, 24 density samples were taken from gold mineralization zones, 50 density samples were taken from lead-zinc mineralization zones and the remaining 30 density samples were taken from wall-rock zones. This number of mineralized density measurements is at the lower end of the range for being a statistically significant number of samples to determine a density regression equation. Considering the variable market price for Lead and Zinc, the Lead and Zinc deposit may not be economically extractable if the metal prices decrease.
- The Company currently holds surface land use rights over the Project valid until 2063. However, the Company does not hold valid Mining Licenses and, as at the Effective Date has not applied for the Mining Licenses for gold, lead and zinc. In addition, several other permits are required to be granted to allow extraction of any minerals. If these permits and licences are not granted the Project cannot recommence production.
- There is no detailed management plans as in the monitoring phase.

The illustrations supporting the various sections of the Report are located within the relevant sections immediately following the references to the illustrations. For ease of reference, an index of tables and illustrations is provided at the beginning of the Report.

The opinions and conclusions presented in this Report are based largely on the data provided to RPM during the site visits, during meetings with the Company personnel, and the reports supplied by the Company or the Client. RPM considers that the information and estimates contained herein are reliable under these conditions, and subject to the qualifications set forth.

RPM operates as an independent technical consultant providing resource evaluation, mining engineering and mine valuation services to the resources and financial services industries. This Report was prepared on behalf of RPM by technical specialists.

RPM has been paid, and has agreed to be paid, professional fees for the preparation of this Report. None of RPM's staff or sub-consultants who contributed to this Report has any interest in:

- the Company, securities of the Company or companies associated with the Company; or
- the Relevant Asset.

Drafts of the Report were provided to the Client for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in the Report. This Report is mainly based on information provided by the Client and the Company, either directly from the Project site and other associated offices or from reports by other organisations whose work is the property of the Client or the Company. The Report is based on information made available to RPM by 30<sup>th</sup> June, 2024.

## 2 Introduction and Terms of Reference

### 2.1 Background

RPMGlobal Limited (“RPM”) was requested by Silvercorp Metals Inc. (“Silvercorp”, the “Client”) to complete an Updated Mineral Resource Technical Report (the “Report”) of the Baiyunpu (“BYP”) Gold-Lead-Zinc project (the “Project” or “Relevant Asset”) in Hunan Province, China. The Report is based on a CIM Mineral Resource estimate which meets the requirements of Canadian National Instrument 43-101 (“NI 43-101”) of the Canadian Securities Administrators.

On November 8<sup>th</sup>, 2010, Silvercorp, through its wholly-owned subsidiary Wonder Success Ltd, acquired a 70% equity interest in Xinshao Yunxiang Mining Co. Ltd. (“Yunxiang Mining”, the “Company”), a private mining company in Hunan Province, China, which owns the BYP Gold-Lead-Zinc mine as its primary asset. The mine was previously permitted to extract lead and zinc. The Company hold the surface land rights which cover the main mine areas until 2063 precluding other entities from applying for the surface and sub-surface rights of the mine areas.

RPM understands the Company has submitted the 2018 BYP resource reconciliation report which is required and has been reviewed and filed by the Hunan Provincial Department of Land and Resources. In 2018 the most recent development and utilization report was prepared for the Company by the Hunan Lantian Survey and Design Co. Ltd, a registered Design Institute. An application for renewal of the mining licence was postponed from 2018 to 2023 due to the establishment of an adjacent natural scenic area which overlapped a portion of the licence area. After the inflection points of the mining licence were adjusted to ensure the tenement boundary did not impinge on the natural scenic area, the mining licence renewal application was planned to be submitted in late 2024 including the extraction of gold in addition to lead and zinc.

The following terms of reference are used in the Technical Report:

- “Silvercorp”, the “Client” refer to Silvercorp Metals Inc.
- Yunxiang Mining, the “Company” refers to Xinshao Yunxiang Mining Co. Ltd
- “RPM” refers to RPMGlobal Asia Limited and its representatives.
- “Project” refers to the BYP gold-lead-zinc deposit located in south central China.
- Gold grade is described in terms of grams per dry metric ton (g/t), lead and zinc grades as a percent (%) with tonnage stated in dry metric tons.
- Resource definitions are as set forth in the “Canadian Institute of Mining, Metallurgy and Petroleum, CIM Standards on Mineral Resource and Mineral Reserves – Definitions and Guidelines” adopted by the CIM Council on 10<sup>th</sup> May, 2014.

### 2.2 Source of Information

The primary source documents for this Report were:

- BYP Gold-Lead-Zinc Property, NI 43-101 Technical Report, P R Stephenson, AMC Mining Consultants (Canada) Ltd, June 2012.
- BYP Gold-Lead-Zinc Property, NI 43-101 Technical Report, Bob Dennis, Tony Cameron and Song Huang, RPMGlobal Asia Limited, April 2019.
- “BYP Au-Pb-Zn Project”, Mining License (4300002012063210125603).
- Mining licence Inflection points’ coordinates adjustment document for Baiyunpu Lead-Zinc-Gold Mine, Xinshao County, Hunan Province, Hunan Provincial Geological and Mineral Exploration and Development Bureau Team 407, March 2022.
- Drilling database – supplied in multiple Access databases which include collar, assay, survey and lithology data:
  - Baiyunpu.mdb

- BYP.mdb
- Previous 3D geological models
  - gold.dtm and pbznd.dtm
- Underground developments models
  - 16 underground developments models. (1XJ, 2XJ, 150, 200, 232, 240, 252+, 252XPD, 261, 279, 336, 336CKQ, 336XPD, MXJ, SJ, TFTJ.dxf)
- Depletion areas models
  - 63 depletion models for Au and 1 depletion model for Pb & Zn
- Topography:
  - Detailed topographic survey points and smoothed contour lines were provided by Silvercorp and surveyed by DGPS total station in UTM WGS84 Datum as of 2012. As there has been no surface mining activity between 2012 and 2024, the topography model is still considered suitable for the 2024 resource estimation update.

## 2.3 Participants

The latest site visit was carried out over March 26<sup>th</sup> and 27<sup>th</sup>, 2024 by RPM consultant Mr Song Huang. Mr Tony Cameron supervised the work of RPM staff and edited or reviewed all portions of the final report.

Project participants included:

- Tony Cameron, Principal Mining Engineer, (Beijing)
- Song Huang, Senior Geology consultant, (Beijing)
- Rodney Graham, Geologist / Manager Mongolia (Ulaanbaatar)
- Philippe Baudry, Executive General Manager, (Sydney)

Details of the participants' relevant experience are outlined in **Appendix B**.

## 2.4 Limitations and Exclusions

The review was based on various reports, plans and tabulations provided by the Client or the Company either directly from the mine site and other offices, or from reports by other organizations whose work is the property of the Company. The Company has not advised RPM of any material change, or event likely to cause material change, to the operations or forecasts since the date of asset inspections.

The work undertaken for this report is that required an independent technical review of the information, coupled with such inspections as the participants considered appropriate to prepare this report.

It specifically excludes all aspects of legal issues, commercial and financing matters, land titles and agreements, except such aspects as may directly influence technical, operational or cost issues and where applicable to the NI 43-101 guidelines.

RPM has specifically excluded making any comments on the competitive position of the Relevant Asset compared with other similar and competing producers around the world. RPM strongly advises that any potential investors make their own comprehensive assessment of both the competitive position of the Relevant Asset in the market, and the fundamental of the uranium markets at large.

## 2.5 Capability and Independence

RPM provides advisory services to the mining and finance sectors. Within its core expertise it provides independent technical reviews, resource evaluation, mining engineering and mine valuation services to the resources and financial services industries.

All opinions, findings and conclusions expressed in this Technical Report are those of RPM and its specialist advisors as outlined in **Section 2.3**.

Drafts of this Report were provided to the Client, but only for the purpose of confirming the accuracy of factual material and the reasonableness of assumptions relied upon in this Technical Report.

RPM has been paid, and has agreed to be paid, professional fees based on a fixed fee basis for its preparation of this Report.

This Technical Report was prepared on behalf of RPM by the signatories to this Technical Report whose experiences are set out in **Appendix B** of this Technical Report. The specialists who contributed to the findings within this Report have each consented to the matters based on their information in the form and context in which it appears.

## 3 Reliance on Other Experts

All Sections of this Report, with the exception of **Section 3** were prepared using information provided by or on behalf of the Client or other third parties and verified by RPM were applicable or based on observations made by RPM.

A list of the reports that contributed to this Report is provided in **Section 27**.

## 4 Property Description and Location

The general location of the Project is shown in **Figure 4-1**.

The Property is located 23 km northwest of Shaoyang city, central Hunan Province, People's Republic of China (**Figure 4-1**). Administratively the Property belongs to Baiyunpu Village, Jukoupu Township, Xinshao County, Shaoyang City (**Figure 4-2**). The Property is located in the central section of the east-west-trending Longshan – Baimashan regional metallogenic zone in central Hunan province. The geographic coordinate's extents are:

- Easting: 111°17'30" ~ 111°19'00", and
- Northing: 27°21'30" ~ 27°23'00"

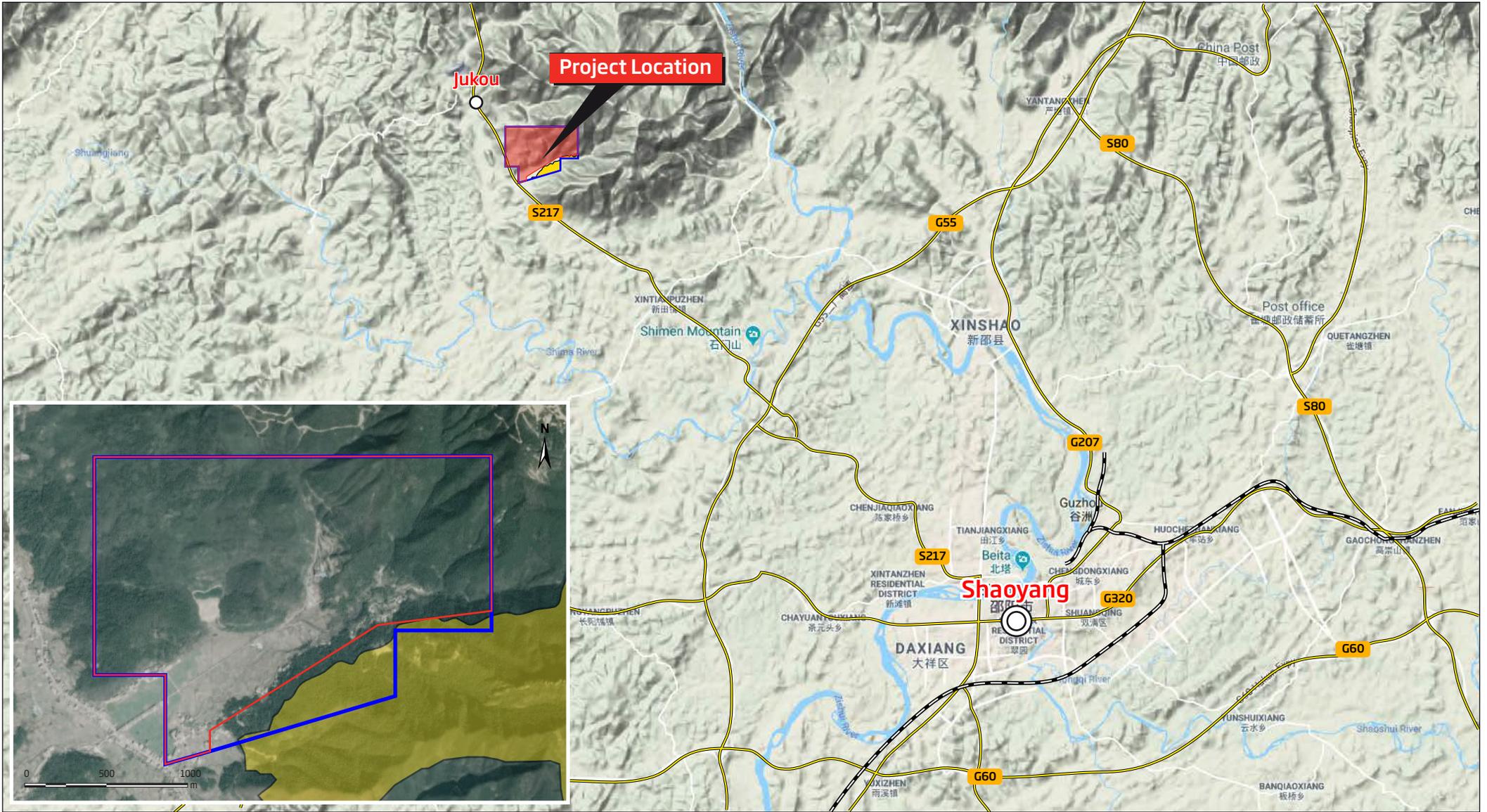
The surface area of the proposed mining license is 3.2350 km<sup>2</sup>.



LEGEND	
	International boundary
	Rivers
	Provincial boundary
	Highways

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT	PROJECT	
	NAME <b>Silvercorp BYP Au-Pb-Zn Project</b>	
	DRAWING <b>General Location Plan</b>	
	FIGURE No. 4-1	PROJECT No. ADV-HK-00157



LEGEND	
	River/ Lake
	Highways
	Railway
	Road
	Current Mining Licence an Inflection Points
	Historical Mining Licence an Inflection Points
	Baishuidong natural scenic area



CLIENT
<b>SILVERCORP METALS INC.</b>

PROJECT		
NAME <b>Silvercorp BYP Au-Pb-Zn Project</b>		
DRAWING <b>Detailed Location Plan</b>		
FIGURE No. 4-2	PROJECT No. ADV-HK-00157	Date June 2024

## 4.1 Property Ownership

The BYP Project is owned by Xinshao Yunxiang Mining Co. Ltd. (“Yunxiang Mining”). The Project is a joint venture consisting of a foreign investor and a local shareholder. In November, 2010, Silvercorp, through a wholly-owned subsidiary, acquired a 70% equity interest in Yunxiang Mining. Silvercorp is a publically-listed company on the main boards of the Toronto and New York Stock Exchanges.

RPM understands the Company has submitted the 2018 BYP resource reconciliation report which is one of the required steps in applying for a renewal of the mining license, and that this reconciliation report has been reviewed and filed by the Hunan Provincial Department of Land and Resources. In 2018 the most recent development and utilization report was prepared for the Company by the Hunan Lantian Survey and Design Co. Ltd, a registered Design Institute. After the inflection points of the mining license were adjusted to ensure the tenement boundary did not impinge on the natural scenic area and had been approved by Hunan Provincial Department of Natural Resources in April 2024, the mining license renewal application is understood to be submitted in late 2024.

The adjusted surface area of the mining license under application is 3.2350km<sup>2</sup>. The revised mining license renewal application includes gold extraction in addition to lead and zinc. RPM understands that, in line with regulations, the royalty for gold extraction will be calculated and paid by the Company prior to granting of the new license. Available details of the new applied mining license are provided in below **Table 4-1**.

**Table 4-1 Application Mining License of Baiyunpu Gold, Lead and Zinc Mine**

Detail/Mine	Baiyunpu Gold, Lead and Zinc Mine
Name of Certificate	PRC Mining Right Permit
Certificate No.	<i>To be updated</i>
Mine Right Holder	Xinshao Yunxiang Mining Co. Ltd
Location	Baiyunpu Village, Jukoupu Town, Xinshao County, Hunan Province
Name of Mine	Baiyunpu Lead, Zinc and Gold Mine, Xinshao County
Company Type	Limited
Mining Mineral Class	Gold, Lead, Zinc,
Mining Method	Underground mining
ROM production capacity	<i>To be updated</i>
Mine Area	3.2350 sq.km
Mining Elevation	490 m asl to -220 m asl
Valid Period	<i>To be updated</i>
Issue Date	<i>To be updated</i>
Issuer	Department of Land and Resources of Hunan Province

*Source: RPM received photocopy of the document.*

The corner coordinates of the mining license are shown below in **Table 4-2**.

Production at the mine is still suspended. There are 3 personnel residents at site who are responsible for daily checks and maintenance of surface infrastructure and activities related to the license renewal process.

**Table 4-2 Coordinates of adjusted Corner Points of BYP Mine (National 2000 Coordinate System)**

Corners	Northing (mN)	Easting (mE)
1	3028245.200	37529351.010
2	3028795.200	37529351.010
3	3028795.200	37528909.218
4	3030139.020	37528909.218
5	3030145.020	37531375.030
6	3029190.581	37531378.504
7	3029103.347	37530671.879
8	3028452.882	37529628.759
9	3028324.642	37529628.759

Source: the information regarding the latest expired mining license is sourced from the documents provided.

## 4.2 Review of Ownership Documents

A photocopy of the business permit, granted on 21<sup>st</sup> September, 2017 was provided to RPM. The business permit remains valid until 21<sup>st</sup> September, 2030. The business permit number is 9143050075804471XE. The Company's location is Baiyunpu Village 12#, Jukoupu Town, Xinshao County. The Company is designated as Limited Liability Company (Taiwan, Hong Kong, Macao and Inland Cooperation).

There are four land utilisation permits (numbers 0002234, 0002235, 0002236 and 0002237). The land areas of the permits are 591 m<sup>2</sup>, 15,746 m<sup>2</sup>, 1,208 m<sup>2</sup>, and 10,092 m<sup>2</sup>, respectively. All of the land utilisation permits were granted on 13<sup>th</sup> September, 2017 by Xinshao County Bureau of National Land and Resources. Their validity period is from 16<sup>th</sup> January, 2013 to 15<sup>th</sup> January, 2063. All the surface land rights are at the main projects areas which the current license application are located.

The Company holds the surface land use rights which cover the main Project areas until 2063 precluding other entities from applying for the surface and sub-surface rights of the mine areas. RPM understands the Company has submitted the 2018 BYP resource reconciliation report which is one of the required steps in applying for a renewal of the mining license, and that this reconciliation report has been reviewed and filed by the Hunan Provincial Department of Land and Resources.

In 2018 the most recent development and utilization report was prepared for the Company by the Hunan Lantian Survey and Design Co. Ltd, a registered Design Institute. In RPM's experience, as the land use right provides the priority right for any subsequent mining license application, there should be no impediment to the granting of a new mining license provided the Client completes the necessary mining and environmental studies as required under the Chinese system.

RPM recommends that potential investors complete their own legal due diligence on this matter.

## 5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

### 5.1 Accessibility and Infrastructure

The Property is located at the southwest margin of the north-east trending Dachengshan mountain range. The southwest side of the range forms the lowest portion of the Property, the other three sides being occupied by high hills. This geographic feature gives the landform an 'armchair-like' morphology.

Elevation ranges from 241 m above sea level in the southwest to 862 m above sea level in the northeast. The north-west, west and southwest parts are a combination of low mountains and hills that formed from erosion of carbonate rocks.

A paved provincial highway, S217 (Shaoyang-Xinhua), runs across the southern margin of the Property. The BYP mill, underground entrance and tailings storage areas are connected to S217 by a 3 km paved road. Shaoyang City, the major local city with a population of more than half a million, is located about 23 km southeast of the Property. Shaoyang is connected to other major cities in Hunan Province and nationwide by rail and expressways. It takes about 3.5 hours to drive by expressway from Shaoyang to the provincial capital city of Changsha, where an airport with both domestic and international flights is located.

### 5.2 Climate and Physiography

The climate is subtropical continental and wet, with an annual average temperature of 17.0°C and an average annual precipitation of 1,353 mm. Maximum temperatures range from a recorded maximum of 39.8°C to a minimum of -10.8°C. The climate is suitable for year-round exploration and mining.

The high mountainous area is covered with forest, while most of the low hills have been developed as farmland. Several streams run through the Property, the surface stream and well water and underground recycled water provide sufficient water for local daily living and industry use. The current 10 kV power supply at the Property is provided from a 35 kV substation at Xintianpu and a 110 kV substation at Jukoupu, respectively. Both are located 11 km from the Property.

Yunxiang Mining has acquired the surface rights to the land covered by the mining permit for mining and processing operations. The district of Shaoyang is one of the most densely populated areas in Hunan province. There is an historical tradition of mining in adjacent areas. Skilled labor is available for all levels of mining and related activities.

## 6 History

### 6.1 Exploration History

The BYP lead-zinc mineralization was discovered in 1977 by 468 Team of Hunan Provincial Geological Bureau and gold mineralization was discovered in 1980 by the Geology Investigation Institute of the Hunan Provincial Geology Bureau. Historically, a series of exploration stages were carried out as outlined below:

- **1971-1977:** General exploration was carried out by 468 Team of Hunan Provincial Geological Bureau, including 217.4 m of adits, 201.35 m of shallow shafts, 2,700 cubic meters of trenching, 84 drill holes for 31,032.58 m and other miscellaneous sample collection and testing activities.
- **1980:** Gold mineralization was discovered in Dachengshan area by the Geology Investigation Institute of Hunan Provincial Geology Bureau.
- **1990-1992:** Prospecting for gold was completed by 418 Team of Hunan Provincial Geology and Mineral Bureau, with 21 holes drilled in the Baiyunchong portion for a total length of 5,121 m. Four mineralized zones (Zones V, VI, VII and XII) were discovered and further explored during this stage.
- **2003-2005:** Yunxiang Mining Company (previously Tianxiang Mining Company) took channel samples, with a total length of 1,290 m, carried out special hydrogeological investigations within an 8 km<sup>2</sup> area, and conducted small-scale processing test work.
- **2006:** The 418 Team of Hunan Provincial Geology and Mineral Bureau prepared "Hunan Province Xinshao County – Baiyunpu Lead-Zinc Mine General Geological Exploration Report " in October 2006, which was approved and filed by the Hunan Provincial Land and Resources Department.
- **2011-2014:** General exploration for gold was completed by Yunxiang Mining Company. The 418 Team of Hunan Provincial Geology and Mineral Bureau verified all exploration works and compiled the 2013 general exploration report. Exploration activities mainly included 65 surface and underground holes with total of 13,517.13 m, and 146 groups of underground channel samples for 4,556.51 m. Two holes drilled in 2014 were not included in the 2013 general exploration report.
- **2017:** Resource & Reserve Reconciliation report. The 418 Team of Hunan Provincial Geology and Mineral Bureau carried out geological verification work including tunnel measurements (1,757 m), tunnel logging (643 m) and supplemental core logging (42 m). In addition, 279 samples were collected from twelve holes completed in 2011-2014 following creation of the joint venture enterprise in 2011. The holes were mainly drilled during tunneling operations for exploration and production, leading to the discoveries of the Zone XIII Pb-Zn, and Zone 3-1 and Zone 4 gold mineralized zones.

### 6.2 Mineral Resource Estimation History

In 2012, the resource estimate for the BYP Au-Pb-Zn deposit was carried out by Yongwei Li, Resource Geologist for Silvercorp, using Surpac software. Independent QP (Ms D Nussipakynova, P.Geo) from AMC checked and verified the resource estimation results for lead, zinc and gold and updated the models in the preparation of the AMC technical report for BYP Gold-Lead-Zinc Property, Hunan Province, China, 2012.

The 2012 resource estimation results and related geological and Block estimation models were reviewed by RPM. It was noted that Inverse Distance Squared (ID<sup>2</sup>) was used for the estimation and variogram analysis was used for determination of search ellipse parameters. All resource was classified as Indicated and Inferred. The final 2012 AMC resource reporting results are as shown below in **Table 6-1** and **Table 6-2**.

In 2018, the resource estimate update for the BYP Au-Pb-Zn deposit was carried out by Song Huang, Resource Geologist from RPM, using Surpac software. Bob Dennis (Executive Consultant, QP) from RPM checked and verified the resource estimation results for lead, zinc and gold and updated the preparation of the RPM technical report for BYP Gold-Lead-Zinc Property, Hunan Province, China, 2019. The final 2019 RPM resource reporting results are as shown below in **Table 6-3** and **Table 6-4**.

**Table 6-1 Mineral Resources for Gold Zones as of December 2011 (AMC)**

Class	Cut Off Grade (g/t)	Tonnes (Mt)	Au (g/t)	Au Metal (koz)
Indicated	1.0	3.51	2.59	292
Inferred	1.0	2.47	1.84	146

**Table 6-2 Mineral Resources for Lead and Zinc Zones as of December 2011 (AMC)**

Class	Cut Off Grade (%)	Tonnes (Mt)	Pb (%)	Zn (%)	Pb Metal (M lb)	Zn Metal (M lb)
Indicated	2.0 Pb+Zn	7.33	1.16	2.52	187	408
Inferred	2.0 Pb+Zn	7.55	0.85	2.75	141	457

**Table 6-3 Mineral Resources for Gold Zones as of December 2019 (RPM, 1.6 g/t Au cut-off)**

Area	Classification	Au Mineral Resource		
		Quantity	Au	Au
		Mt	g/t	koz
Gold area	Measured	2.8	3.0	269
	Indicated	1.5	3.1	149
	Measured & Indicated	4.3	3.1	418
	Inferred	1.3	2.5	109

**Table 6-4 Mineral Resources for Lead&Zinc and Overlap Zones as of December 2019 (RPM, 3% Pb<sub>Eq</sub> cut-off)**

Area	Classification	Pb and Zn Mineral Resource						
		Quantity	Pb	Zn	Au	Pb Metal	Zn Metal	Au Metal
		Mt	%	%	g/t	kt	kt	koz
Lead and Zinc area	Indicated	4.0	0.7	2.3		28	89	
	Inferred	6.1	1.4	3.1		83	187	
Overlap area	Indicated	0.12	1.2	1.7	0.8	2	2	3
	Inferred	0.03	2.7	3.5	1.0	1	1	1

## 6.3 Mining History

The BYP mine was approved in 2006 for production of lead-zinc at an annual rate of 90,000 tpa within a mining area covering 3.6649 sq. km extending from 490 m above sea level to 220 m below sea level.

The mine was developed as an underground mine utilizing drift-adit development and haulage with ore extraction by shrinkage stopping. Modifying factors included an 85% mining recovery rate and 10% for mining loss/dilution. Lead and zinc production commenced in 2006 but was suspended in July 2011 due to prevailing low metal prices.

In August 2010 gold pilot mining began between exploration lines 16-22, where gold mineralized zones had been discovered during the initial prospecting phase of the Project. Gold mineralized zones are presently accessed on four levels at 261 m, 252 m, 232 m, and 200 m. Pilot-scale production was carried out on the 261 m and 252 m levels using 8 m x 4 m shrinkage stopes with paste fill. Gold production was suspended in June 2014 due to low metal prices and the inability to ramp up production rates from pilot level under the mining licence.

Mine access is currently through three adits; No.1 Main Adit, No.1 Auxiliary Adit, No.2 Adit (previously No. 3 Adit), and through the ventilation shaft. The original No.2 Adit was abandoned due to an influx of mud and water.

Total mine production from commencement in 2006 to suspension of operations comprised 307,000 tons of lead-zinc plant feed yielding 1,403 tons of lead and 8,936 tons of zinc at recovered grades of 0.46% Pb and 2.9% Zn (2006 to 2011), plus 221,000 tons of gold plant feed yielding 788 kg of gold at a recovered grade of 3.56 g/t Au. RPM conducted a comparison between the reported depleted numbers with the historical production. The model depletion indicated a slightly lower grade and higher tonnage compared to the historical production likely resulting from factors such as inaccurate underground surveying, mining loss and dilution. Please refer to **Section 14.6.5** for more details.

Production from the mine has been suspended since July 2014. Pumping was halted after the 2018 visit and the underground workings in all levels of the gold mineralized zones are currently flooded.

## 7 Geological Setting and Mineralization

### 7.1 Regional Geology

Tectonically, the Property is located in the central portion of the east-west-trending Baimashan-Longshan uplift belt in central Hunan province, which is part of the accretionary wedge of the subduction zone between the Yangtze and South China Plates. Dominant, deep structures are the NE-trending Chengbu-Taojiang faults, which are parallel to the suture zone between the two plates. From east to west, three secondary dome structures (Longshan, Dachengshan and Baimashan) are equidistantly distributed and form the major structural control of the central Hunan gold-antimony-lead-zinc polymetallic belt.

The regional sedimentary sequence was developed in an aulacogen environment and can be divided into three sub-sequences:

- Precambrian-Cambrian: Glacial and pyroclastic, dark carbonaceous and siliceous sediments, and argillaceous carbonate formations.
- Ordovician-Silurian: Flysch facies sediments.
- Devonian: Terrigenous clastics and carbonate rocks.

Precambrian weakly metamorphosed sandy slate and lower Palaeozoic rocks outcrop within the core areas of the dome structures. Shallow-sea facies sedimentary clastic and carbonate rocks of Middle and Upper Palaeozoic age comprise the flanks of these dome structures. Concealed intrusions have been detected beneath the Dachengshan dome and Baimashan dome. Some of the Precambrian formations contain abundant volcanic material and are geochemically anomalous in gold, antimony, tungsten and arsenic.

The BYP Project is located at the contact between the east to west-striking Baimashan-Longshan uplift belt and the northeast-trending Chengbu-Taojiang tectonic belt, within the southwest-dipping end of the regional Dachengshan anticlinorium (dome structure). The detailed regional geology location map is shown below in **Figure 7-1**.

### 7.2 Project Geology

The Property is located on the south-west plunging end of the Dachengshan anticlinorium (dome structure). The Dachengshan anticlinorium is about 8.5 km wide and 30 km long with an axial trend of NE30°. Lead-zinc-polymetallic mineralization occurs mainly at the southern and northern flanks of the Dachengshan anticlinorium.

Bedrock in the Property area consists predominantly of Devonian clastic and carbonate rocks. Precambrian and Cambrian rocks occur at the eastern margin of the Property and are unconformably overlain by a Middle Devonian sedimentary sequence (**Figure 7-2**). Faults and folds of variable attitudes are well developed and control the distribution of gold, lead and zinc mineralization. No surface outcrop of intrusive rock is observed in the Dachengshan dome structure area, however regional gravity and magnetic data indicate the likely presence of a concealed intrusion at depth. Precambrian and Cambrian rocks exhibit low-grade metamorphism.

#### 7.2.1 Stratigraphy

The stratigraphy on the Property includes Quaternary cover, Devonian metamorphic and sedimentary rocks, Cambrian and Sinian as outlined below:

- Quaternary cover consists of diluvium and alluvium with a thickness ranging from 0 m to 135 m.
- The Middle Devonian rocks are subdivided into three formations:
  - Banshan Formation (D<sub>2b</sub>), composed of sandstone, conglomerate and quartz siltstone cemented with purple-red ferrous clay and with a total thickness of around 320 m.
  - Tiaomajian Formation (D<sub>2t</sub>), a fine-grained clastic sedimentary sequence including quartz sandstone, siltstone, and mudstone with a total thickness of around 200 m. This sequence forms the major host rock for gold mineralization on the Property.

- Qiziqiao Formation (D<sub>2q</sub>), composed of lower, dark-grey marl, calcareous shale and biolithite and upper, thick-bedded massive biolithite, dolomite, and limestone with a total thickness of around 1,000 m. Lead-zinc mineralization in the Property mainly occurs in the middle section of this sequence.
- The Cambrian units consist of dark grey carbonaceous shale, siliceous shale, carbonaceous slate and siliceous rock with a total thickness of around 250 m, conformably overlying the Sinian rocks.
- The Sinian comprises slightly metamorphosed sedimentary rocks distributed in the northeast part of the Property, and is subdivided into the Lower Sinian (Z<sub>1h</sub>) and Upper Sinian (Z<sub>2j</sub> and Z<sub>2l</sub>).

### 7.2.2 Structure

The Property is located at the south-western end of the Dachengshan Anticlinorium. The principle structures within the Property include a northeast-trending secondary fold structure and three sets of post-folding faults which include mostly normal faults and minor reverse faults.

The northeast-trending secondary fold occurs as an anticline with an axial plane striking about 050°, and with dip angles of 30°--50° on the southeast limb and 25°--50° on the northwest limb. The anticline is disrupted by 29 known faults grouped into three sets: northeast, east-west, and northwest. Mineralization occurs within the northwest limb of the secondary anticline, associated with the northeast-trending F5 fault.

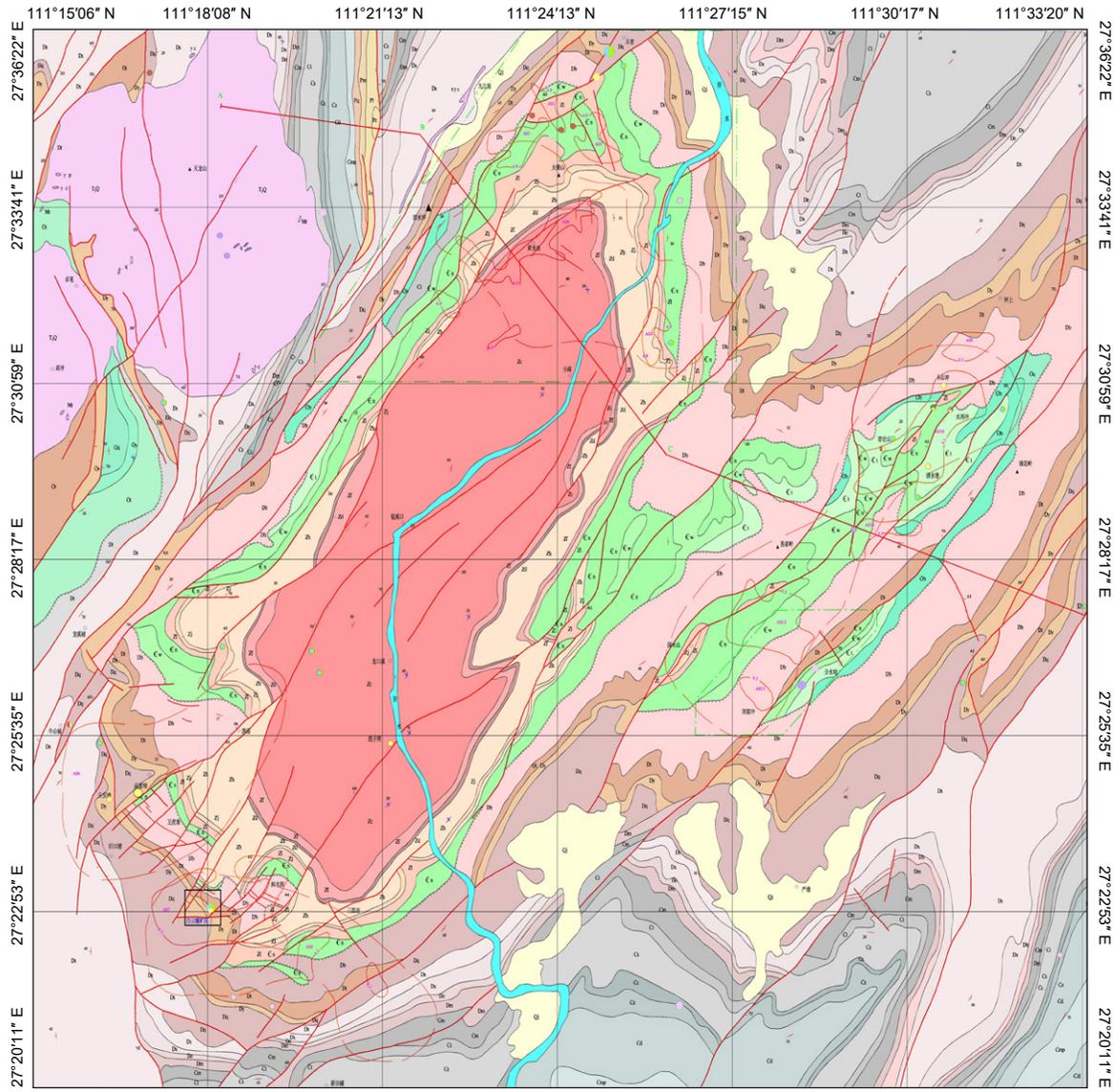
### 7.2.3 Metamorphism and alteration

Metamorphism in the mine area is largely developed in the Precambrian (Sinian) units exposed in the northeastern part of the Property. Hydrothermal alteration is obvious in the country rock enclosing the mineralization, consisting of pyritisation, dolomitisation, silicification, and bleaching. Alteration intensity increases proximal to the mineralization, with lead-zinc zones exhibiting mainly dolomitization, and gold zones exhibiting mainly silicification, pyritisation, and bleaching.

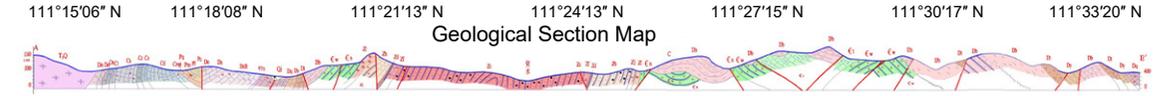
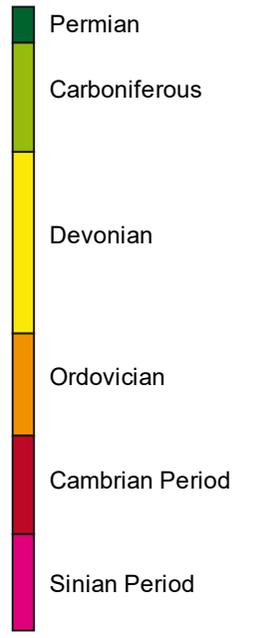
## 7.3 Mineralization

Mineralization consists of gold, lead-zinc, and polymetallic mineralization types. A total of 30 major individual lead-zinc mineralized domains and 11 gold mineralized domains have been recognised to date. They occur in two sub-areas:

- Haitangling (HTL), on the northwest portion of the Property, where lead-zinc zones 6, 7 and 30 are located.
- Baiyunchong (BYC), on the south portion of the Property, where all the gold zones and the other 27 lead-zinc zones are located (**Figure 7-3**).



- T,Q Qiantianling Unit Biotite Adamellite
- 77# Monzonitic Granite Porphyry
- yq Granitic Pegmatite Dikes
- Mr Fine-grained Granite Dikes
- 7 c Granulite Dike
- q Quartz Vein
- 70 Normal Faults
- 30 y Reverse Faults
- Blatt Flaws
- Unclear Faults
- Predicted Faults
- Speculative Unconformity Boundaries
- Speculative Geological Boundaries
- 41 Stratum Orientation
- 43 Stratum Reversed Orientation
- 50 Intrusive Contact Faces Orientation
- Large Size Deposit
- Medium Size Deposit
- Small Size Deposit
- Mineralisation Points
- Gold
- Stibium
- Tungsten
- Iron
- Lead-zinc, Lead-zinc-gold
- Stibium-gold
- Stibium-tungsten-gold
- Copper-tungsten-gold
- Pyrite
- Property Area

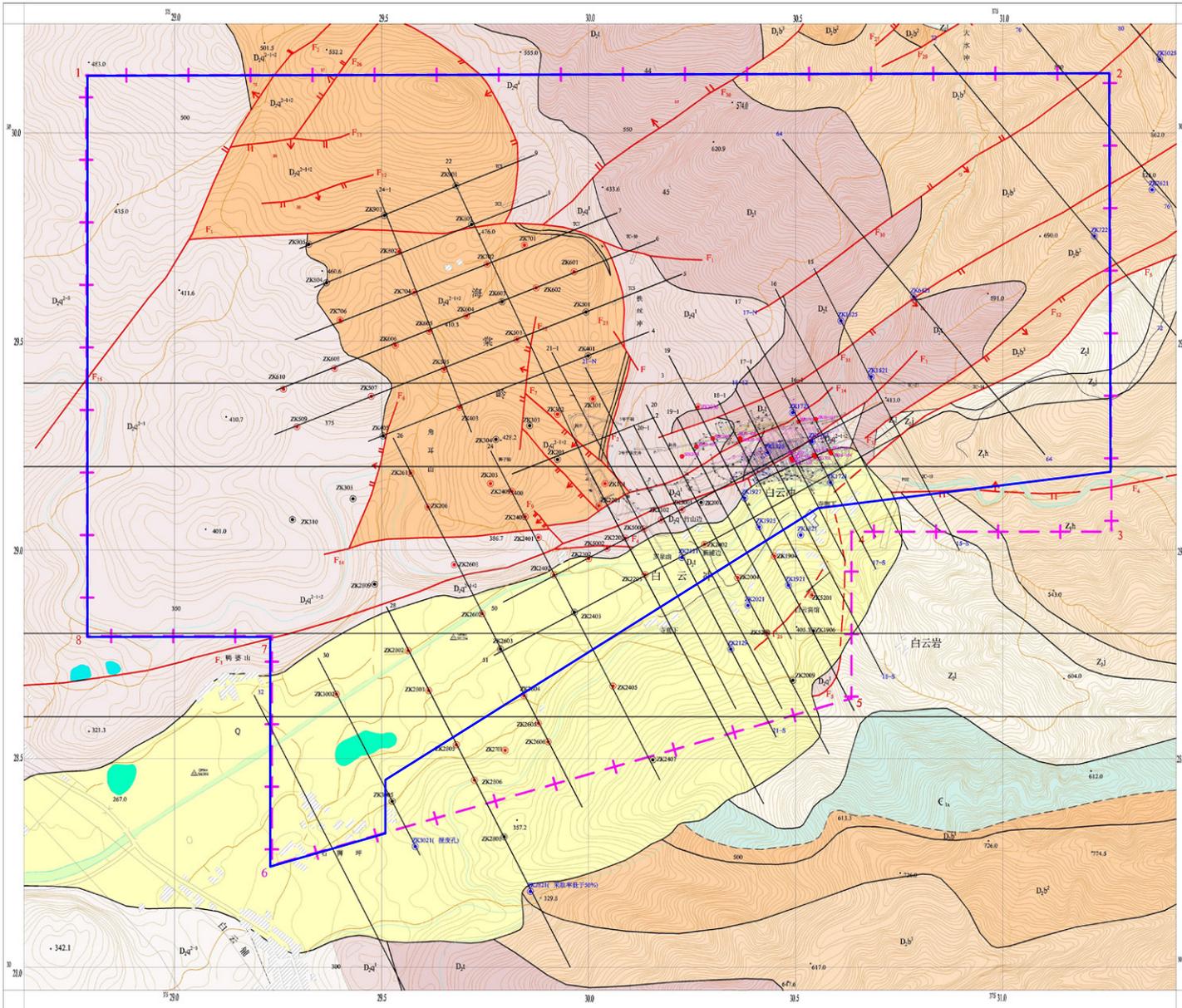


Source: Resource Reserves Reconciliation Report of Baiyun Pu Pb-Zn Mine, Au Xinshao County, Hunan Province, prepared by 418 Team, Hunan Provincial Bureau of Geology and Mineral Resources Exploration and Development (previously Hunan Provincial Geology and Mineral Bureau), May 2018

**LEGEND**

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT		PROJECT	
		NAME	<b>Silvercorp BYP Au-Pb-Zn Project</b>
		DRAWING	Regional Geology Map
FIGURE No.	PROJECT No.	Date	
7-1	ADV-HK-00157	June 2024	



- Quaternary
- Upper Devonian Yutianqiao Formation
- Middle Devonian Qiziqiao Formation Upper Segment 3rd Layer
- Middle Devonian Qiziqiao Formationp Upper Segment 1st And 2nd Layer
- Middle Devonian Qiziqiao Formation Lower Segment
- Middle Devonian Tiaomajian Formation
- Middle Devonian Banshan Formation 3rd Segment
- Middle Devonian Banshan Formation 2nd Segment
- Middle Devonian Banshan Formation 1st Segment
- Lower Cambrian Xiaoyanxi Formation
- Upper Sinian Liuchapo Formation
- Upper Sinian Jinjiajian Formation
- Lower Sinian Hongjiang Formation
- Comformable Geologiucal Boundaries
- Uncomformable Geologiucal Boundaries
- Reverse Faults Numbers and Orientation
- Normal Faults Numbers and Orientation
- Un-identified Faults Numbers and Orientation
- Overburden Pushed Down Faults
- Section Lines and Numbers
- Trenches and Numbers
- Adits and Numbers
- 200m Level Tunnels
- 232m Level Tunnels
- 252m Level Tunnels
- Mineralised Drill Holes
- Un-mineralised Drill Holes
- Gps Control Points and Elevation
- Historical Mining Licence and Inflection Points
- Current Mining Licence and Inflection Points

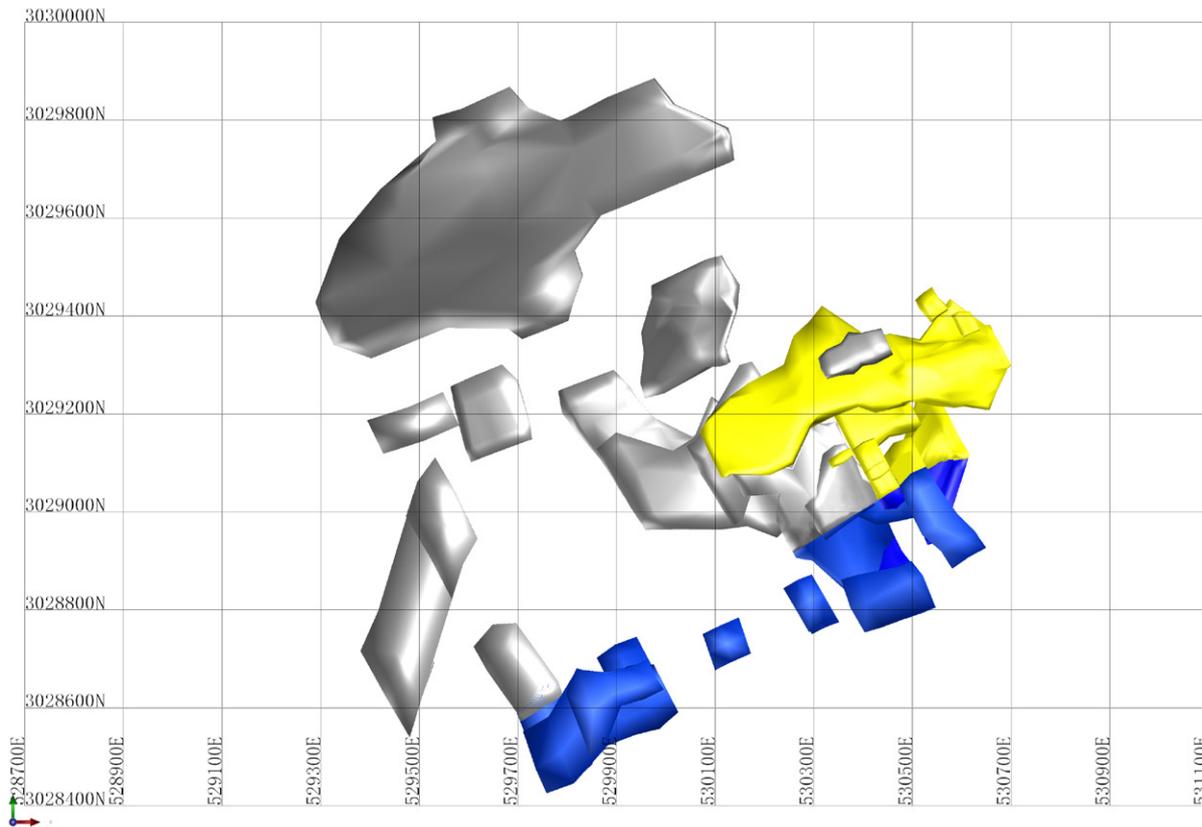
Source: Resource Reserves Reconciliation Report of Baiyun Pu Pb-Zn Mine, Au Xinshao County, Hunan Province, prepared by Team 418, Hunan Provincial Bureau of Geology and Mineral Resources Exploration and Development Bureau, May 2018

**LEGEND**

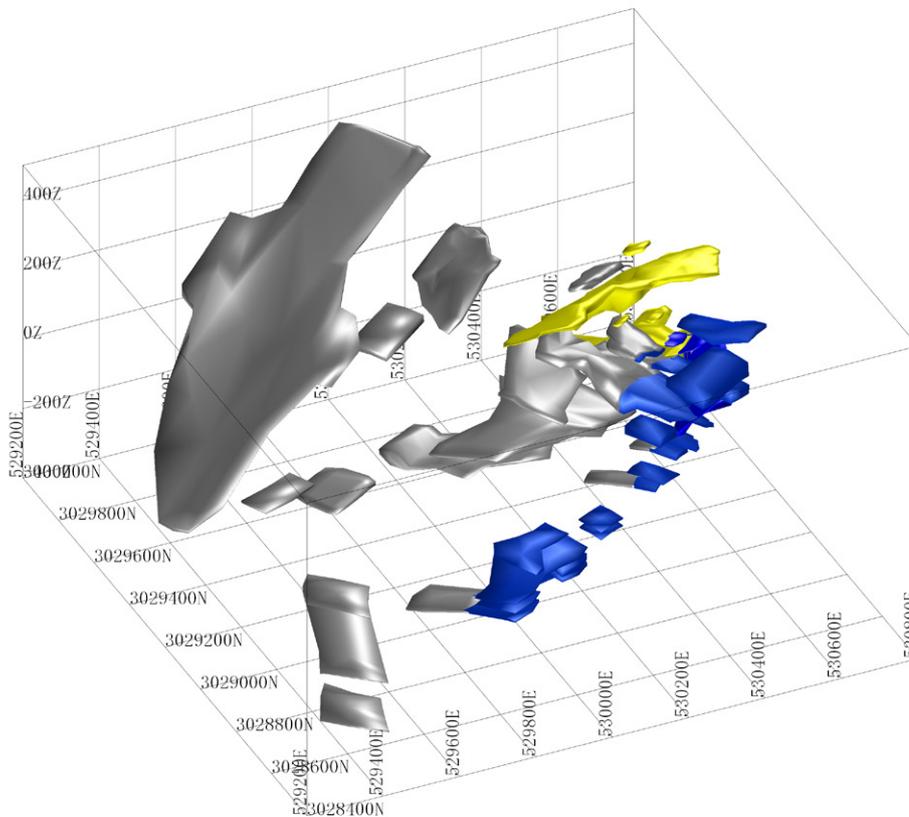
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

<b>CLIENT</b>	<b>PROJECT</b>	
	NAME <b>Silvercorp BYP Au-Pb-Zn Project</b>	
	DRAWING <b>Local Geology Map</b>	
	FIGURE No. 7-2	PROJECT No. ADV-HK-00157

Plan Map



Inclined Map



Note: Wireframes outside of mining licence area were not displayed

**RPM**GLOBAL

LEGEND

- Gold Mineralisation
- Wireframes outside of new licence area
- Lead and Zinc Mineralization

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT

**SILVERCORP** METALS INC.

PROJECT

NAME  
**Silvercorp BYP Au-Pb-Zn Project**

DRAWING  
**Mineralisation Zones on the Property**

FIGURE No.  
7-3

PROJECT No.  
ADV-HK-00157

Date  
June 2024

## 7.3.1 Lead-Zinc Mineralization

All known lead and zinc zones show characteristics of stratabound mineralization and occur within the thickly-bedded carbonate rocks in the upper portion of the Middle Devonian (D<sub>2a</sub>), which overlies the host gold sequence. The occurrence and size of individual zones are controlled and affected by pre-mineralization and post-mineralization faults and folds. Lead and zinc mineralization is closely associated with second-order fractures and fractured zones in the hanging walls of major faults.

Major metallic minerals in the lead-zinc zones include pyrite, sphalerite, galena and boulangerite. Chalcopyrite and clinohedrite occur as accessory minerals. Major gangue minerals are calcite and dolomite, and minor gangue includes barite, quartz and muscovite. Grain sizes of galena and sphalerite range from 0.01 mm to 2 mm. Metallic minerals are unevenly distributed as disseminated and fissure-filling mineralization.

All the mineralized zones occur as stratiform and lenticular bodies in Devonian limestone, dolomite and marl. The general trend of mineralized zones is conformable with the host rock, with a dip angle ranging from 0° to 30°. There is some overlap in defined mineralized bodies, with the relatively steeper Zones 1, 2, 3, 5, 9 and 27 overlapping vertically with the relatively flatter Zones 8, 10, 12, 16, 17 and 19. There is also an apparent overlap relationship with the small volume mineralized Zones 6, 7 and 30 located in the north, with the shallower Zones 6 and 7 being related to the deeper blind Zone 30 along a 45° plunge. Characteristics of individual zones are summarized in **Table 7-1**.

**Table 7-1 Lead-Zinc mineralized Zone Orientation Summary**

Mineralized Zone	Area	Range of Exploration Lines	Occurrences					Elevations Defined (m)
			Strike	Azimuth	Dip	Angle	Plunge	
6,7,30	North	3 - 8	NW	320°-340°	SW	25°-40°	10°-20°	-200 to 500
2,5,9,25	East	19 - 22	NE	60°-70°	NW	0°-10°	0°-15°	32 to 243
22,26,27,28,29	East	19 - 22	NE	60°-70°	NW	0°-10°	0°-10°	110 to 250
1,3,4,20	Central	21 - 26	NE	70°-90°	NW	0°-15°	0°	-90 to 106
21,23,24	Central	22 - 24	NE	60°-70°	NW	0°-10°	0°-10°	-145 to 30
8,10,12,14,15,16,17,19	West	26 - 28	NE	60°-70°	NW	5°-20°	0°	-120 to 40
11,13,18	West	28 - 30	NNE	10°-30°	NWW	0°-10°	0°-5°	-360 to -195

## 7.3.2 Gold Mineralization

Known gold zones occur as stratiform or lenticular zones in fractured clastic rocks in the lower portion of the Middle Devonian sedimentary sequence. The distribution of gold mineralization is structurally controlled by two major NE-trending faults, F3 and F5.

Fine-grained (<1 mm) pyrite is the major host mineral for gold and is commonly unevenly distributed as veinlets or disseminations. Metallic minerals consist of native gold, pyrite, arsenopyrite, sphalerite, galena, siderite, tenorite, and rare stibnite. Major gangue minerals include quartz and sericite. Alteration assemblages and metallic mineral distributions show zonation from proximal silicification with gold and pyrite outward to distal bleaching with arsenopyrite, barite, calcite, and sericite.

Eleven gold zones have been identified. The zones occur at elevations from 40 m to 300 m above sea level. Individual zones range from 50 m to 600 m in length and from 2 m to 50 m in thickness. The average grade of the zones is generally in the range of 1 g/t to 3 g/t Au. The Company's 2011-2014 exploration program further defined an extensive area of mineralization now known as Zone 6, which had previously been considered part of Zone 3 in previous geological reports. Characteristics of the currently known gold mineralization zones are summarised in **Table 7-2**.

**Table 7-2 Gold mineralized Zone Orientation Summary**

Mineralized Zones	Area	Range of Exploration Lines	Occurrences					Elevations Defined (m)
			Strike	Azimuth	Dip	Angle	Plunge	
6	North	17-22	NE	60°-70°	NW	30°-45°	0°-10°	80 to 300
1,10	Northeast	22	NE	60°-70°	NW	30°-45°	0°-10°	200 to 250
11	South	21	NE	55°-65°	NW	40°-50°	0°-10°	60 to 170
3,7,8,9	Central	18-20	NE	50°-80°	NW	30°-45°	10°-20°	40 to 210
2,4,5	Central	20	NE	60°-70°	NW	15°-30°	0°-5°	215 to 272

Zone 6 is the most important gold zone, containing more than 70% of the total estimated gold resource at BYP. Mineralization is hosted in fractured quartz sandstone and siltstone, with faults F3 and F24 forming the hanging wall and F5 forming the footwall. The bulk of Zone 6 is located between lines 17 and 19. It becomes thinner westwards and pinches out between lines 22 and 24.

Zone 3 has a similar orientation to Zone 6 but lies at a lower elevation. All other mineralized zones are currently considered as secondary mineralized zones and are defined by limited drilling. Most of them are located south and southwest of the main gold deposit area.

Based on the 2011-2014 exploration program outcomes, RPM updated the solid models with respect to the 2012 mineralized models. The solid models were re-numbered to maintain consistency with the wireframed object numbers and the defined zone numbers. The solid models have incorporated the exploration data as of December 31, 2018. **Table 7-3** shows how these mineralization zones have been numbered and how the updated solid model numbering relates to the corresponding mineralized zones.

**Table 7-3 Mineralized Zone Numbering by Exploration Stage**

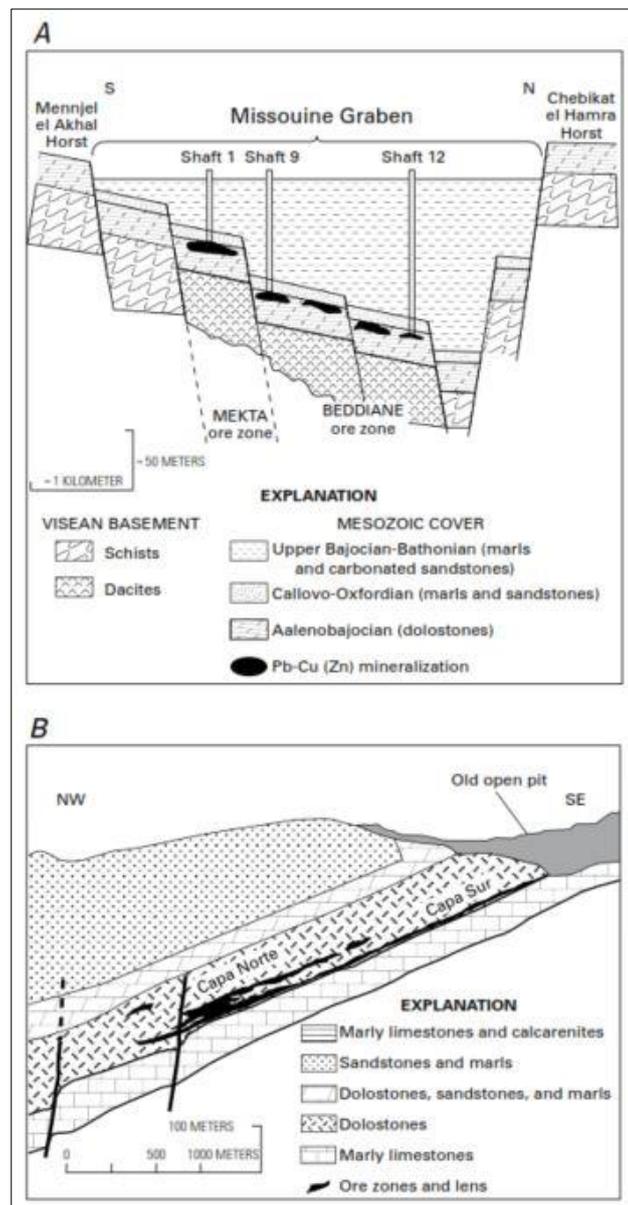
1971 - 1977	1990 - 1992	2003-2006	2011 - 2014	2018 - 2019
<b>Lead-Zinc zones</b>				
Zone 1		Zone 1	Zone 1-2	Zone 6,7,30
Zone 2		Zone 2		
Zone 3		Zone 3	Zone 3-5	Zone 1-5, 9, 20-29, 31
Zones 5, 6, 7, 8	Block 1	Zones 5, 6, 7, 8		
Zone 9	Block 2	Zone 9	Zone 9-10	Zone 8, 10-19
Zone 10		Zone 10		
Zone 11	Block 3	Zone 12	Zone 12	
<b>Gold zones</b>				
	Zone 3	Zones 3, 3-1, 3-2	Gold Zone 3	Zone 1,6,10
	Zone 1	Zones 1, 1-4	Gold Zone 1	Zone 2-5,7-9
		Zones 1-1, 1-2, 1-3	Gold Zone 5	Zone 11

## 8 Deposit Types

### 8.1 Mississippi Valley Type (MVT) Deposits

Based on the current understanding of the geology, the lead-zinc mineralization is classified as a carbonate-hosted Mississippi Valley Type (“MVT”) deposit containing minor silver and cadmium. Carbonate-hosted lead-zinc deposits are important and highly valuable concentrations of lead and zinc sulfide ores hosted within carbonate (limestone, marl, and dolomite) formations and which share a common genetic origin. These mineralized bodies tend to be compact, fairly uniform plug-like or pipe-like replacements of their host carbonate sequences and as such can be very high grade (Figure 8-1). They also tend to be coarse; typically having good process recoveries. This classification of ore deposits is known as Mississippi Valley Type or MVT ore deposits, after a number of famous such deposits along the Mississippi River in the United States, where such ores were first recognized. These include the famed Southeast Missouri Lead District of southeastern Missouri, and deposits in northeast Iowa, southwest Wisconsin, and northwest Illinois.

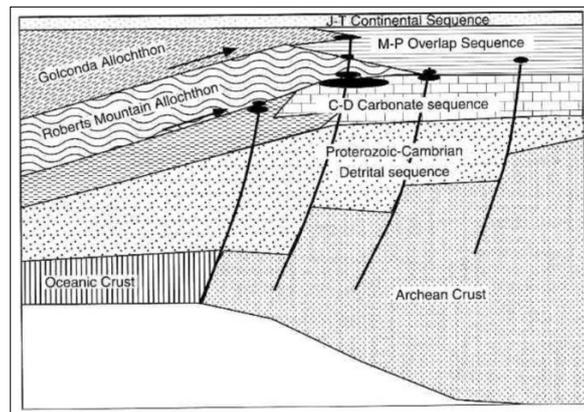
Figure 8-1 Deposit Models of MVT Deposits from Morocco (A) and Spain (B) (Leach et al, 2010)



## 8.2 Carlin Type Deposits

The gold mineralization is classified as a Carlin Style fine grained disseminated gold deposit with both stratigraphic and structural controls, and with mercury, arsenic, and antimony as the main indicator elements (**Figure 8-2**). Carlin-type gold deposits are sediment-hosted disseminated gold deposits. These deposits are characterized by invisible (typically microscopic and/or dissolved) gold in pyrite and arsenopyrite. This kind of gold is called "Invisible Gold", as it can only be found through chemical analysis. The deposit is named after the Carlin mine, the first large deposit of this type discovered in the Carlin Trend, Nevada.

**Figure 8-2 Carlin Type Deposit Formation (Hofstra and Cline, 2000)**



## 9 Exploration

A summary of the activity, including methodologies and results, for the exploration work carried out between December 1971 and December 2018 on the BYP Au-Pb-Zn Project mining license area is outlined below.

### 9.1 Geological Mapping

During the 1971-1977 general exploration stage, the 468 team carried out basic geological mapping on the BYP Au-Pb-Zn exploration license area following discovery of lead and zinc mineralization. The completed geological mapping works included an 8.88 sq. km topographic survey, 19 sq. km 1:5,000 scale geological mapping and 2.9 sq. km 1:2,000 scale geological mapping.

During the 1990-1992 prospecting stage, the 418 team carried out basic geological mapping on the BYP Au-Pb-Zn exploration license area. The completed geological mapping works included an updated 28.5 sq. km topographic survey and an updated 5.44 sq. km 1:2,000 scale topographic survey.

No significant mapping was carried out during the more recent stages of exploration.

### 9.2 Geochemical Surveys

During the 1990-1992 prospecting stage, the 418 team carried out a series of geochemical surveys including a 40 sq. km stream sediment survey and a 5.5 sq. km secondary halo survey, both mainly targeting gold mineralization.

### 9.3 Geophysical Surveys

During the 1971-1977 general exploration stage, the 468 team carried out a 1.3 sq. km induced polarization intermediate gradient survey.

### 9.4 Tunneling Program

Since commencement of the Project, a total of 10.656 m of adit and shaft channel samples were taken (**Table 9-1**).

**Table 9-1 Historical Tunneling Program**

Period	Company	Exploration works
1971-1977	468 Team of Hunan Provincial Geological Bureau	2,700 m <sup>3</sup> of trench sampling, 201.35 m of shallow shaft sampling and 217.4 m of channel sampling
1990-1992	418 Team of Hunan Provincial Geology and Mineral Bureau	6,200 m <sup>3</sup> of trench sampling, 286.1 m of channel sampling
2003-2006	Yunxiang Mining company	1,290 m of channel sampling
2006-2008	Yunxiang Mining company	4,114.53 m of channel sampling
2011-2014	Yunxiang Mining company	4,546.51 m of channel sampling at different elevations ranging from 150 m to 336 m

Significant results from the 2011-2014 underground sampling program are summarised in **Table 9-2**.

**Table 9-2 Significant Intersections from Underground Sampling**

Drill hole		Depth from	Depth to	Length (m)	Weighted Au grade (g/t)	Mineralized zone
200-CM18-SCM		10.4	12.40	2.00	1.3	6
	And	18.8	20.80	2.00	0.9	6
	And	22.8	36.60	13.80	2.9	6
252-CM18-1-NCM		7.6	15.60	8.00	2.0	6
232-CM16-1-SCM		2.20	17.50	15.30	3.4	6
	And	21.50	24.00	2.50	0.6	6
	And	24.00	32.60	8.60	4.8	6
	And	32.60	36.10	3.50	0.7	6
232-CM16-1-NCM		0.90	7.10	6.20	0.7	6
	And	9.10	19.10	10.00	8.8	6
	And	19.10	22.10	3.00	0.9	6
232-CM17-SCM		0.80	30.00	29.20	3.9	6
232-CM17-NCM		0.50	32.70	32.20	2.2	10
232-CM17-1		0.2	21.10	20.90	3.5	6
	And	25.1	43.10	18.00	2.1	6
	And	47.1	63.10	16.00	1.4	6
	And	67.1	75.30	8.20	1.4	6
232-CM18-NCM		7.6	11.60	4.00	0.7	6
	And	14.7	25.60	10.90	1.4	6
	And	29.5	40.60	11.10	3.4	6
200-CM18-1-SCM		1.00	7.00	6.00	2.6	6
232-18-1-NCM		8.40	9.40	1.00	1.0	6
	And	11.40	15.10	3.70	0.8	6
	And	22.80	43.70	20.90	5.5	6
232-18-1-SCM		5.2	11.20	6.00	1.2	6
	And	11.2	57.90	46.70	2.6	6
	And	57.9	69.50	11.60	1.4	6
200-SZK18-101		11.67	39.94	28.27	3.2	6
	And	42.47	67.05	24.58	1.3	6
200-SZK18-102		8.96	12.95	3.99	1.0	6
	And	16.85	30.91	14.06	2.3	6
	And	32.18	43.49	11.31	1.9	6
	And	54.68	64.21	9.53	1.3	6
ZK1938		333.21	334.71	1.50	1.2	6
252-CM19	And	6.00	18.00	12.00	1.2	6
CM19-1		27.70	35.70	8.00	0.5	6
	And	45.70	49.70	4.00	0.8	6
	And	68.10	74.10	6.00	1.1	6
252-CM20		8.00	26.00	18.00	2.1	6
CM22		19.6	24.80	5.20	2.1	6

## 10 Drilling

The total drilling which is mainly comprised of pre-2011 and post-2011 stages are summarized in below **Table 10-1**.

**Table 10-1 Historical Drilling Programs**

Period	Company	Exploration works
1971-1977	468 Team of Hunan Provincial Geological Bureau	84 drill holes of 31,032.58 m
1990-1992	418 Team of Hunan Provincial Geology and Mineral Bureau	21 drill holes of 5,120.62 m
2011-2014	Yunxiang Mining company	64 drill holes of 13,334.92 m

Detailed information of all historical drilling are introduced in the sections below.

### 10.1 Pre-2011 Drilling

Following the discovery of epithermal lead and zinc mineralization on the Property in 1977, geological mapping, geophysical and geochemical survey works were conducted by different geology bureaus. Geological drilling was also conducted at an early stage of exploration for the BYP Au-Pb-Zn deposit area.

During the 1971-1977 general exploration stage, the 418 team completed 84 drill holes for 31,032.58 m. As the main gold mineralization was still not identified by the 1971-1977 exploration stage, all drill holes were designed to test the lead and zinc target areas. Among all the 84 holes, 80 holes were retained and 4 holes were not included in the provided database, RPM confirmed with the clients that they were un-mineralized and located outside the extents of the lead-zinc deposit and therefore have no material impact on the resource model.

During the 1990-1992 prospecting stage, the 418 team completed 21 drill holes for 5,120.62 m. Most of the 21 holes were designed to test the gold mineralization. The main mineralization Zone 6 was firstly defined from exploration lines 17 and 19. Among all the 21 holes, 7 holes intersected the gold mineralized zone successfully while 14 holes were un-mineralized and not included in the current database. RPM confirmed with the clients that they were un-mineralized and located outside the extents of the gold deposit and therefore have no material impact on the resource model.

Between 1992 and 2011, no drilling was conducted.

Significant intercepts of gold, lead and zinc mineralization from the pre-2011 drilling programs are summarized in **Table 10-2**.

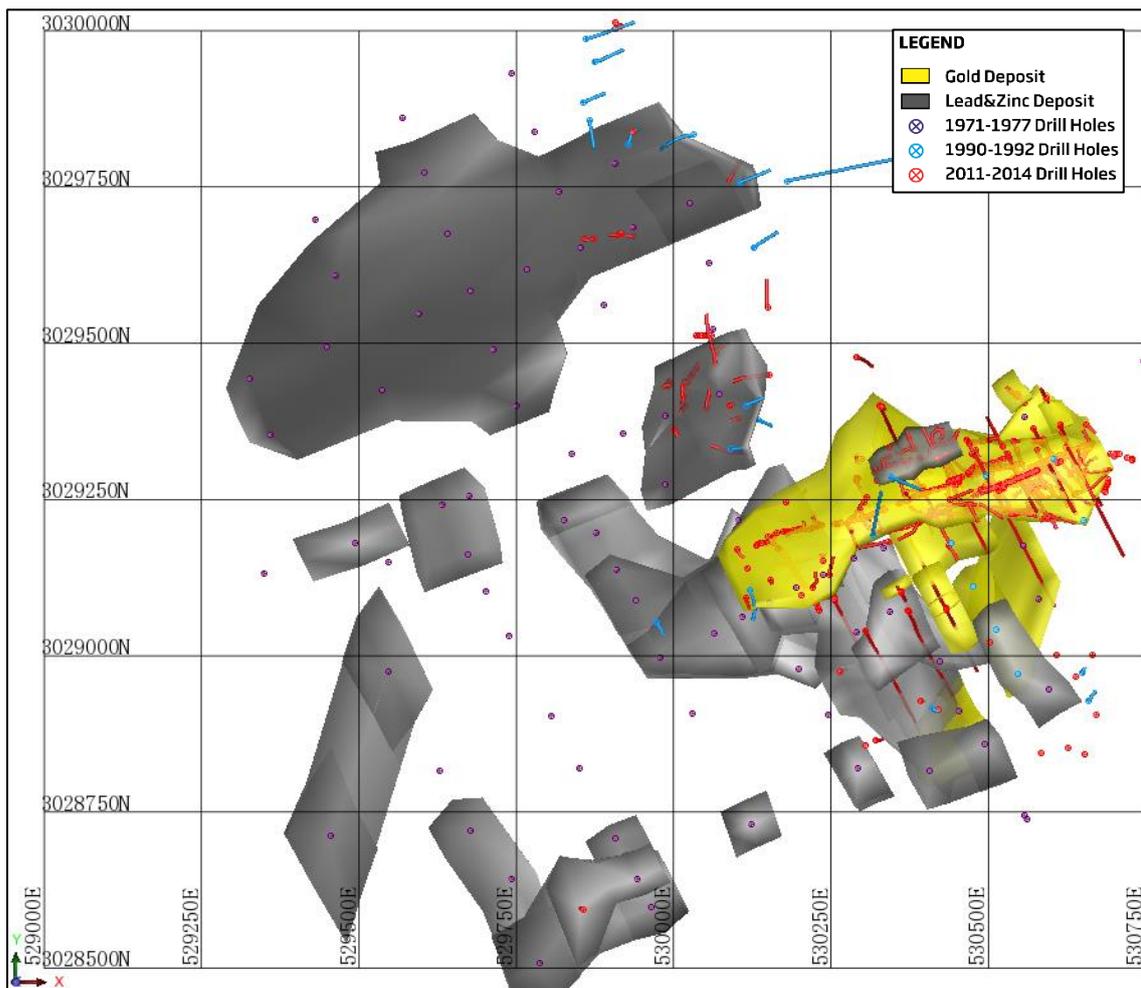
### 10.2 Post-2011 Drilling

The Company commenced a surface and underground core drilling program in March, 2011. The program included 42 surface drill holes totaling 10,812.14 m, 5 underground holes for 797.14 m in 2012, 15 underground holes for 1,583.16 m in 2013 and 2 underground holes for 141.88 m in 2014. The 2011-2014 drilling programs included a total of 64 holes for 13,334.92 m. **Figure 10-1** is a plan map of the 2011-2014 drilling relative to previous holes.

**Table 10-2 Significant Intercepts of the Pre-2011 Drilling Programs**

Drill hole		Depth from	Depth to	Length(m)	Weighted Au grade (g/t)	Mineralized zone
ZK1721		59.5	65.95	6.45	0.9	6
ZK1723		63.56	115.19	51.63	2.6	6
ZK1725		168.62	176.44	7.82	3.3	6
ZK1801		184.5	198.39	13.89	4.5	7
ZK1821		147.16	149.71	2.55	0.9	7
ZK1825		75.75	120.51	44.76	2.3	6
ZK1904		140.5	146.64	6.14	2.5	9
	And	185.28	186.83	1.55	3.2	7
ZK1921		185.43	190.31	4.88	2.3	7
	And	205.53	210.28	4.75	2.1	8
ZK1925		155.98	162.08	6.1	1.6	9
	And	215.4	216.6	1.2	0.6	7
ZK1927		155.71	179.58	23.87	1.7	3
ZK2021		220.07	224.12	4.05	0.5	11
ZK2102		26.3	45.05	18.75	1.2	6
ZK2129		222.1	224.1	2	0.8	11
ZK5202		195.73	220.66	24.93	1.3	11

**Figure 10-1 Plan Map Showing Collar Locations by Exploration Stage**



Three surface and four underground drill rigs were utilized during the 2011-2014 drilling program. Surface drilling was designed to test the extension of known mineralization, improve the understanding of the geology and increase the gold and lead-zinc resource base by identifying new mineralized zones along strike and down dip. Underground drilling was designed to provide detailed understanding of the existing gold zones, test the margins of these zones and explore for extensions. At the completion of the program, surface drilling was at a spacing of 100 m by 100 m and 100 m by 50 m in selected areas, while underground drilling was spaced at 10 m to 50 m within gold Zone 3. **Table 10-3** summarizes significant intercepts of gold, lead and zinc mineralization in the 2011-2014 drilling program.

**Table 10-3 Significant Intercepts of the 2011-2014 Drilling Program**

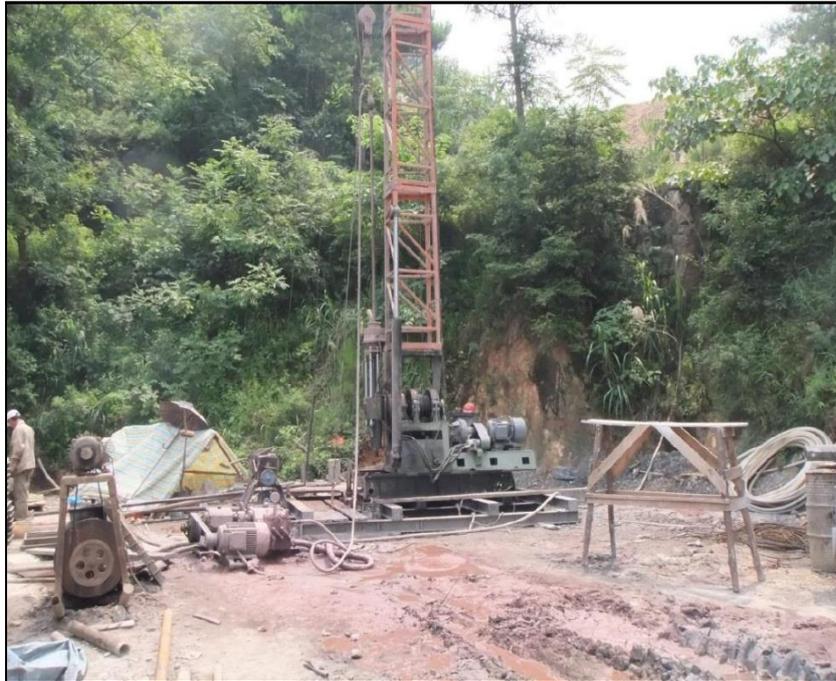
Drill hole		Depth from	Depth to	Length(m)	Weighted Au grade (g/t)	Mineralized zone
SZK1901		0.00	10.47	10.47	2.3	6
		10.47	26.77	16.30	1.6	6
		32.00	70.00	38.00	3.2	6
	And	70.00	81.94	11.94	1.7	6
SZK2001		0.00	13.46	201.23	2.3	6
ZK16-101		0.00	23.36	23.36	1.1	6
ZK16-104		0.00	12.42	12.42	1.2	6
ZK16-106		0.00	24.80	24.80	3.5	6
ZK16-107		0.00	69.50	69.50	5.0	6
	Including	29.63	57.24	27.61	6.4	6
ZK16-109		0.00	15.60	15.60	1.4	6
ZK16-110		41.65	57.80	16.15	2.4	6
ZK16-111		35.85	43.39	7.54	3.1	1
ZK1701		0	30.94	30.94	3.3	6
	Including	0	17.67	17.67	5.3	6
ZK1702		0	24.58	24.58	5.6	6
	Including	0	16.95	16.95	6.5	6
ZK1703		0	38.28	38.28	4.3	6
	Including	0	14.83	14.83	7.2	6
ZK1704		0	29.33	29.33	4.1	6
	Including	0	8.49	8.49	7	6
ZK1706		0.00	22.25	22.25	7.4	6
ZK1710		42.03	49.05	7.02	1.4	6
ZK17-101		0	47.29	47.29	4.5	6
	Including	0	12.19	12.19	6.2	6
	Including	20.34	34.34	14.00	7.1	6
ZK17-105		0	46.67	46.67	4.6	6
	Including	0	23.35	23.35	7.3	6
ZK1711		67.11	72.18	5.07	2.5	6
ZK17-111		0	30.48	30.48	5.2	6
	Including	0	17.03	17.03	7.3	6
zk17-113		0.00	75.05	75.05	4.7	6
	Including	66.20	75.05	8.85	8.4	6
	And	89.70	102.50	12.80	2.0	6
ZK17-114		0	59.37	59.37	4.1	6
	Including	0	20.75	20.75	7.5	6
ZK17-115		0	80.12	80.12	3.6	6

Drill hole		Depth from	Depth to	Length(m)	Weighted Au grade (g/t)	Mineralized zone
	Including	0	26.99	26.99	6.7	6
ZK1723		63.56	107.51	43.95	3.0	6
ZK1725		171.30	176.44	5.14	4.6	6
ZK1801		184.50	198.39	13.89	4.6	7
ZK1802		0.00	39.11	39.11	1.1	6
	And	39.11	48.38	9.27	2.8	6
ZK1808		0.00	11.12	11.12	1.9	6
ZK1810		0.00	11.65	11.65	1.5	6
	And	179.07	187.25	8.18	1.1	6
ZK18-101		14.41	37.91	23.50	1.2	6
	And	41.49	54.56	13.07	0.7	6
	And	103.28	112.73	9.45	1.0	6
	And	112.73	122.23	9.50	0.6	6
	And	128.66	137.99	9.33	0.7	6
ZK18-102		0.00	7.24	7.24	1.1	6
	And	13.78	19.29	5.51	0.6	6
	And	19.29	36.92	17.63	2.4	6
	And	38.84	55.72	16.88	0.7	6
	And	85.32	97.87	12.55	0.7	6
ZK18-103		8.55	47.73	39.18	2.6	6
	And	116.50	133.86	17.36	0.6	6
ZK18-105		0.00	12.98	12.98	2.2	6
		36.04	58.61	22.57	2.8	6
	And	58.61	65.87	7.26	0.6	6
ZK18-106		19.74	25.30	5.56	1.5	6
ZK1825		75.75	120.51	44.76	2.3	6
ZK1904		124.49	146.64	22.15	2.5	9
ZK19-102		27.60	33.60	6.00	1.7	5
	And	66.30	80.80	14.50	2.4	5
	And	86.95	92.35	5.40	1.6	5
ZK19-103		33.43	35.37	274.00	1.2	5
	And	85.94	93.32	227.50	2.0	5
	And	102.97	104.85	213.00	2.4	5
	And	160.76	162.68	162.00	2.8	5
ZK19-104		76.74	80.15	233.70	1.8	2
	And	111.96	114.16	202.00	0.8	2
ZK19-105		6.35	18.92	181.33	3.4	6
	And	18.92	34.51	165.75	1.0	6
	And	58.27	60.45	139.81	1.1	6
ZK1911		5.75	32.09	26.34	1.1	6
	And	32.09	48.39	16.30	3.2	6
ZK1912		0.00	7.57	7.57	0.7	6
	And	7.57	13.20	5.63	1.9	6
	And	21.20	28.70	7.50	1.1	6
	And	28.70	43.25	14.55	3.4	6

Drill hole		Depth from	Depth to	Length(m)	Weighted Au grade (g/t)	Mineralized zone
	And	144.28	150.56	6.28	0.5	6
ZK1913		0.00	9.62	9.62	1.2	6
	And	9.62	17.95	8.33	2.5	6
	And	26.76	37.53	10.77	0.8	6
	And	37.53	46.88	9.35	5.8	6
ZK1927		160.32	179.58	19.26	2.1	3
ZK1936		286.39	298.24	11.85	1.8	6
	Including	288.39	296.24	7.85	2.3	6
ZK1936		615.30	623.30	8.00	1.5	6
ZK1937		251.45	260.20	8.75	1.4	6
	And	324.80	332.16	7.36	1.3	6
ZK1939		0.00	23.96	23.96	3.3	6
ZK1940		66.61	94.04	27.43	2.7	6
ZK2021		256.64	267.44	72.00	0.7	11
ZK2023		255.80	284.65	75.20	0.7	11
	Including	269.81	276.81	82.60	0.6	11
ZK2032		44.12	47.35	266.70	2.1	4
	And	49.80	51.83	262.70	1.4	4
ZK2102		41.50	45.05	279.70	2.8	6
ZK2108		288.07	312.75	59.50	0.6	11
ZK2110		43.37	45.77	276.40	1.4	6
ZK21-101		6.47	18.62	297.00	3.5	6
	And	218.30	221.15	95.20	0.4	6
ZK2111		108.38	110.38	215.00	1.5	6
ZK2210		38.64	41.64	285.20	2.1	6
	And	53.20	55.09	271.70	2.2	6
	And	58.49	61.12	265.50	3.3	6

Two drill rigs, models XY-42T and YDX-3L, were used in surface drilling. **Figure 10-2** shows the XY-42T drill rig at hole ZK2110. Each surface hole started with a 110 mm bit, reducing to a 75 mm bit when bedrock was reached. Underground holes were drilled with an underground XY-4 drilling rig equipped with a 75 mm bit (**Figure 10-3**). NQ sized core was recovered from both the surface and underground drilling programs.

**Figure 10-2 Drill Rig XY-42T at Hole ZK2110**



Source: 2012 NI 43-101 technical report for BYP Gold-Lead-Zinc property, Hunan Province, China, AMC Mining Consultants (Canada) Ltd, P R Stephenson, H A Smith et al, 30 June 2012

**Figure 10-3 Underground Drill Rig XY-4**



Source: 2012 NI 43-101 technical report for BYP Gold-Lead-Zinc property, Hunan Province, China, AMC Mining Consultants (Canada) Ltd, P R Stephenson, H A Smith et al, 30 June 2012

Total drill core recovery, including mineralized zones, was 85% or greater. Down-hole surveys were conducted every 50 m with a compass inclinometer. The down-hole survey was completed by drillers under the supervision of the project geologist. Drill hole depth was calibrated every 100 m and an error tolerance of <0.1% was required. After completion, the drill hole was sealed with cement and the drill hole number, depth, and date of completion were marked on the concrete.

The Company's geologists inspected the drilling progress and drill core on a daily basis and recorded geology, alteration and mineralization of the drill cores. Detailed geological logging was undertaken at a temporary core storage location, and sample boundaries were marked on the core according to the intensity and variation of visible mineralization and alteration. One or two samples were collected on either side of the visually mineralized rock to confirm the extent of mineralization. Sample lengths depended on the actual length of intersection and the variation of mineralization over the interval. Two meters core samples were routinely collected across continuous zones.

Drill core from the 2011-2014 drilling program was carefully stacked, temporarily, on open ground while the core storage facility was under construction. An example of carefully stacked core and a labelled core box is shown in **Figure 10-4**.

**Figure 10-4 Core Storage Room and Core Boxes**

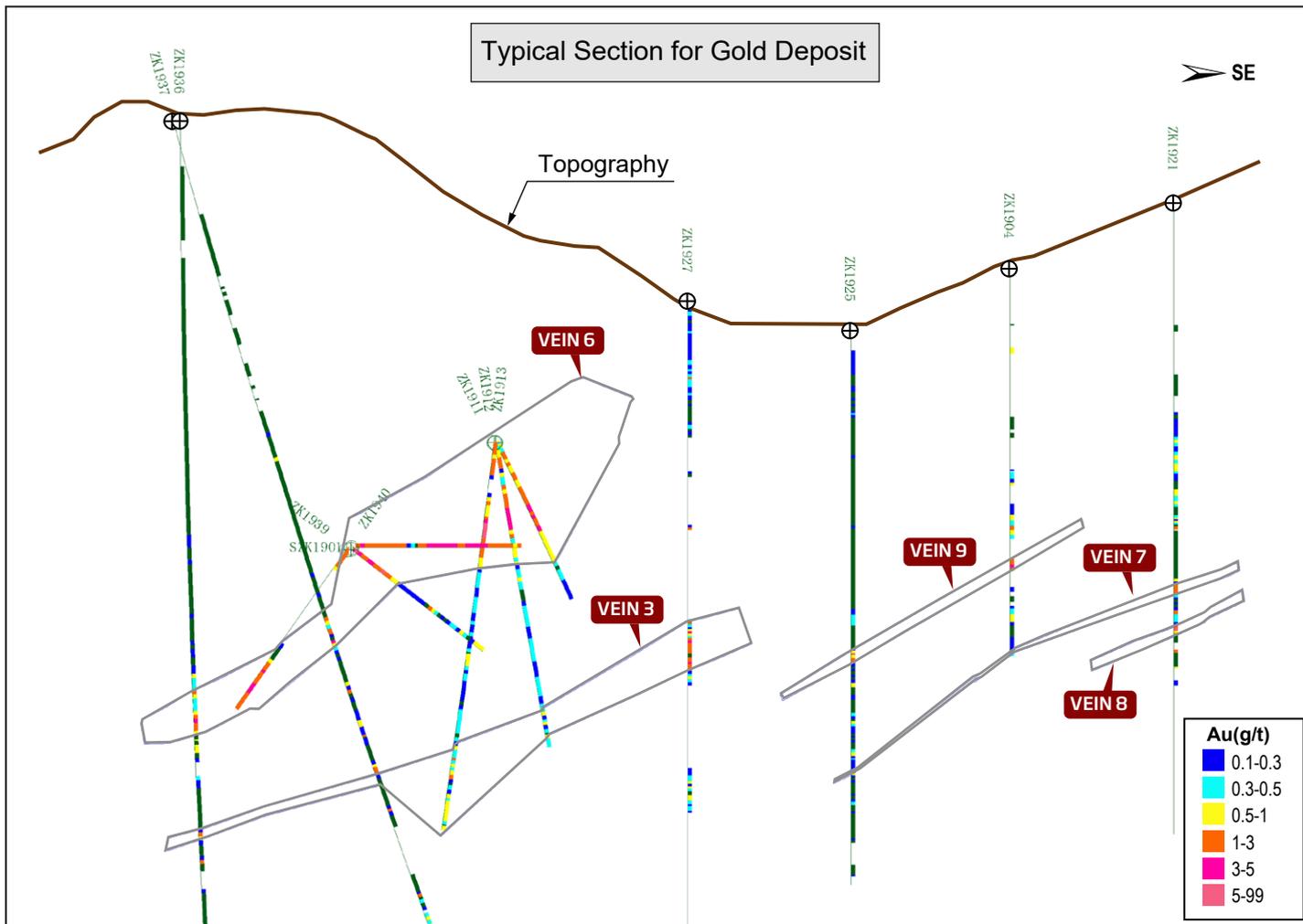


Mineralization wireframes were updated based on the final results of the 64 holes completed in the 2011-2014 drilling program. RPM notes that 22 holes were drilled subsequent to the 2011 resource estimate (**Table 6-1** and **Table 6-2**), including 18 holes targeting gold mineralization and four holes targeting lead-zinc mineralization. The Zone 6 gold wireframe interpretation was extended downward significantly, and the Zone 3 gold mineralization was more accurately defined. Zones 2, 3, and 29 were intersected by four new holes, with wireframes being adjusted accordingly.

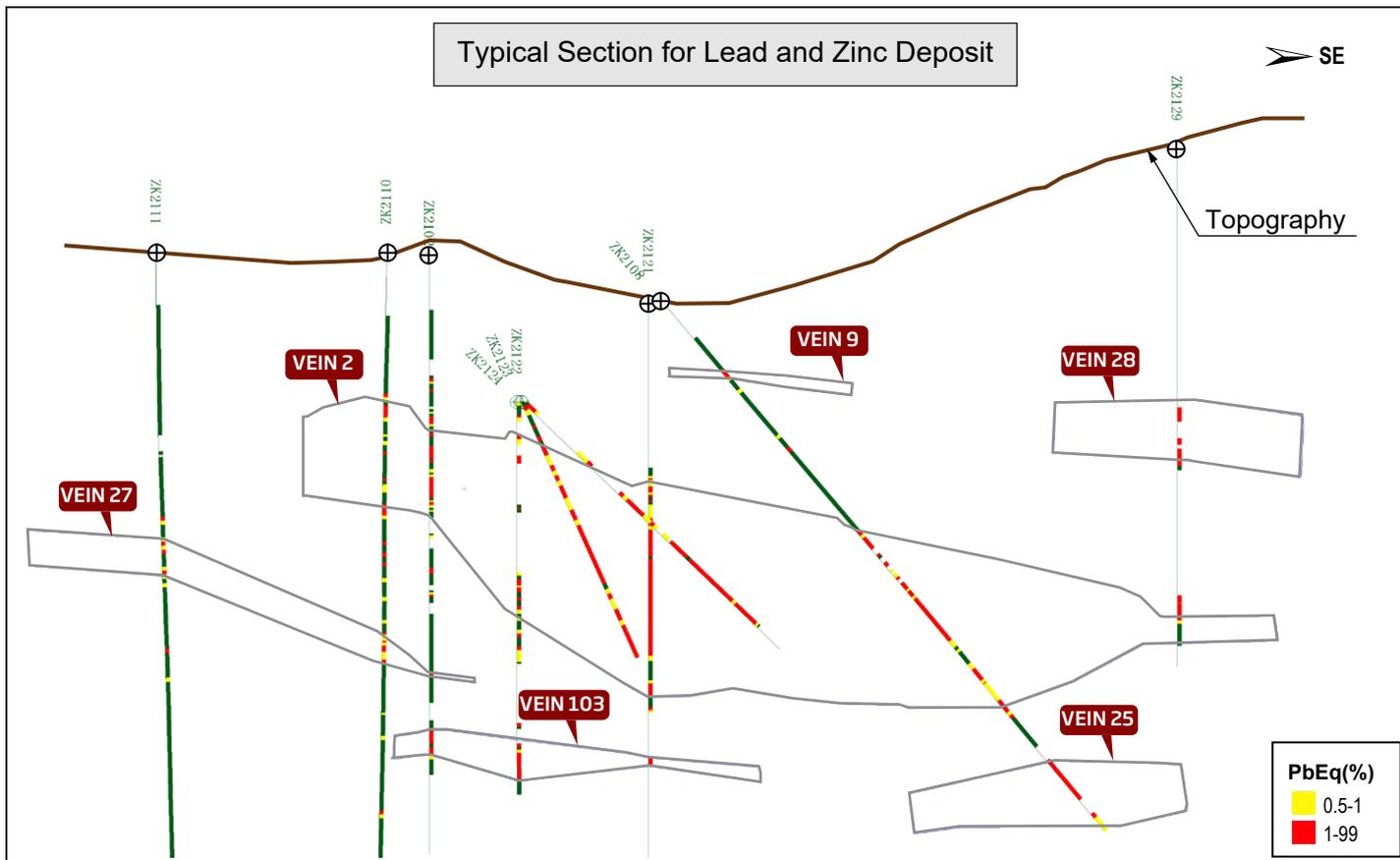
**Figure 10-5** shows typical sections where the previous geological interpretation was impacted by the new drilling.

Between 2015 and 2024, no additional drilling program was completed within the mining licence area.

### Typical Section for Gold Deposit



### Typical Section for Lead and Zinc Deposit



**RPM**GLOBAL

**LEGEND**

- ⊕ Drill Hole
- Mineralisation

**CLIENT**

**SILVERCORP** METALS INC.

**PROJECT**

NAME  
**Silvercorp BYP Au-Pb-Zn Project**

DRAWING  
**Typical Section for Gold-Lead-Zinc Deposit**

FIGURE No.  
10-5

PROJECT No.  
ADV-HK-00157

Date  
June 2024

## 11 Sample Preparation, Analysis and Security

The details of the sample preparation, analytical methodology and sample security protocols in place for channel and core samples from the exploration programs carried out to date on the BYP deposit area are included in this section.

### 11.1 Sample collection

For 1971-1977 and 1990-1992 exploration stages, all samples were taken from trench, test pits and drill cores, onsite logging was completed with detailed lithology, alteration, structure and texture descriptions. The overall and average drill hole sample recovery was more than 75% and 80% respectively.

For the 2011-2014 exploration stage, locations of channel samples were selected and marked by the geologist across the exposed mineralization zone along the drift and cross-cut tunnels. Under the supervision of the Company's project geologist, samplers cut a 5 cm wide and 3 cm deep channel across the mineralization zone with an electric cutter, and then excavated material within the channel with a hammer and chisel. Excavated chip material was collected in a cloth bag and the sample number was written on the wall and on the bag upon completion of each individual sample. The length of individual samples depended on the continuity and intensity of mineralization. Most of the channel samples were 2 m in length and weighed between 8 to 10 kg.

Drill hole cores were logged and marked for sampling by a geologist with detailed logging information; the overall average core recoveries were more than 85%. The core was then cut into two halves with a diamond rock saw. One half was marked with the sample number and replaced in the core box for long term storage and future reference. The other half was broken up and bagged for analysis. The sample location was marked on the core box and a sample tag with sample number, date, from and to meterage, total length, drill rig used, and sampler's name was enclosed in a transparent plastic bag and stapled to the core box. The weight of a 2 m core sample was around 5 kg.

### 11.2 Sample Handling Protocols and Security

For the 1971-1977 and 1990-1992 exploration stages, all bagged channel and core samples were kept in secure storage rooms and then shipped to the laboratory for preparation and assay.

For the 2011-2014 exploration stage, the bagged channel and core samples were kept in a secure room which could only be accessed by the designated person until the shipment for analysis was completed. A professional courier company was hired for the shipment of samples from the Property to the ALS-Chemex (ALS) Laboratory in Guangzhou. Upon receiving the samples, the laboratory reported sample conditions to the Company's project geologist. Remediation measures were taken immediately if there was any damage or possible contamination reported from the laboratory.

### 11.3 Assay Laboratory Sample Preparation and Analysis

The samples collected in 1971-1977 general exploration stage were sent to the 468 team laboratory for sample preparation with procedures which mainly include crushing to 5mm, division, pulverizing to 0.85mm, division, dried at 80°C for 2 – 3 hours, pulverizing to 0.147mm, 40 – 50 g samples were taken for assay. Pb, Zn and Cu elements were assayed with LP-55 polarization spectrometer; S was assayed with the titration method.

The samples collected in 1990-1992 prospecting stage were sent to the Hunan Xiangzhong Geology Institute for sample preparation with a procedure which included crushing to 1mm, division, pulverizing to 0.074mm; half for duplicate samples and half for assay. AAS and the quinhydrone volumetric method were used for Au assay; AAS and polarography methods were used for Pb and Zn assay.

The samples collected by the Company in its 2011-2014 exploration stage were sent to the ALS Laboratory in Guangzhou ("ALS"), which has ISO and Chinese government accreditation.

At ALS, all samples were handled as per the below procedures:

- All samples were dried for 12 to 24 hours at 65°C.
- Whole samples were crushed with a jaw crusher until 70% of the crushed sample passed sieves of size fraction of minus 10 mesh (2 mm).
- Crushed samples were multi-split to 300 g for pulverizing, with the coarse reject kept at the laboratory.
- The 300 g sample was pulverized with a vibratory pulverizer, and 85% of the sample was pulverized to minus 200 mesh (0.075 mm).

Samples from the gold zones were analyzed by standard fire assay fusion with an AAS finish procedure to analyze lower grade samples from 0.005 to 10 g/t Au, and fire assay fusion-electronic analytical balance method to analyze high grade samples from 0.05 to 1,000 g/t Au. Samples from lead-zinc and polymetallic zones were analyzed for Ag, As, Cu, Pb and Zn using a four-acid digestion and ICP-AES finish with detection ranges of 1 to 1,500 g/t for Ag, 0.001 to 30% for Zn, 0.001 to 30% for As, 0.001 to 40% for Cu and 0.001 to 20% for Pb.

## 11.4 Quality Control Data

### 11.4.1 Quality Control Data (Pre 2011)

There are two major exploration stages prior to 2011 for which the QA/QC samples were taken.

During the 1971-1977 general exploration stage carried out by 468 team, internal samples and external samples were taken for QA/QC procedures.

A total of 174 internal samples (3.5% of total assay results) were taken to 468 team laboratory for check analysis. The reproducibility or qualification rates were 93.1% and 95.1% for Pb and Zn respectively.

During the 1990-1992 prospecting stage for gold which was conducted by 418 team, internal and external samples were again used as the main control for QA/QC procedures.

A total of 1,224 internal samples (56.9 % of total assay results) were taken to 418 team laboratory for check analysis. The reproducibility or qualification rates were 99.35%, 97.37% and 99.07% for Au, Pb and Zn, respectively.

A total of 24 external samples for Au, 12 external samples for Pb and 12 external samples for Zn, were taken to the Hunan Provincial Mineral Test Institute Laboratory for check analysis (1% of total assay results). The reproducibility or qualification rates were 99.17%, 91.67% and 100% for Au, Pb and Zn respectively.

For these two exploration stages, no original re-assay documents were provided, only the general exploration and prospecting reports were available. The QA/QC quality assessments were based on the related sections in the two reports.

A total of 80 external samples were taken to the Hunan Provincial Geological Laboratory for check analysis (1.5% of total assay results). The reproducibility or qualification rates were greater than 90% for both Pb and Zn.

RPM has reviewed the available information on the historical QA/QC and is satisfied that the sample/assay information from the exploration programs undertaken in the 1971-1977 and 1990-1992 stages are of acceptable quality for resource estimation purposes.

### 11.4.2 Quality Control Data (Post 2011)

For the 2011-2014 exploration program, the Company routinely inserted Certified Reference Materials ("CRMs") and blanks into each batch of 40 samples to monitor sample preparation and assay procedures. External check assays were obtained by sending around 10% of the mineralized pulps and 5% of non-mineralized pulps to the Zhengzhou Laboratory of the Henan Nonferrous Metals Exploration Institute. The Zhengzhou laboratory has ISO and Chinese government accreditation. The Company's program comprised 1,643 QA/QC samples which were inserted into a sequence of 7,141 core and channel samples. The QA/QC samples included 108 CRMs, 158 blanks, 550 internal check samples, 771 external check samples and 56 field duplicate samples.

## 11.4.3 CRM and Blanks (Post 2011)

Nine CRMs, sourced from the Institute of Geophysical and Geochemical Exploration (“IGGE”) and CDN Resource Laboratories Ltd. were used in the 2011-2014 QA/QC program as external standards inserted by the Company prior to submittal to ALS. The nine CRMs used were GAu-18a, GAu-22, GSO-1, GSO-2, GSO-4, CDN-GS-3J, CDN-GS-ME-16, CDN-ME-5 and CDN-ME-1206. All CRMs complied with China’s national standards and were approved by the General Administration of Quality Supervision, Inspection and Quarantine of the People’s Republic of China. Detailed information including expected values, standard deviations and numbers of samples are listed in **Table 11-1**.

**Table 11-1 Details of External Standards Used for the Project Post 2011**

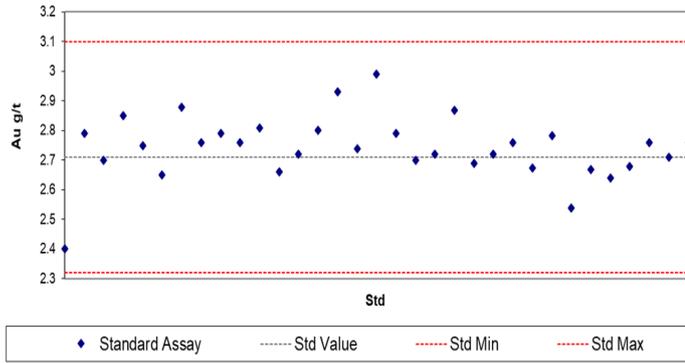
CRM	Expected CRM Values and Error Limits			No. of Assays/ element	
	Au g/t	Pb %	Zn %	Au	Pb, Zn
GAu-18a	10.6±0.4			10	
GAu-22	5.72±0.22			7	
CDN-GS-3J	2.71±0.26			33	
CDN-ME-16	1.48±0.14			3	
CDN-ME-5	1.07±0.14	2.13±0.12	0.58±0.02	8	10
CDN-ME-1206	2.61±0.20	0.801±0.044	2.38±0.15	8	3
GSO-1		0.43±0.02	0.83±0.04		8
GSO-2		2.17±0.07	4.26±0.15		14
GSO-4		5.13±0.08	13.9±0.2		4

RPM was provided with 108 results for Au, Pb and Zn for the nine CRMs used for the Project (**Figure 11-1 to Figure 11-3**).

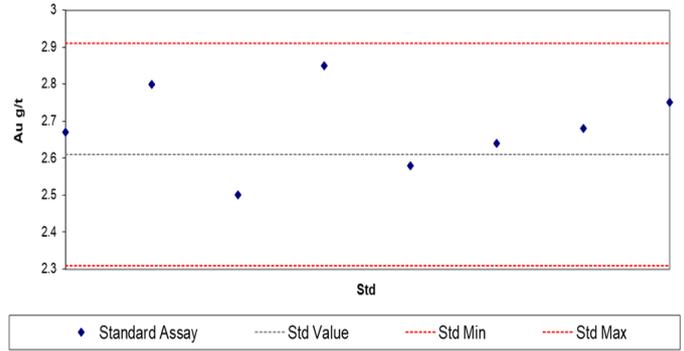
Analysis of the plots indicate an acceptable range of variability over time and between sample batches for Au, Pb and Zn with most results within the upper and lower control limits (three standard deviations). RPM notes there are insufficient samples for standard CDN-ME-16, CDN-ME-1206 and GSO-4. RPM notes that no material assay bias can be observed highlighting the good performance of the ALS laboratory.

Blank material was made from barren limestone and siltstone collected within the Property. The blank samples were randomly inserted into each batch of samples and then sent to the ALS Laboratory for assay. External blank samples were inserted into the sample batches by the Company staff during the 2011-2014 exploration stage to monitor for possible contamination problems during sample preparation and analysis. A total of 158 valid blank samples were available for analysis (**Figure 11-4 to Figure 11-6**). Four blank samples were detected with anomalous values of gold; no blank samples were detected with anomalous values of lead or zinc. Overall, the assay results of the blank materials are considered acceptable.

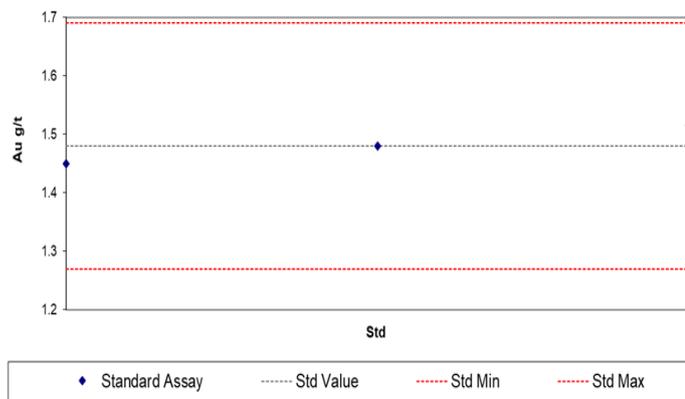
Au Analysis of Standard **CDN-GS-3J**



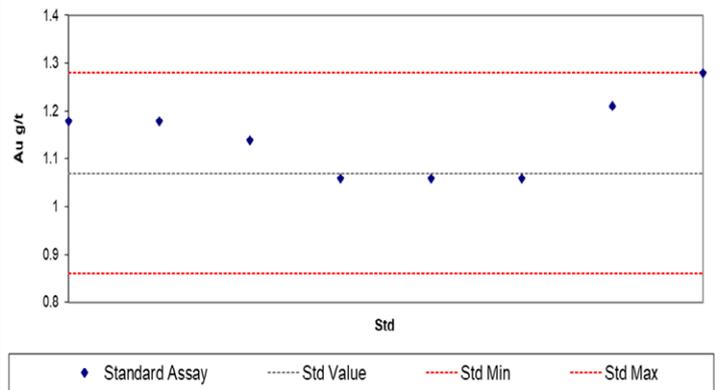
Au Analysis of Standard **CDN-ME-1206**



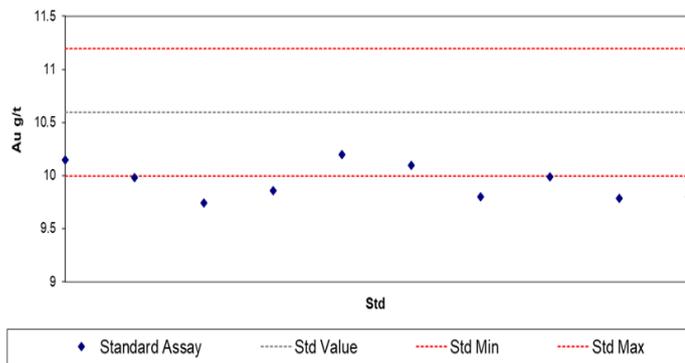
Au Analysis of Standard **CDN-ME-16**



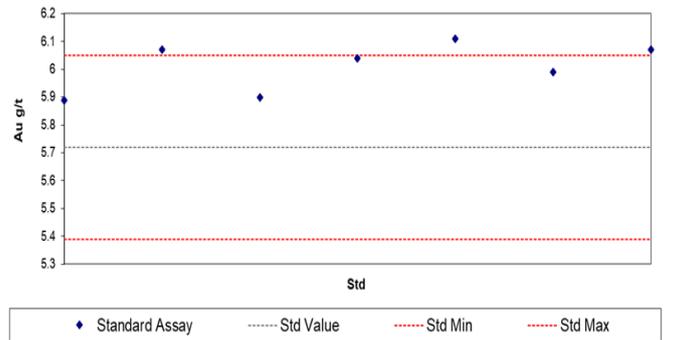
Au Analysis of Standard **CDN-ME-5**



Au Analysis of Standard **Gau-18a**



Au Analysis of Standard **Gau-22**



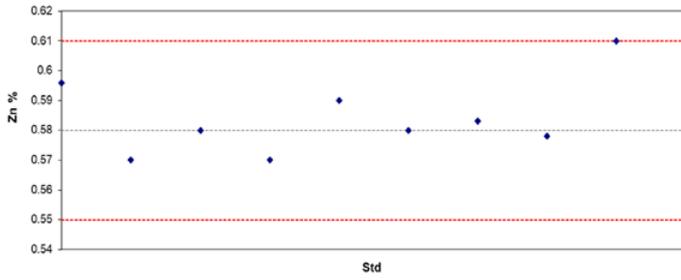
LEGEND

---

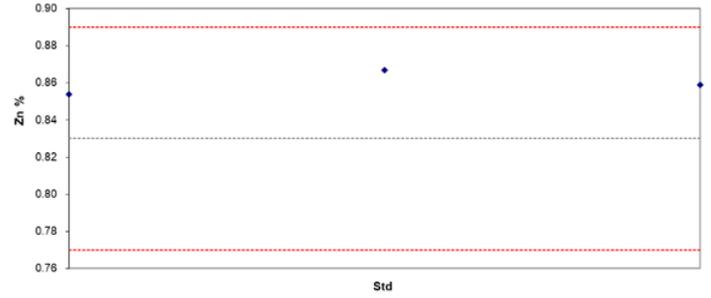
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT <b>SILVERCORP METALS INC.</b>	PROJECT NAME <b>Silvercorp BYP Au-Pb-Zn Project</b>	
	DRAWING <b>ALS Internal Standards Results for Au (Post 2011)</b>	
FIGURE No. 11-1	PROJECT No. ADV-HK-00157	Date June 2024

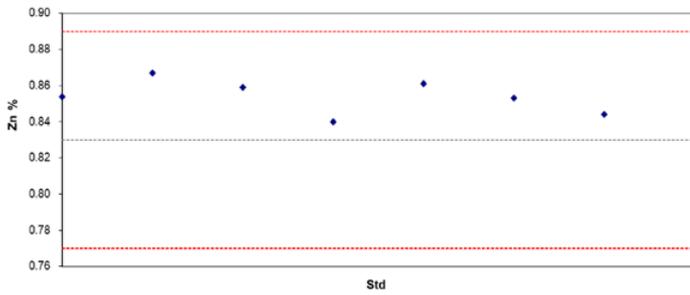
Zn Analysis of Standard **CDN-ME-5**



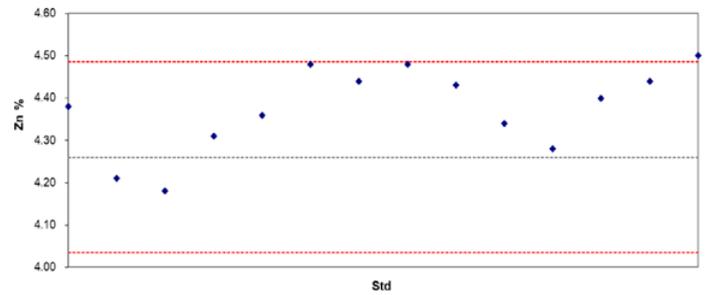
Zn Analysis of Standard **CDN-ME-1206**



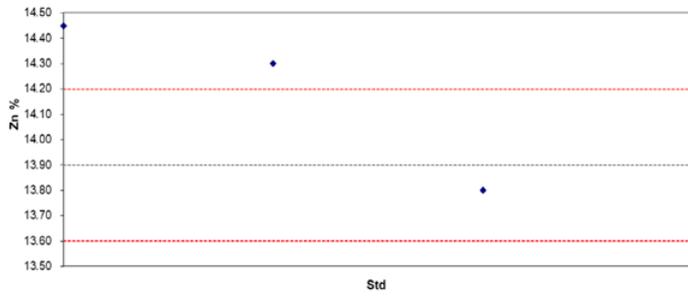
Zn Analysis of Standard **GSO-1**



Zn Analysis of Standard **GSO-2**



Zn Analysis of Standard **GSO-4**



**RPM**GLOBAL

LEGEND

- ◆ Standard Assay
- Std Value
- Std Min
- Std Max

CLIENT

**SILVERCORP** METALS INC.

PROJECT

NAME  
**Silvercorp BYP Au-Pb-Zn Project**

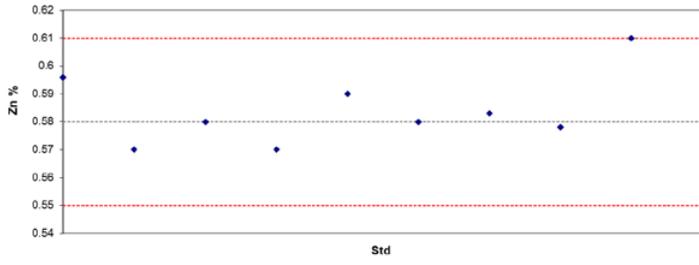
DRAWING  
**ALS External Standards Results for Pb Post 2011**

FIGURE No.  
11-2

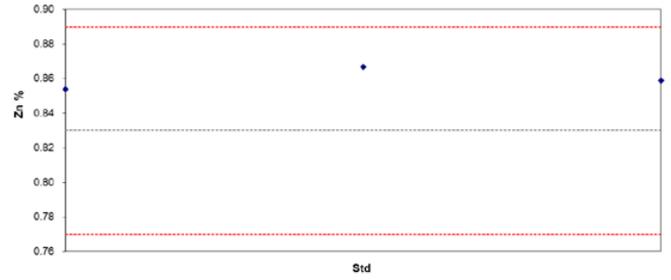
PROJECT No.  
ADV-HK-00157

Date  
June 2024

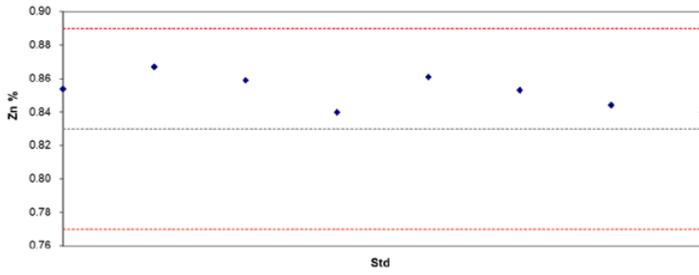
Zn Analysis of Standard **CDN-ME-5**



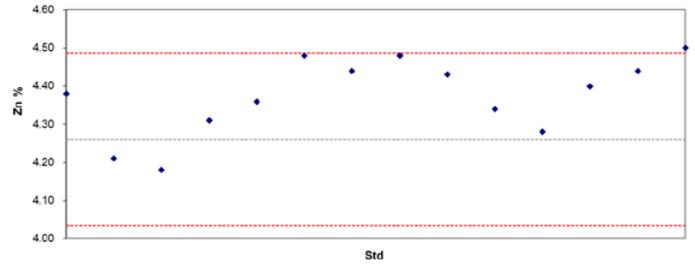
Zn Analysis of Standard **CDN-ME-1206**



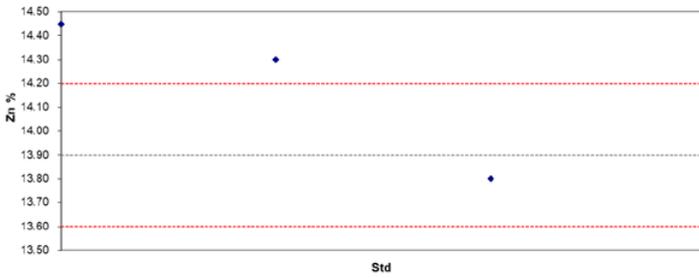
Zn Analysis of Standard **GSO-1**



Zn Analysis of Standard **GSO-2**



Zn Analysis of Standard **GSO-4**



**RPM**GLOBAL

LEGEND

- ◆ Standard Assay
- Std Value
- Std Min
- Std Max

CLIENT

SILVERCORP METALS INC.

PROJECT

NAME  
**Silvercorp BYP Au-Pb-Zn Project**

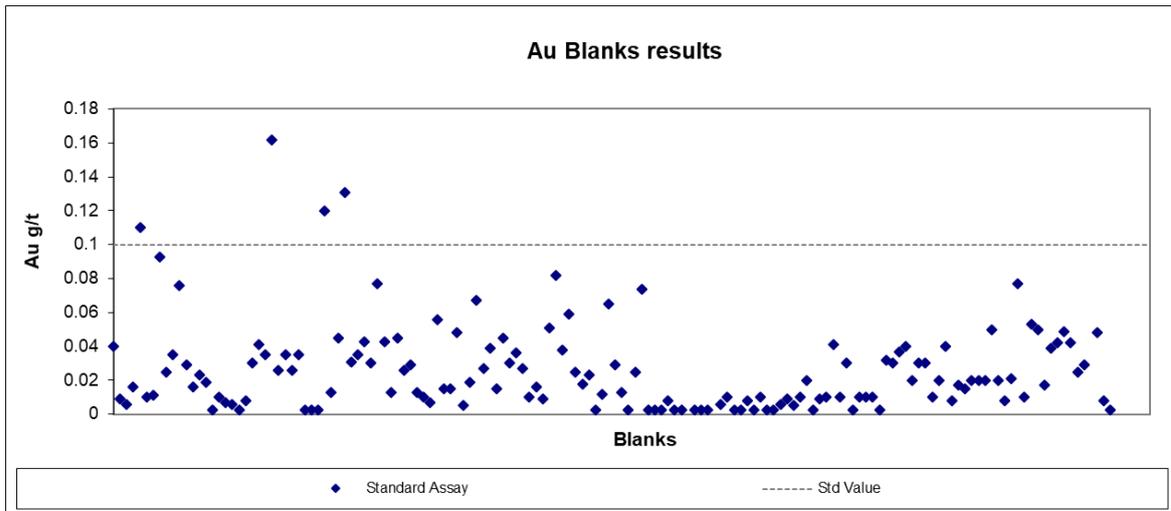
DRAWING  
**ALS External Standards Results for Zn Post 2011**

FIGURE No.  
11-3

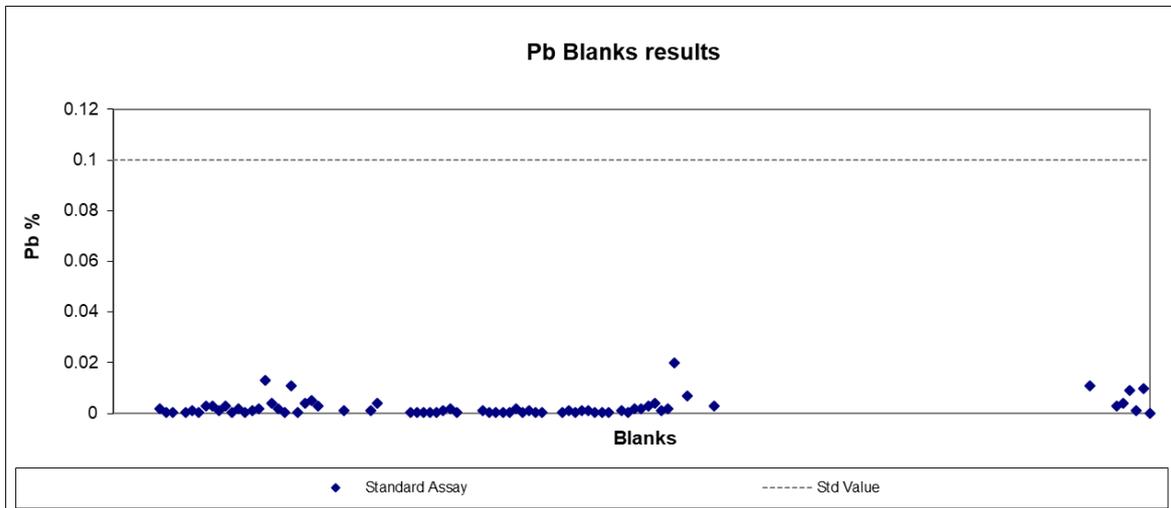
PROJECT No.  
ADV-HK-00157

Date  
June 2024

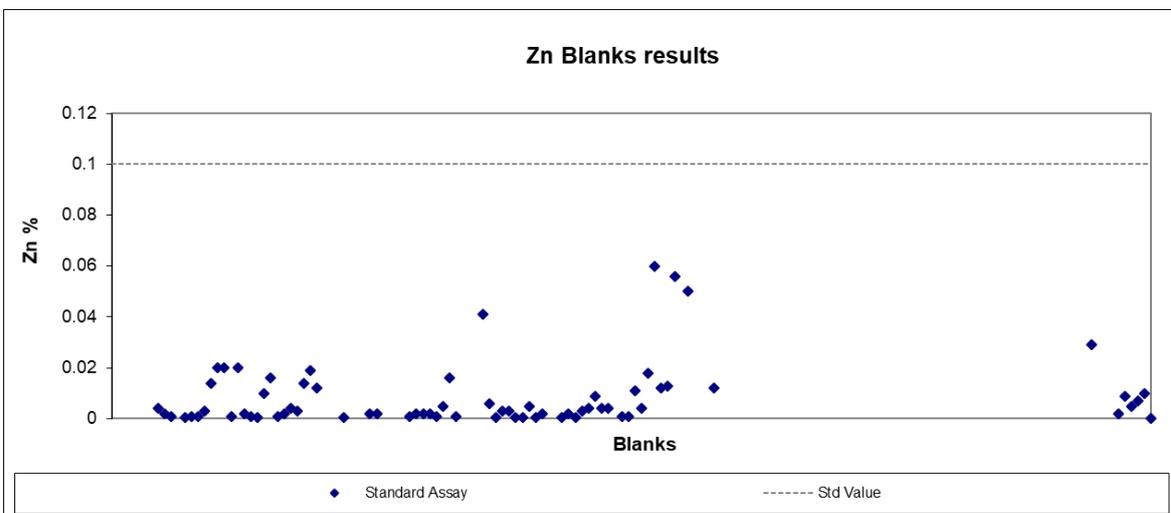
**Figure 11-4 Internal Blank Results for Au Post 2011**



**Figure 11-5 Internal Blank Results for Pb Post 2011**



**Figure 11-6 Internal Blank Results for Zn Post 2011**



## 11.4.4 Internal Check Samples (Post 2011)

A total of 550 laboratory internal check samples (around 7% of all post 2011 drill hole and channel samples assays) were analyzed for Au at ALS. The scatterplots of these results are shown in **Figure 11-7**.

Analysis of these plots indicates that the majority of the results for Au are within the 10 % error limits. This indicates good repeatability of the primary pulverized samples and that the pulps appear to be homogeneous. In addition, no assay bias can be observed in the data highlighting the precision of the sample preparation and analysis by ALS.

## 11.4.5 External Check Samples (Post 2011)

A total of 771 laboratory external check samples (around 11% of all post 2011 drill hole and channel samples assays) were sent to the Zhengzhou Laboratory of the Nonferrous Metals Exploration Institute to be analyzed for Au.

The results of the external check samples for Au are shown in the scatterplot in **Figure 11-8**. Analysis of the plot indicates that the majority of the results for Au are within the 10 % error limits, although there is a slight low bias to the external laboratory. This indicates overall good repeatability of the primary pulverized samples and that the pulps appear to be homogenous. The results highlight the reasonable precision of the sample preparation and analysis by ALS.

## 11.4.6 Field Duplicate Samples (Post 2011)

Field duplicate sample analysis was carried out for the 2011-2014 exploration program with 56 samples being analyzed by ALS. Of these samples, 47 samples were assayed for Au and 9 samples were assayed for Pb and Zn. Results of the field duplicates are shown in **Figure 11-9**.

The majority of the field duplicate samples assay results were within the 10% bias limit, although a few outliers were detected which mainly resulted from local inherent grade variation. RPM notes insufficient samples were analyzed for Pb and Zn from which to draw conclusions and that the accuracy and suitability of assay methods and procedures could be improved by increasing the number of field duplicate samples.

## 11.4.7 QA/QC Summary (Post 2011)

The Company carried out a standard program of QA/QC for drilling since 2011 at the BYP Au-Pb-Zn Project. Certified Reference Material standards were inserted at regular intervals and results have accurately reflected the original assays and expected values. The majority of certified blanks reported below 0.1g/t Au and 0.1% Pb and Zn; four blanks with slightly higher grade than 0.1 g/t Au are considered to have resulted from cross-contamination during the sample preparation which led to a systematic error.

A slight underestimation of Gau-18a and overestimation of Gau-22 for gold grade was observed for the 2011-2014 exploration stage, however most of the results were within the 3SD limit lines which is acceptable. No obvious scatter was observed in the lead and zinc CRM sample results.

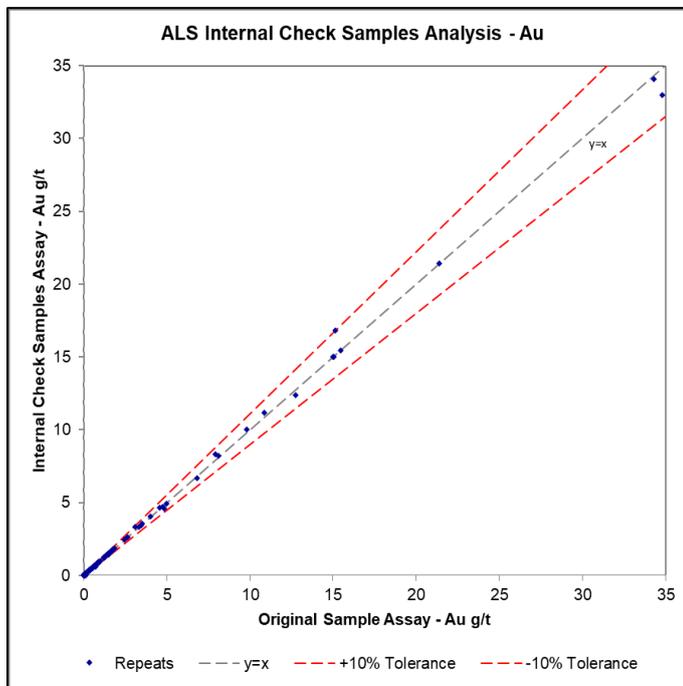
A total of 550 samples were taken as internal check samples, around 7% of all assay results. This is adequate although it is slightly less than the standard proportion requirement of 10%. A total of 771 samples were taken as external check samples, which is 11% of all assay results and more than the standard proportion requirement of 5%.

All internal check samples plotted within the 10% limit lines indicate the good quality of the assay procedures. Most of the external check samples plotted within the 10% limit lines as well, with fewer than 10 external assay results falling outside the limits indicating a negligible bias which has no material impact on the Mineral Resource.

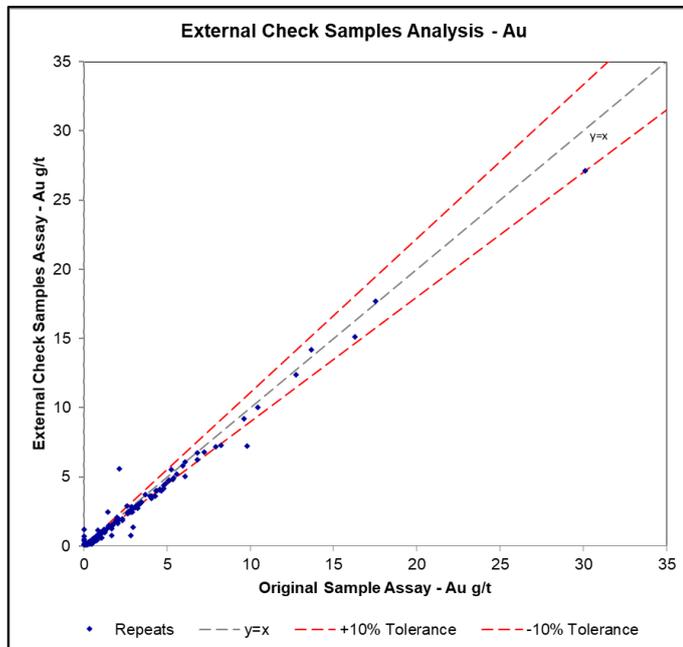
Limited field duplicate samples were taken for comparison. Most of the re-assay results plot within the 10% limit lines, with a few abnormal points with high nuggets observed for Au, Pb and Zn re-assay results. Given the spread of duplicate values in general it is suggested that sample splitting protocols should be reviewed, and more duplicate samples should be taken for check analysis.

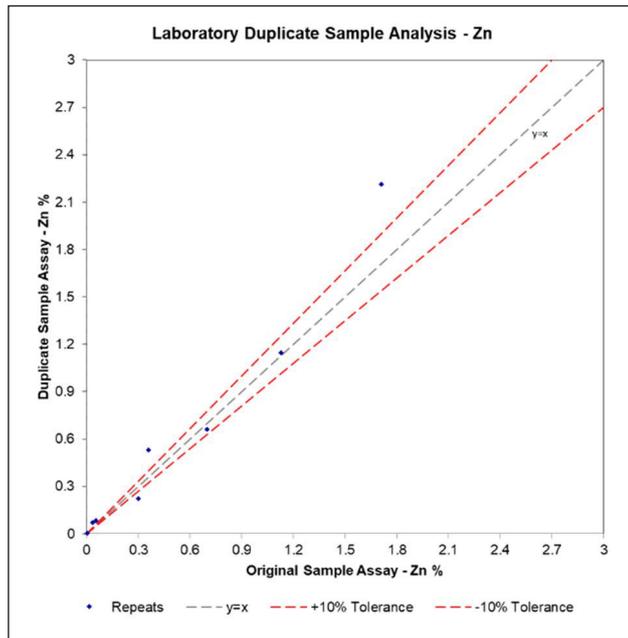
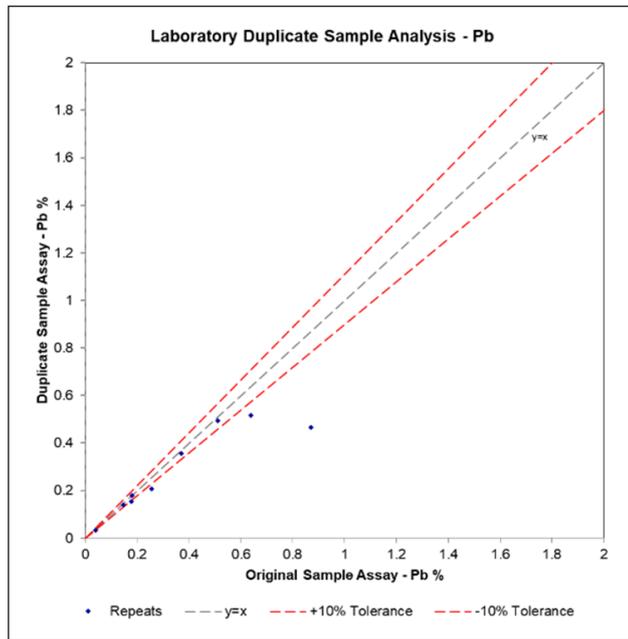
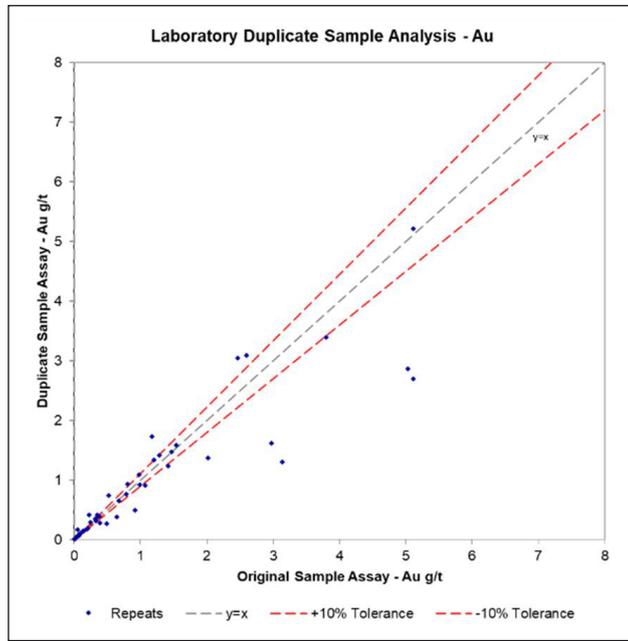
Generally the QA/QC data suggests a slight bias for high Au standards, potentially as a result of approaching the method over-limit range. Considering the high accuracy and repeatability of CRMs, internal and external check samples, field duplicate samples and the limited apparent bias, these are not considered by RPM to be material, and all categories of QA/QC results support the assay data used in the Mineral Resource estimate.

**Figure 11-7 ALS internal Check Samples for Au Post 2011**



**Figure 11-8 Zhengzhou Laboratory External Check Samples for Au Post 2011**





**RPMGLOBAL**

LEGEND
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT
<b>SILVERCORP METALS INC.</b>

PROJECT		
NAME		
<b>Silvercorp BYP Au-Pb-Zn Project</b>		
DRAWING		
Field Duplicate Sample Analysis		
FIGURE No.	PROJECT No.	Date
11-9	ADV-HK-00157	June 2024

## 12 Data Verification

RPM conducted a review of the geological digital data supplied by Silvercorp for the BYP Au-Pb-Zn Project to ensure no material issues could be found and there was no cause to consider that the data was not accurate. RPM's review included 1<sup>st</sup> site visit undertaken from the 18<sup>th</sup> to 21<sup>st</sup> September, 2018 by Tony Cameron (QP), Song Huang (QP) and Hong Zhao, and 2<sup>nd</sup> site visit undertaken from the 26<sup>th</sup> to 27<sup>th</sup> March, 2024 by Song Huang (QP) who are all full time employees of RPM.

### 12.1 Validation of Mineralization

During the 2018 site visit, RPM visually checked detailed drill logs and assay results with two drill hole cores stored at the site. Visual checks were conducted on hole ZK19-102 from the gold mineralized zones and hole ZK2110 from the lead-zinc mineralized zones with assay results and drill logs. The core boxes including typical mineralized core are shown below in **Figure 12-1** and **Figure 12-2**.

**Figure 12-1 Gold mineralized Core Intervals from 72.73m to 77.95m Showing Argillaceous Siltstone and Quartz Sandstone (ZK19-102)**



**Figure 12-2 Pb and Zn mineralized Core Interval from 192m to 198m Showing Limestone and Dolomites (ZK2110)**



A comparison of the core with the database and original logging indicates they are mostly consistent and no major errors were made during the digitization process.

During the 2024 site visit, RPM re-visited the core storage room and considered that there was no significant changes and that all stored cores are consistent with the database and original logging.

## 12.2 Drill Hole Location Validation

RPM was unable to identify any drill hole or trench collar locations during the 2018 site visit and was informed by the Client that the sites had been destroyed by local farmers and rehabilitated. For exploration stages before 2011, no other geological documents were available apart from the scanned geological reports, while most of the original geology documents since 2011 were available for further data validation.

The provided original geology documents included 16 drill holes columnar maps, 123 original handwritten trench sketch maps, 37 digital scanned trench sketch maps, drill hole commencement forms, geological logs, down hole surveys and drill hole completion documents for 58 drill holes. Other documents included geology plan maps and typical sections with current mineralized zones' outlines,

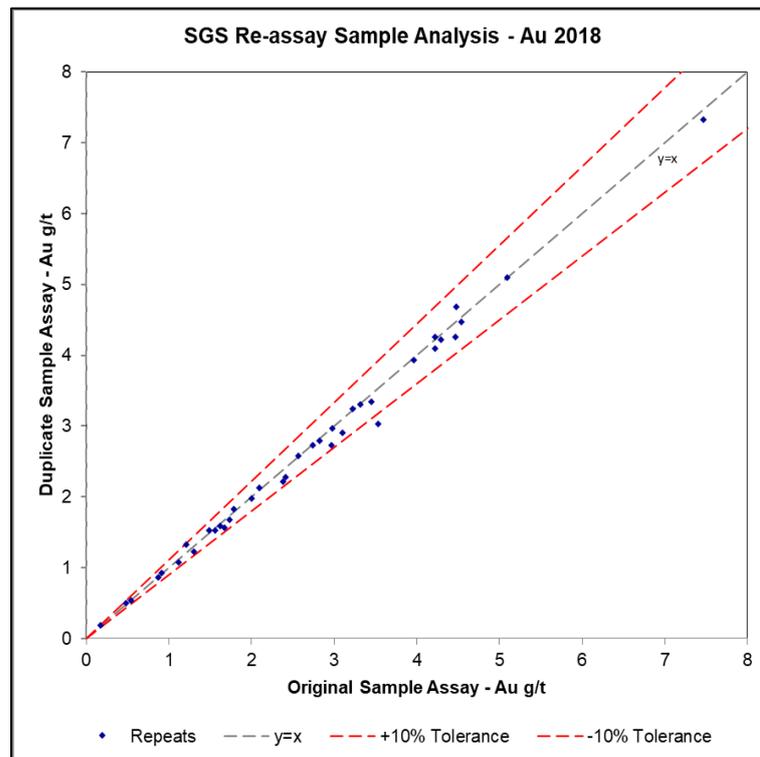
Around 10% of all related documents were cross-checked with each other and with the constructed database. RPM notes no major issues were identified.

During the 2024 site visit, RPM did not conduct additional checks, as the same database used in the 2018 resource report was still used again for the 2024 resource reporting update.

## 12.3 Sample Pulp Validation

During the 2018 site visit, RPM visited the sample storage room. A total of 40 pulp samples were taken from stored pulp samples which included most of the 2011-2014 exploration samples. The 40 samples were selected from mineralized intervals, taking into consideration a roughly even distribution of samples. All samples were sent to the SGS Tianjin international laboratory for re-assay for Au only. The re-assay results were used for the comparison with the original assay results as shown below in **Figure 12-3**.

**Figure 12-3 Sample Pulp Re-assay Results for Au**



The re-assay results indicate a strong correlation between SGS re-assay results and original ALS assay results. The bias between original and re-assay results is less than 10% which supports the accuracy and reliability of all original assay data in the database.

During the 2024 site visit, RPM did not conduct additional checks, as the same database used in the 2018 resource report was still used again for the 2024 resource reporting update.

## 12.4 Database validation

Silvercorp supplied RPM with a digital Access database with collar, survey, general lithology, RQD and sampling data. In addition, PDF files of original assay certificates from ALS were supplied along with cross sections of the drilling plotted with assay grades and interpretations. RPM checked grades and orientation of the drilling against the original assay certificates and cross sections and found no inconsistencies. Hard copy logs of drill holes and tunnels were also supplied to RPM.

RPM conducted a review of the geological digital data supplied by Silvercorp for the Project to ensure no material issues could be found and that there was no cause to consider that the data was not accurate.

RPM completed systematic data validation steps after receiving the database. Checks completed by RPM included:

- Down hole survey depths did not exceed the hole depth as reported in the collar table.
- Hole dips were within the range of 0° to -90°.
- Assay values did not extend beyond the hole depth quoted in the collar table.
- Assay and survey information was checked for duplicate records.

During this review RPM noted only minor inconsistencies in the provided data which were subsequently corrected in the digital database. The inconsistencies included mis-labelled intervals of QA/QC data as well as lithology intervals.

RPM independently imported all original laboratory reports and cross checked them with the Client-supplied data. A total of 1,645 assay samples (23% of all samples) were checked out of 7,141 samples (post 2011 data) which underpins the updated Mineral Resource Estimate for BYP Au-Pb-Zn Project. No material errors were noted.

The reviewed drilling database formed the underlying data for the independent NI 43-101 Statement of Mineral Resources completed by RPM.

During the 2024 site visit, RPM did not conduct additional checks, as the same database used in the 2018 resource report was still used again for the 2024 resource reporting update.

## 12.5 Assessment of Data

The data review conducted by RPM shows that Silvercorp has supplied a digital database that is largely supported by verified certified assay certificates, original interpreted sections, and sample book records.

Based on the data supplied, RPM considers that the analytical data is of sufficient quality to be used in a Mineral Resource estimate for the BYP Au-Pb-Zn Project.

## 13 Mineral Processing and Metallurgical Testing

*Note: The word “ore” is used in this section in a generic sense and does not imply that mineral reserves have been estimated. At the time of report writing, the Company had not prepared an estimate of mineral reserves.*

Historically, lead, zinc and gold-bearing pyrite concentrates were produced by flotation where lead-zinc and gold ores were treated in campaigns.

In 2010, two types of BYP mineralization, gold and lead-zinc, were tested by Hunan Non-ferrous Metals Research Institute (“HNMRI”). The study included head assays, mineralogical analyzes, flotation testing, mass balance, reporting, water recycle and disposal. Two technical reports for the gold and lead-zinc test results were issued to the Company on January, 2011.

In 2018, additional BYP gold mineralization samples were tested by HNMRI. The study included head assays, mineralogical analyzes, flotation testing, mass balance, reporting, water recycle and disposal. One technical report on the gold test result was issued to the Company in March, 2018 which is considered as the updated version of the 2011 gold mineralization test report.

### 13.1 Historical Production

The operation employed a conventional 500tpd processing flow sheet consisting of a two-stage crushing circuit followed by ball milling and classification to achieve a primary grind size of 70% passing 74 micron. The lead flotation circuit comprised of a rougher/scavenger stage with three stages of cleaning which was also used to recover a gold-rich concentrate when processing gold-bearing material. The zinc flotation circuit consisted of a rougher/scavenger stage and four stages of cleaning.

The concentrates were thickened in settling bays while the zinc scavenger tailings were pumped to the surface tailings storage facility. A portion of the gold tailings were used for paste fill.

The typical daily metallurgy and production is summarized in **Table 13-1**.

**Table 13-1 Historical Metallurgy and Production (2011)**

Process Stream	Production (tpd)	Grade			Metal Recovery (%)		
		Pb (%)	Zn (%)	Au (g/t)	Pb	Zn	Au
Feed	420	0.5	2.5	3.6	100	100	100
Lead Concentrate	3.57	50			82		
Zinc Concentrate	21.46		45			90	
Gold-bearing Pyrite Concentrate	34.02			40			90
Tailings	360.95						

### 13.2 Test Samples

#### 13.2.1 Gold Mineralization

In September 2010, the Company collected 102 pieces of drill core samples (BY24 to BY125) from Gold Zone 6 (at the 252m level) during the 2010 drilling program. HNMRI prepared three composites for the laboratory tests. The gold head assays are shown in **Table 13-2**.

Later, in January 2018, the Company collected 25 pieces of drill core samples (1 to 25) from Gold Zone 6 (at the 252m and 261 level). The gold head assays are shown in **Table 13-3**.

**Table 13-2 Gold Samples Used for Gold Metallurgical Testing (2010)**

Sample No.	Location	Au (g/t)
BY-1	Gold Zone 6	3.45
BY-2	Gold Zone 6	3.30
BY-3	Gold Zone 6	3.75
<b>Average</b>		<b>3.50</b>

**Table 13-3 Gold Samples Used for Gold Metallurgical Testing (2018)**

Sample No.	Location	Au (g/t)
BY-1 Mix	Gold Zone 6	3.20

## 13.2.2 Lead-Zinc Mineralization

In 2010, the Company collected lead-zinc mineralized samples from three different locations. The samples were analyzed for the main payable elements, i.e., lead, zinc, silver and gold (refer to **Table 13-4**).

**Table 13-4 Samples Used for Lead and Zinc Metallurgical Testing (2010)**

Sample No.	Adit Location	Weight (kg)	Zn (%)	Pb (%)	Au (g/t)	Ag (g/t)
BYP1	PD2	104	2.42	0.11	0.30	<5
BYP2	PD1	125	6.07	0.12	0.25	<5
BYP3	PD1	108	1.17	2.75	0.45	<5
<b>Average</b>			<b>3.21</b>	<b>0.99</b>	<b>0.37</b>	

In order to produce a bulk composite sample for flotation tests, the two samples BYP2 and BYP3 from the main adit PD1 were mixed in a ratio of 3:2 (BYP2:BYP3). The final master composite (7.55g/t Ag, 0.25g/t Au, 1.24% Pb and 4.08% Zn) was used for the flotation test work to produce lead and zinc concentrates and recover silver.

## 13.3 Mineralogy and Occurrences of the Payable Elements

### 13.3.1 Gold Mineralization

The mineralogical analysis results for the gold composite samples are summarized in **Table 13-5** and **Table 13-6**. The major non-sulfide components are gangue minerals (50.36% quartz), mica and clay minerals. The major sulphide mineral is pyrite (3.18%); pyrrhotite and arsenopyrite occur in lesser quantities.

**Table 13-5 Summary of Mineralogy of the Gold Samples (2010)**

Mineral	Content (%)	Mineral	Content (%)	Mineral	Content (%)
Quartz	50.36	Chlorite	2.42	Native gold	Trace
Mica	14.91	Talc	1.15	Chalcopyrite	0.05
Feldspar	5.18	Pyrite	3.18	Galena	0.08
Clay minerals	8.35	Pyrrhotite	1.01	Limonite	3.85
Dolomite	3.15	Greigite	1.52	Pyrolusite	0.11
Calcite	3.01	Arsenopyrite	0.95	Barite	0.12

**Table 13-6 Summary of Mineralogy of the Gold Samples (2018)**

Mineral	Content (%)	Mineral	Content (%)	Mineral	Content (%)
Quartz	51.08	Chlorite	3.21	Native gold	Trace
Mica	13.21	Talc	1.08	Chalcopyrite	0.04
Feldspar	4.98	Pyrite	3.21	Galena	0.07
Clay minerals	8.71	Pyrrhotite	1.10	Limonite	3.67
Dolomite	3.07	Greigite	1.62	Pyrolusite	0.10
Calcite	3.35	Arsenopyrite	0.91	Barite	0.14

Characteristics of gold and other minerals present are summarized below (2010 and 2018 results):

- Native Gold – native gold was not detected from the polished specimen sample of the primary mineralization. However, native gold was observed from the polished specimen sample of flotation concentrate.
- Pyrite – Pyrite is one of the major sulphide minerals. It occurs in the forms of subhedral crystals and fine-grained anhedral crystals. Disseminated pyrite grain size was uniform, mostly in the range of 0.01-0.1 mm, which is favourable for flotation.
- Other sulphides – trace amounts of other sulphides, such as sphalerite, galena and chalcopyrite (in the size range of <0.03mm), were seen around the edges of pyrite grains or locked within pyrite grains.
- Limonite and other oxides – mainly as limonite (<0.1mm) in granular column form, dispersed in the mineralization.
- Other gangue minerals – the main gangue minerals are quartz (50.36%), kaolinite, sericite, chlorite, amphibole and feldspar.

The gold mineralogical analysis results on ground samples (100%-200 mesh) are shown in **Table 13-7**.

**Table 13-7 Summary of Gold Mineralogical Analysis**

Gold Form	Assay_2010 (g/t)	Distribution_2010 (%)	Assay_2018 (g/t)	Distribution_2018 (%)	Observation
Native Gold	0.61	18.89	0.59	18.43	Native, free-milling and exposed gold
Inclusion within Oxides	0.19	5.88	0.21	6.56	Gold included or locked within calcite or dolomite
Inclusions within Pyrite	2.37	73.37	2.35	73.45	Gold included or locked in fine-grained pyrite etc.
Inclusions within Silicate	0.06	1.86	0.05	1.56	Gold included or locked in quartz or other silicates
<b>Total</b>	<b>3.23</b>	<b>100</b>	<b>3.2</b>		

### 13.3.2 Lead-Zinc Mineralization

The mineralogy of the Pb-Zn composite samples is summarized in **Table 13-8**. The major components are gangue minerals (62% calcite) and sulphide minerals (sphalerite 5.8%, pyrite 4.7%, and galena 1.2%).

The lead mineralogical analysis results on ground samples are shown in **Table 13-9** while the zinc mineralogical analysis results on ground samples are shown in **Table 13-10**.

**Table 13-8 Summary of Mineralogy of the Samples**

Mineral	Content (%)	Mineral	Content (%)
Sphalerite	5.79	Quartz	8.12
Zinc spinel	0.41	Pyrolusite	0.58
Galena	1.18	Dolomite	5.17
Pyrite	4.68	Kaolinite	6.65
Pyrrhotite	0.11	Barite	2.59
Arsenopyrite	0.26	Calcite	62.00
Hematite	1.5	Calamine	Trace
Chalcopyrite	Trace		
Anglesite	0.11	Others	0.31
Stibnite	0.42	Total	100

**Table 13-9 Summary of Lead Mineralogy**

Occurrence	Pb Content (%)	Distribution (%)	Comment
Sulfide	1.07	82.30	Galena
Carbonate	0.1	7.69	Cerussite
Sulfate	0.09	6.92	Anglesite
Others	0.04	3.08	Stibnite
Total	1.30	100	

**Table 13-10 Summary of Zinc Mineralogy**

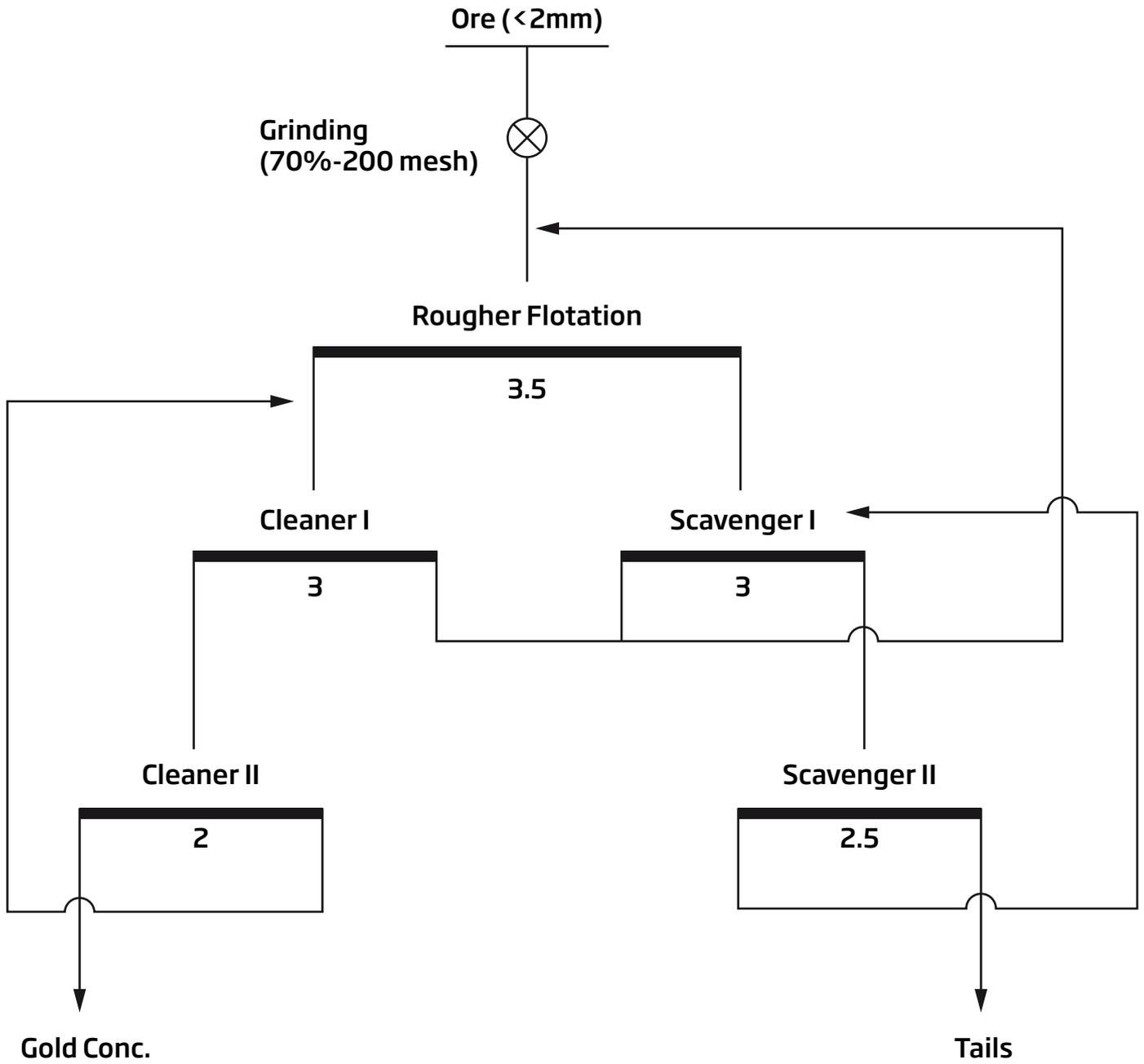
Occurrence	Zn Content (%)	Distribution (%)	Comment
Sulfide	3.50	95.37	Sphalerite
Oxide	0.03	0.82	Calamine
Sulfate	0.01	0.27	Hemimorphite
Spinel	0.13	3.54	Zinc Spinel
Total	3.67	100	

## 13.4 Metallurgical Test Results

### 13.4.1 Gold Mineralization

In 1992, the 418 team conducted a preliminary cyanidation study using run-of-mine gold oxide samples (1.5g/t Au) from Gold Zone 3. The cyanidation leaching recovery was about 85% with moderate cyanide consumption (1 kg/t). In 2010, the Company engaged HNMRI to conduct a flotation study, using a locked-cycle flow sheet (refer to **Figure 13-1**) with one-stage rougher/2-stage scavenger/2-stage cleaner operation. In 2018, the Company engaged HNMRI to conduct an updated flotation study for gold samples, using the same locked-cycle flow sheet (refer to **Figure 13-1**) with one-stage rougher/2-stage scavenger/2-stage cleaner operation.

The test results show that a gold concentrate product (Au 41.59g/t) was produced with a gold flotation recovery of 91.65% from 2010 test results while a gold concentrate product (Au 48.68g/t) was produced with a gold flotation recovery of 87.41% from 2018 test results. The results are summarized in **Table 13-11** and **Table 13-12**.



LEGEND

CLIENT	PROJECT	
	NAME <b>Silvercorp BYP Au-Pb-Zn Project</b>	
	DRAWING Locked Cycle Flow Sheet for 2010 and 2018	
	FIGURE No. 13-1	PROJECT No. ADV-HK-00157

**Table 13-11 Mass Balance of BYP Gold Mineralization Flotation Tests - 2010**

Stream	Mass Recovery (%)	Au Grade (g/t)	Au Recovery (%)
Gold Concentrate	7.56	41.59	91.65
Tails	92.44	0.31	8.35
Ore (Feed)	100.00	3.43	100.00

**Table 13-12 Mass Balance of BYP Gold Mineralization Flotation Tests - 2018**

Stream	Mass Recovery (%)	Au Grade (g/t)	Au Recovery (%)
Gold Concentrate	5.65	48.68	87.41
Tails	94.35	0.42	12.59
Ore (Feed)	100.00	3.15	100.00

Analysis of the process water after eight locked cycles showed slightly elevated levels of arsenic (0.34 ppm As) and copper (1.0 ppm Cu). Treatment with ferrous sulphate and sodium sulphide followed by settling reduced these levels to 0.13 ppm As and 0.35 ppm Cu.

Considering that the latest processing test samples were taken from current mining faces which are more representative for the actual extracted ore, and all the sampling locations are distributed more evenly, RPM decided to use the 2018 processing test results for any processing assumptions in this technical report.

### 13.4.2 Lead-Zinc Mineralization

Between 1971 and 1977, Yunxiang Mining retained the Hunan Geological Laboratory to conduct a preliminary bulk flotation test using 501.7 kg of drill core material. The tests were done using a flow sheet of “two-stage grinding, and rougher-scavenger-5 stage cleaner” to a bulk lead-zinc concentrate of only moderate quality. The preliminary test results are summarized in **Table 13-13**.

**Table 13-13 Flotation Results of Locked Cycle Test (1971-1977)**

Product Name	Grades				Recovery Rate (%)			
	Pb (%)	Zn (%)	S (%)	Ag (g/t)	Pb	Zn	S	Ag
Lead/Zinc Con	11.17	35.55	30.11	176	64.05	89.61		
Sulfur Con	0.99	0.55	35.92	N/A			64.6	

From September to December 2010, the Company contracted the HNMRI to perform mineral processing and metallurgical tests.

The head sample for the laboratory flotation testing was a mixture of 3:2 (BYP2:BYP3) bulk composite material. Head sample assay results are listed in **Table 13-14**.

**Table 13-14 Head Grade of the Blended Test Sample**

Element	Cu	Pb	Zn	S	As	TFe	Cd	Mn
Comp (%)	0.032	1.24	4.08	5.12	0.12	2.30	0.022	0.47
Element	SiO <sub>2</sub>	CaO	MgO	Al <sub>2</sub> O <sub>3</sub>	Au (g/t)	Ag (g/t)	Sb	
Comp (%)	10.12	46.12	1.13	2.63	0.23	7.55	0.28	

After preliminary tests to optimize flotation conditions, locked cycle tests were carried out.

The following three flow sheet options were examined:

**Option 1** – Locked cycle without re-grinding of cleaned Pb and Zn concentrates;

**Option 2** – Locked cycle with re-grinding of Pb scavenger concentrate and Zn rougher concentrates; and

**Option 3** – Locked cycle with re-grinding of Pb rougher concentrate and Zn rougher concentrates

**Table 13-15** and **Table 13-16** summarize the comparison between the three options in terms of product grades and recovery. Option 3 was recommended for commercial design consideration due to the advantages of improved product grades at similar recoveries.

**Table 13-15 Comparison of Locked Cycle Test Results (Grade)**

Option	Lead Concentrate Grades				Zn Concentrate Grade			
	Wt (%)	Pb (%)	Zn (%)	Ag (g/t)	Wt (%)	Zn (%)	Pb (%)	Ag (g/t)
1	2.04	48.43	5.98	165.8	9.75	36.75	0.73	40.23
2	1.98	50.27	5.56	171.5	6.95	51.87	0.64	45.7
3	1.72	55.97	5.06	170.1	6.99	52.4	0.83	53.6

**Table 13-16 Comparison of Locked Cycle Test Results (Metal Recovery)**

Option	Recovery		
	Pb (%)	Ag (%) *	Zn (%)
1	85.45	43.67	91.48
2	86.62	48.32	91.86
3	85.87	41.03	92.71

Note: \*Ag recovery; within PbS Concentrate only

**Figure 13-2** shows the flotation flow sheet for Option 3, which includes:

- A Pb flotation circuit with one-stage rougher, 2-stage scavenger and 3-stage cleaner.
- A Zn flotation circuit with one-stage rougher, 2-stage scavenger and 4-stage cleaner.
- Locked close loop between Pb and Zn circuit.

**Table 13-17** summarizes the mass balance for Option 3 tests.

**Table 13-17 Mass Balances of Pb Zn Flotation tests (Option 3) (%)**

Stream	Mass Recovery (%)	Grade			Recovery (%)		
		Pb (%)	Zn (%)	Ag (g/t)	Pb	Zn	Ag
Pb Concentrate	1.72	55.97	5.06	170.14	85.87	2.20	41.03
Zn Concentrate	6.99	0.83	52.40	53.65	5.17	92.71	52.57
Tailings	91.29	0.11	0.22	0.50	8.96	5.08	6.40
Feed	100.00	1.12	3.95	7.13	100.0	100.0	100.0

The compositions for the lead concentrate and zinc concentrate are summarized in **Table 13-18** and **Table 13-19**, respectively. The results show that lead and zinc concentrate products, although by no means of premium grade, nevertheless meet commercially acceptable standards.

**Table 13-18 PbS Concentrate Composition (%) (Option 3)**

<b>Element</b>	<b>Pb</b>	<b>Zn</b>	<b>Cu</b>	<b>S</b>	<b>As</b>	<b>TFe</b>	<b>Mn</b>
Comp (%)	55.97	5.06	0.41	18.17	0.62	8.07	0.044
<b>Element</b>	<b>SiO2</b>	<b>CaO</b>	<b>MgO</b>	<b>Al2O3</b>	<b>Au (g/t)</b>	<b>Ag (g/t)</b>	<b>Sb</b>
Comp (%)	0.38	2.47	0.2	0.34	0.1	170.14	3.89

**Table 13-19 ZnS Concentrate Composition (%) (Option 3)**

<b>Element</b>	<b>Zn</b>	<b>Pb</b>	<b>Cu</b>	<b>S</b>	<b>As</b>	<b>TFe</b>	<b>Mn</b>
Comp (%)	52.4	0.83	0.1	33	0.13	1.63	0.092
<b>Element</b>	<b>SiO2</b>	<b>CaO</b>	<b>MgO</b>	<b>Al2O3</b>	<b>Au (g/t)</b>	<b>Ag (g/t)</b>	<b>Sb</b>
Comp (%)	0.42	4.22	0.22	0.96	0.2	53.65	0.22

To examine the impact of water re-use on flotation mass balance, flotation tests using combined water (4 recycle: 1 fresh make-up water) were completed. **Table 13-20** summarizes the mass balance; the recovery differences are quite small and thus the impact of applying re-use water on flotation recovery is immaterial.

**Table 13-20 Mass Balances of Pb-Zn Flotation Tests Using Recycled Water (Option 3)**

<b>Process Stream</b>	<b>Mass Recovery</b>	<b>Grade</b>			<b>Recovery (%)</b>		
		<b>Pb (%)</b>	<b>Zn (%)</b>	<b>Ag (g/t)</b>	<b>Pb</b>	<b>Zn</b>	<b>Ag</b>
Lead Concentrate	1.94	52.86	7.49	182.63	86.74	3.59	48.37
Zinc Concentrate	6.99	0.81	52.63	47.59	4.79	91	45.41
Tailings	91.07	0.11	0.24	0.5	8.47	5.41	6.22
Feed	100.00	1.18	4.04	7.32	100.00	100.00	100.00

In a similar fashion to the gold mineralization tests, analysis of the process water after ten locked cycles showed slightly elevated levels of metals, in this case Pb, Zn and also high pH. Treatment with ferrous sulphate followed by pH adjustment and settling brought these levels within the range of the regulations.

Considering that the latest processing test samples were taken in 2010 as the main mining activities were suspended and no more mining faces developed during the gold mining period between 2011 – 2014, the 2010 processing test results are the latest data and RPM consider it acceptable to use the 2010 processing test results of lead- and zinc-bearing material for any processing assumptions in this technical Report.

## 13.5 Summary of Mineral Processing and Metallurgical Testing

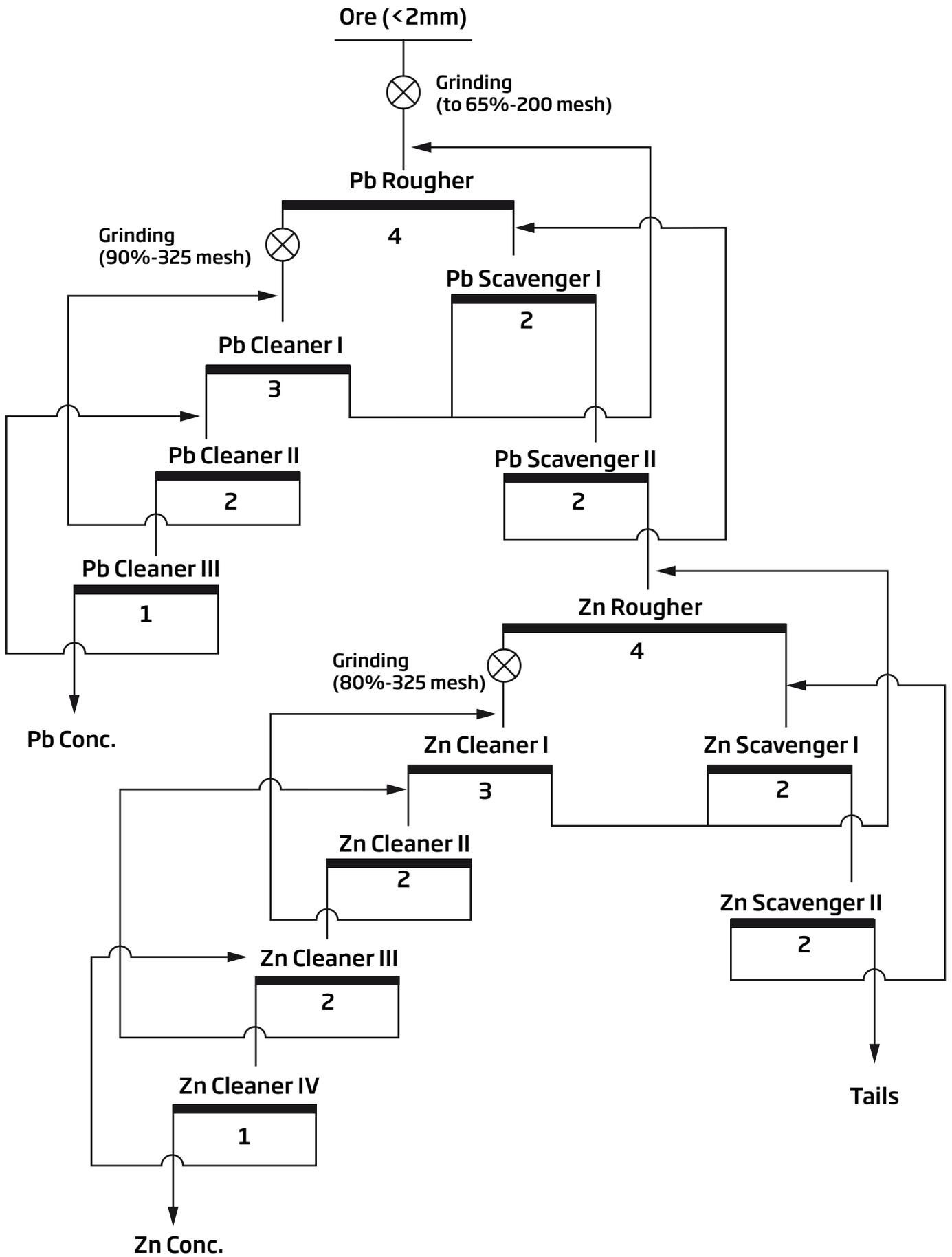
The laboratory test work included mineralogical analysis, mineralization compositions, optimization of grinding size, flotation circuit development and flow sheet optimization, reagent optimization, water re-use and water treatment studies, etc.

### The test results for the gold mineralization show that:

- Average grade tested is about 3.43 g/t Au from 2010 stage and 3.20 g/t Au from 2018 stage.
- Most of the gold is associated with pyrite (73.40% for 2012 samples and 73.45% for 2018 samples respectively).
- A locked-cycle flotation test with one-stage rougher/2-stage scavenger/2-stage cleaner operation has proved up a suitable flow sheet for gold processing based on both 2010 and 2018 test results.
- High gold recovery (91.65%) to a 41.6 g/t Au concentrate has been achieved at a grind size of 70% - 100 µm in 2010. High gold recovery (87.41%) to a 48.6 g/t Au concentrate has been achieved at a grind size of 70% -100 µm in 2018.

**The test results for the Pb-Zn mineralization show that:**

- Average grades tested are approximately 1.24% Pb, 4.08% Zn and 7.55 g/t Ag.
- Major components are gangue (62% calcite), sulphide minerals (sphalerite 5.79%, galena 1.18%).
- Three sequential flow sheet options have been tested, with various re-grind configurations. The preferred option with re-grinding of rougher concentrates achieved high metals recoveries (Pb 85.9%, Zn 92.7%, Ag 41.1%) to commercially acceptable concentrate grades (56.0% Pb, 52.4% Zn).
- In both cases the impact of recycled water on flotation recovery was shown to be minimal and water treatment routes were tested to demonstrate that water discharge standards could be met.



LEGEND
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT	PROJECT	
	NAME <b>Silvercorp BYP Au-Pb-Zn Project</b>	
	DRAWING Locked Cycle Flowsheet for Pb-Zn Flotation (Option 3)	
	FIGURE No. 13-2	PROJECT No. ADV-HK-00157

## 14 Mineral Resource Estimates

A Mineral Resource estimate update has been independently completed by RPM in accordance with the CIM Definition Standards. Information contained in this Report is based on information provided to RPM by the Company or the Client and verified where possible by RPM. RPM considers the Mineral Resource estimate meets the general guidelines for CIM Definition Standards for reporting of Mineral Resources at the Indicated and Inferred confidence levels.

### 14.1 Data

The key files supplied to RPM included:

- BYP Gold-Lead-Zinc Property, NI 43-101 Technical Report, P R Stephenson, AMC Mining Consultants (Canada) Ltd, June 2012.
- BYP Gold-Lead-Zinc Property, NI 43-101 Technical Report, Bob Dennis, Tony Cameron and Song Huang, RPMGlobal Asia Limited, April 2019.
- “BYP Au-Pb-Zn Project”, Mining License (4300002012063210125603).
- Mining licence Inflection points’ coordinates adjustment document for Baiyunpu Lead-Zinc-Gold Mine, Xinshao County, Hunan Province, Hunan Provincial Geological and Mineral Exploration and Development Bureau Team 407, March 2022.
- Drilling database – supplied in multiple access databases which include collar, assay, survey and lithology data:
  - Baiyunpu.mdb
  - BYP.mdb
- Previous 3D wireframe solid models
  - goldd.dtm and pbznd.dtm
- Underground development models
  - 16 ug development models. (1XJ, 2XJ, 150, 200, 232, 240, 252+, 252XPD, 261, 279, 336, 336CKQ, 336XPD, MXJ, SJ, TFTJ.dxf)
- Depletion areas models
  - 63 depletion models for Au and 1 depletion model for Pb+Zn
- Topography:
  - Detailed topographic survey points and smoothed contour lines were provided by the Company and surveyed by DGPS total station in UTM WGS84 Datum at 2012. As there has been no surface mining activity from 2012 to 2024, the topographic model is considered suitable for the 2024 resource estimation update.

#### 14.1.1 Sample Data

The supplied extra drilling data spreadsheets were compiled by RPM into the previous database and saved as ‘BYP\_20181101.mdb’ and included tabulated information for collar, assay, survey, detailed lithology and mineralization domain data. The data was then loaded into Surpac software. All Mineral Resource estimation work conducted by RPM was based on drill hole, trench and channel samples data received as at 15<sup>th</sup> October, 2018. As there were no additional exploration works completed between 2018 and 2024, the same database was used for the 2024 resource estimation update.

The BYP database contains the records for 163 diamond drill holes (DH) for 48,627m of drilling, 22 trenches (TC) for 1,082m and 383 groups of channel samples (CS) of 4,959m.

A summary of the drill hole database is shown in **Table 14-1**.

**Table 14-1**      **BYP Project - Summary of Data Used in the Mineral Resource Estimate**

	Exploration Type	In Database		In 2018 Mineral Resource (Gold)		In 2018 Mineral Resource (Lead+Zinc)	
		Number	Meters	Number	Intersection Meters	Number	Intersection Meters
1972-1977	DH	80	30,724	4	52	36	857
1990-1992	TC	22	1,082	1	4	5	62
	DH	7	1,858	5	89	2	35
2011-2014	CS	563	4,959	349	2,992	49	537
	DH	64	13,335	51	1,892	13	967
Total	TC	22	1,082	1	4	5	62
	CS	563	4,959	349	2,992	49	537
	DH	151	45,917	60	2,023	51	1,859

Note: \*Historical data which was used for the resource estimation but outside of the new licence boundary was not included in the above summary table.

All drill holes from 1972-1977 and 1990-1992 exploration stages are surface holes; 19 surface holes and 45 underground holes were drilled during 2011-2014 exploration stage. No additional exploration work was undertaken between 2015 and 2024.

No data in the latest database was excluded for wireframing and estimation.

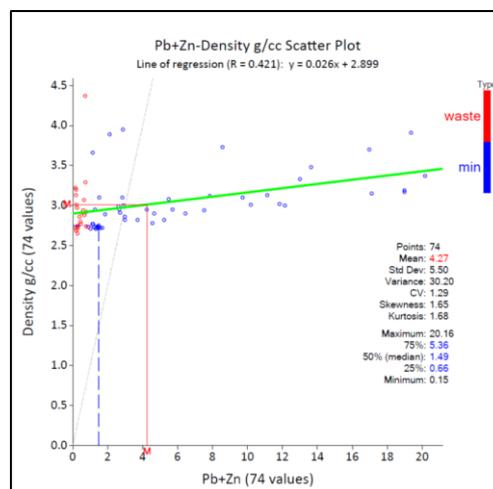
### 14.1.2 Bulk Density Data

RPM was provided a total of 104 density samples by the Company. The density samples include 24 density samples from the gold mineralization domain, 50 density samples from the lead and zinc mineralization domains and 30 density samples taken from the wall rock domain.

Due to the low number of determinations within the gold domain, the application of an average density was considered as the suitable approach. RPM notes a few low-density samples were identified which were considered to be a mixture of mineralized samples and wall rock samples, as such, which were excluded when determining average value.

For the lead and zinc deposit, assay results of Pb + Zn and density values were used for regression analysis. Moderate regression coefficients were obtained, and the regression formula was obtained for the lead and zinc deposit density assignment. The regression analysis is shown in **Figure 14-1**.

**Figure 14-1**      **Regression analysis results**



The density summary is shown below in **Table 14-2**.

**Table 14-2 Bulk Density Summary**

Domain	Density samples	Average density(g/cm <sup>3</sup> ) or Regression formula
Gold	24	2.8
Lead+Zinc	50	(Lead+Zinc)*0.026 + 2.899
Waste	30	2.9

In addition, RPM recommends that the Company continue recording density measurements which would cost approximately USD 25,000, ensuring that the density measurement intervals correspond directly with geological logging and sampling intervals and density samples are distributed evenly inside the mineralization domain. It is also recommended that some density measurements should be taken from the waste rock area for the accurate indication of the density of waste rocks.

## 14.2 Geology and Resource Interpretation

Based on the current understanding, the mineralization occurs at and near the intersection of converging limbs of a southwest-plunging syncline. Gold mineralization is contained within sandstone units and the lead-zinc mineralization is contained within limestone units, both mainly located in Middle Devonian age stratum.

According to basic statistical analysis of the assay values (refer to **Figure 14-2**) and experimental geological cut-off grades for similar deposits, mineralization interpretations were prepared by RPM using a nominal 0.5g/t Au cut-off grade value for gold mineralization and a 1% Pb equivalent cut-off grade value for lead and zinc mineralization.

Silvercorp provided the wireframed models of the mineralized zones, which were used by AMC for the 2012 NI 43-101 resource estimate. RPM subsequently updated the wireframes based on the addition of the 2017 drilling data. This resulted in a total of 11 separate solids were constructed for gold mineralization and a total of 31 separate solids for Pb and Zn which are grouped into three zones for lead- zinc mineralization as shown in **Figure 14-3**.

## 14.3 Preparation of Wireframes

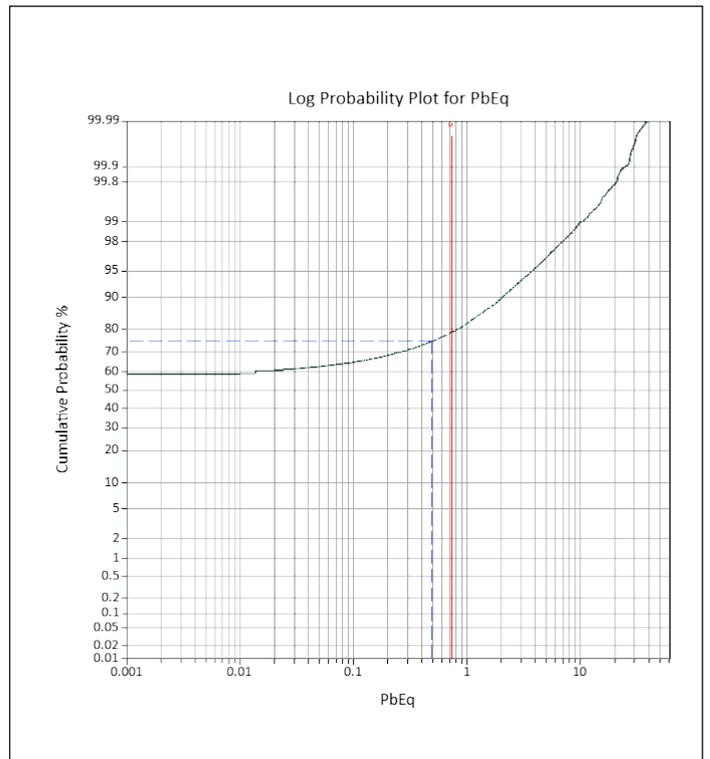
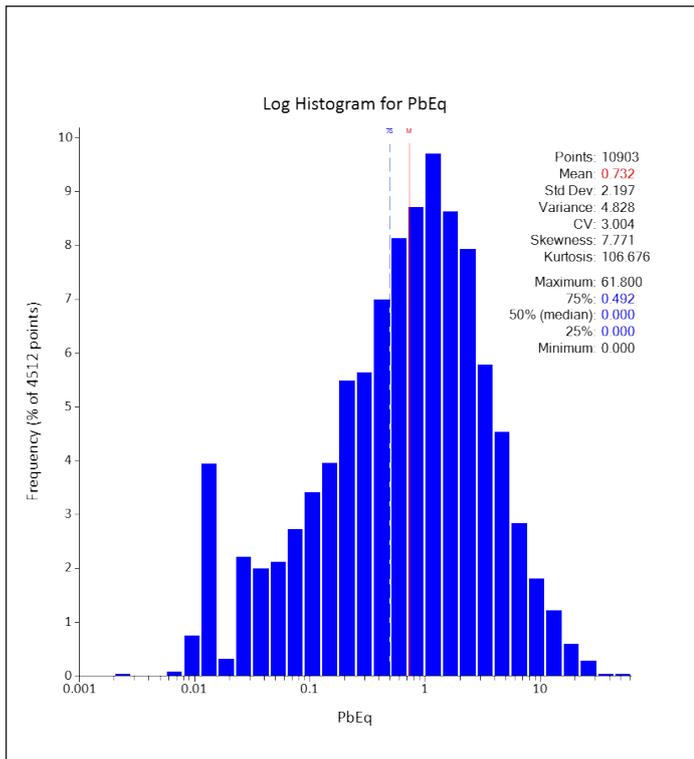
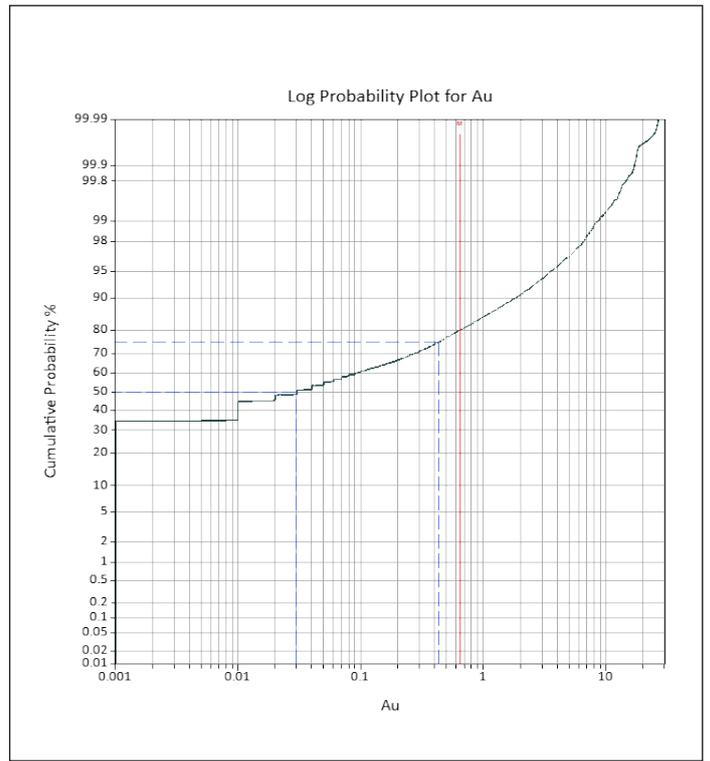
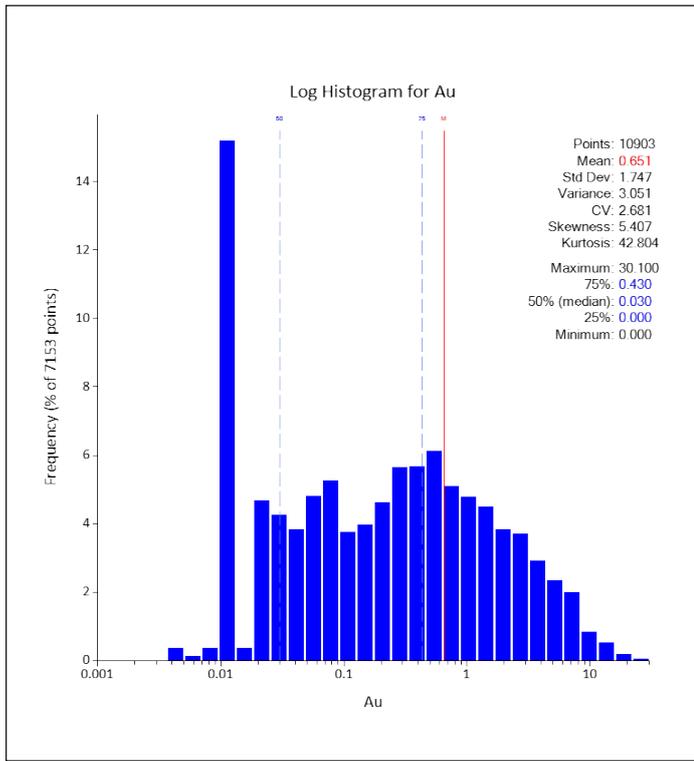
### 14.3.1 Resource Wireframes

The interpreted sectional outlines were manually triangulated to form wireframes. The end section strings were copied to a position midway to the next section or to 20-25 m distance and adjusted to match the dip, strike and plunge of the zone. The objects were constructed using Geovia Surpac 6.7.1 mining software ("Surpac") and set as solids, and validated using Geovia Surpac 2023 for the use of resource update at 2024.

A gold mineralization wireframe ('wireframes\_au\_20181127.dtm') including 11 resource wireframes (object 1 to 11) and a lead+zinc wireframe ('wireframes\_pbzn\_20181127.dtm') including 30 resource wireframes (object 1 to 30) were created and used to select the sample data to be used for grade estimation, and to constrain the block model for estimation purposes.

The mineralization wireframes were treated as hard boundaries for grade estimation zones, that is, only assays from within each wireframe were used to estimate blocks within that wireframe.

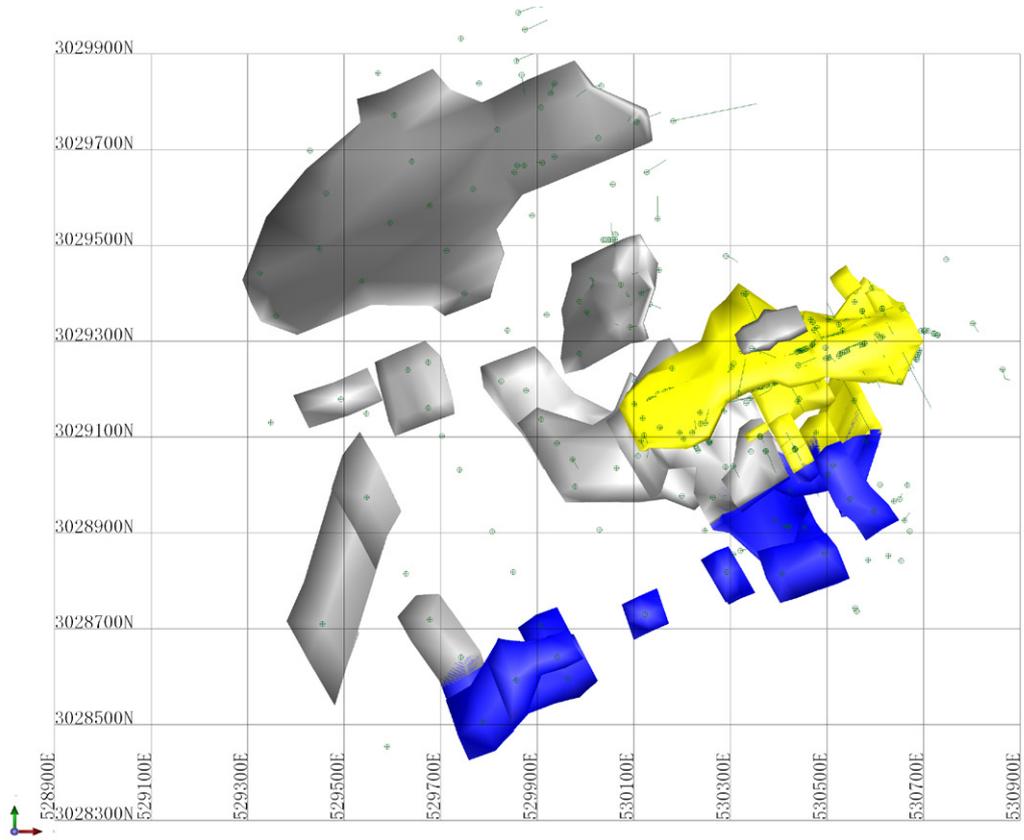
The extent of the interpreted domains, and drilling at the Project area is shown in **Figure 14-3**. The mineralized lodes have been depicted in different colours to distinguish individual lodes. The colouring has no other significance and is a reflection of the software utilised (Surpac).



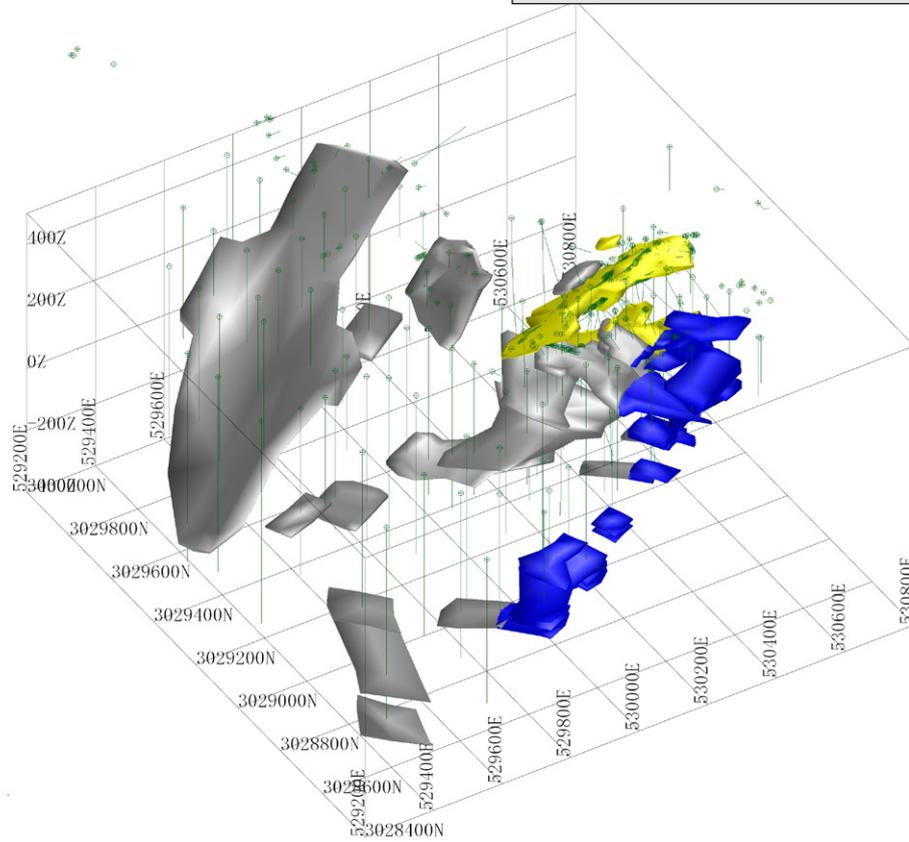
LEGEND	
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE	

CLIENT	PROJECT		
	NAME <b>Silvercorp BYP Au-Pb-Zn Project</b>		
SILVERCORP METALS INC.	DRAWING <b>Log Histogram and Log Probability Plot for all Assays at BYP Project</b>		
	<table border="1"> <tr> <td>FIGURE No. 14-2</td> <td>PROJECT No. ADV-HK-00157</td> <td>Date June 2024</td> </tr> </table>	FIGURE No. 14-2	PROJECT No. ADV-HK-00157
FIGURE No. 14-2	PROJECT No. ADV-HK-00157	Date June 2024	

Plan view of mineralisation domains



3D view of mineralisation domain



**RPM**GLOBAL

LEGEND

- Gold Mineralisation
- Wireframes outside of new licence area
- Lead and Zinc Mineralization
- Drill Hole

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT

**SILVERCORP** METALS INC.

PROJECT

NAME  
**Sivercorp BYP Au-Pb-Zn Project**

DRAWING  
**3D Views of Mineralisation Domains**

FIGURE No.  
14-3

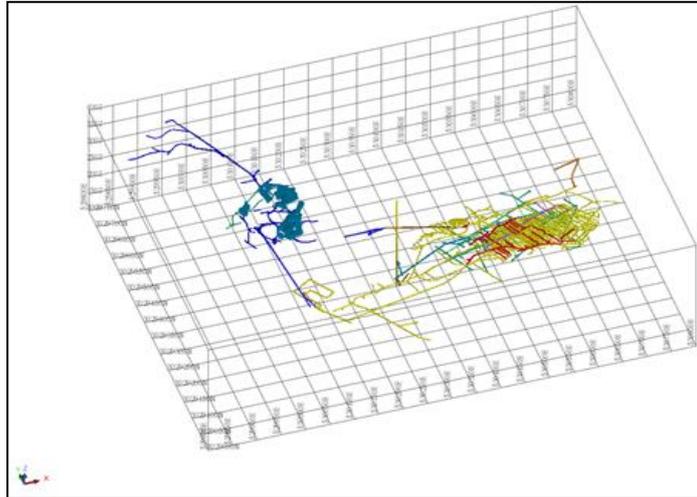
PROJECT No.  
ADV-HK-00157

Date  
June 2024

### 14.3.2 Underground Development Wireframes

A total of 16 underground development solids were provided by Silvercorp, RPM reviewed all models, fixed some validation issues and combined all models into one 3DM (“ugdevelopments.dtm”) which was used in the block model to exclude depleted blocks. All underground development models are displayed in **Figure 14-4**.

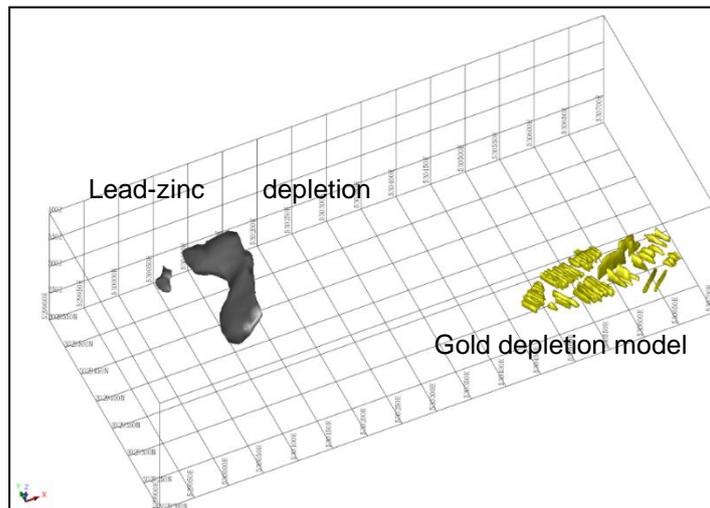
**Figure 14-4 3D View of Underground Developments**



### 14.3.3 Depleted Wireframes

One lead-zinc depleted model and sixty-three gold depleted models were provided by Silvercorp, which represented areas that are either sterilized or mine out, assumed to be stoping. RPM validated all models and combined these models as one depleted model for gold mineralization and one model for lead-zinc mineralization respectively, as in **Figure 14-5**.

**Figure 14-5 3D View of Underground Depletions**



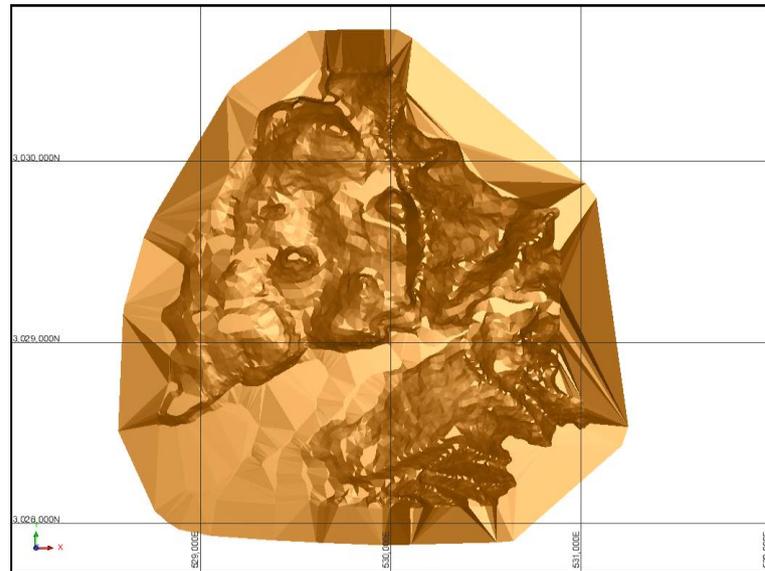
### 14.3.4 Topographic Surface

Silvercorp supplied one file for the same topographic surface which was used in the 2012 resource estimation. As there has been no surface mining activity from 2012 to 2024, RPM considers the topography model suitable for use in the 2024 resource estimation update.

In order to maintain consistency between the extent of the current block model and the latest topography file, the boundary string of the topography file was extracted and expanded to 200 m and then combined

with the previous contour strings to construct a new topography surface ('byp\_topo\_20181127.dtm') for block model coding as shown in **Figure 14-6**.

**Figure 14-6 3D View of Topography**



## 14.4 Compositing and Statistics

The wireframes of the mineralized zones were used to define the Mineral Resource intersections. These were coded into the 'res\_zone' table within the database.

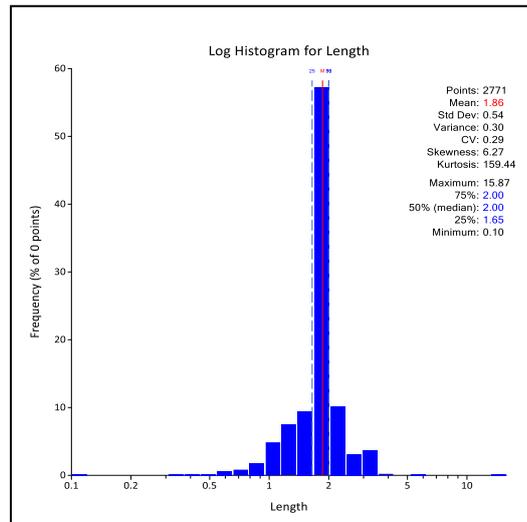
Separate intersection files were generated for each resource domain. A review of sample length within these files was carried out to determine the optimal composite length. This review determined that a variety of sample lengths were used during the original sampling, ranging from less than 0.1 m to 5 m. The majority of sample lengths within the mineralization were 2 m which was selected as the composite length (**Figure 14-7**).

Surpac software was then used to extract 'best fit' 2m down-hole composites within the intervals coded as 'domain' intersections. This method adjusts the composite length within intersections to eliminate "rejected" samples that can occur when fixed length compositing is used. A minimum length of 50% was used due to the numerous very narrow intersections. This allowed a composite to be generated for intersections as narrow as 0.5 m.

Due to clustering in the main gold mineralized object 6, an extra step of de-clustering was applied to the composite file of object 6. This was completed to obtain a more robust composite file for later analysis and grade estimation.

The composites were checked for spatial correlation with the wireframe objects, the location of the rejected composites and zero composite values. Individual composite files were created for each of the domains in the wireframe models and contained Au, Pb and Zn assay data. The composite data was imported into Snowden Supervisor v8.8 statistical software ("Supervisor") for analysis. All pods from gold wireframes were considered as one similar orientation mineralization domain and all pods from lead-zinc wireframes were grouped into 3 main mineralization domains with different orientations as shown in **Figure 14-8**. Summary statistics for each zone are shown in **Table 14-4** to **Table 14-8**.

**Figure 14-7 Sample Lengths inside Wireframes**



Analysis of the descriptive statistics indicates that the elements within each domain appear to have a log normal distribution with moderate to high variability. This interpretation is further supported when the log probability plots and histograms are analyzed, resulting in the interpretation that all elements have a relatively log normal distribution and a highly positively skewed distribution as would be expected with the style of mineralization observed within the deposit.

RPM interprets these statistics to be representative of the style of mineralization observed at the Project.

### 14.4.1 Correlation Analysis

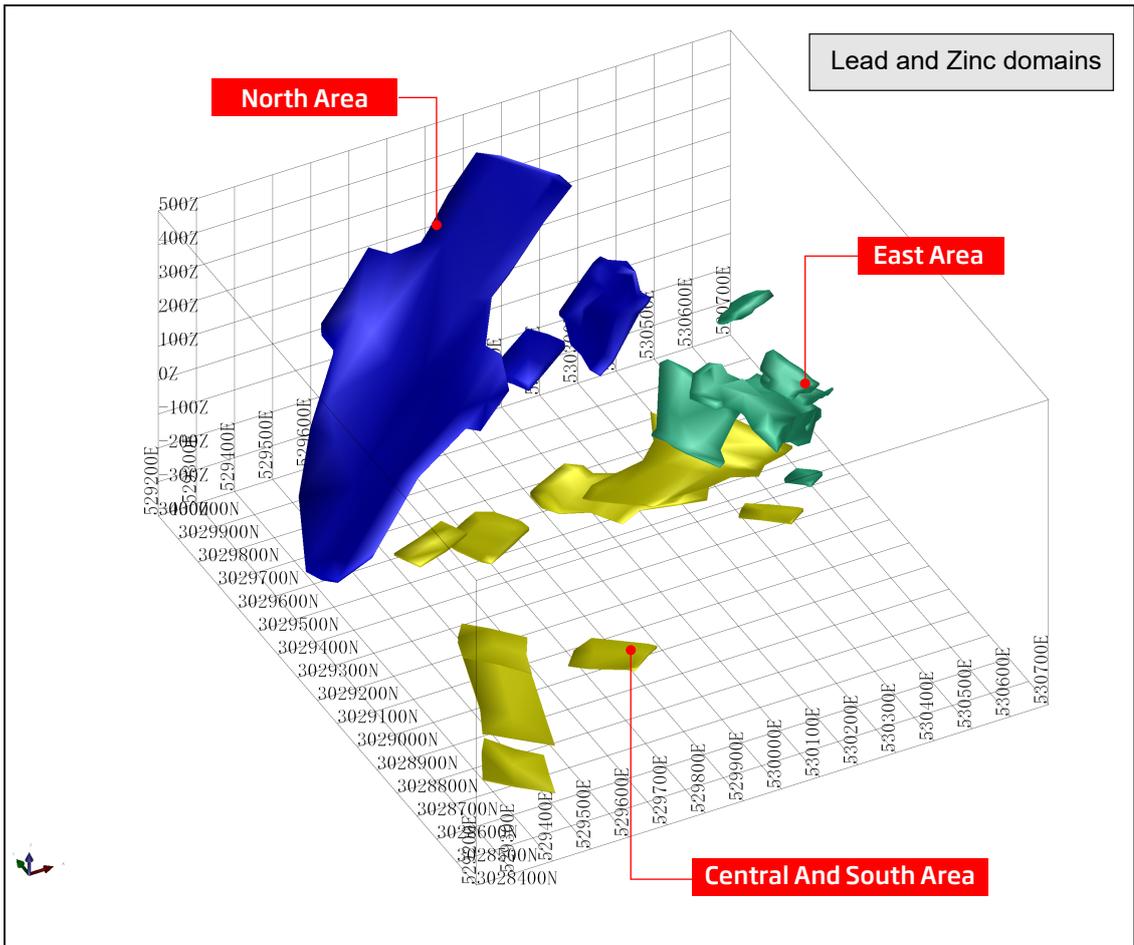
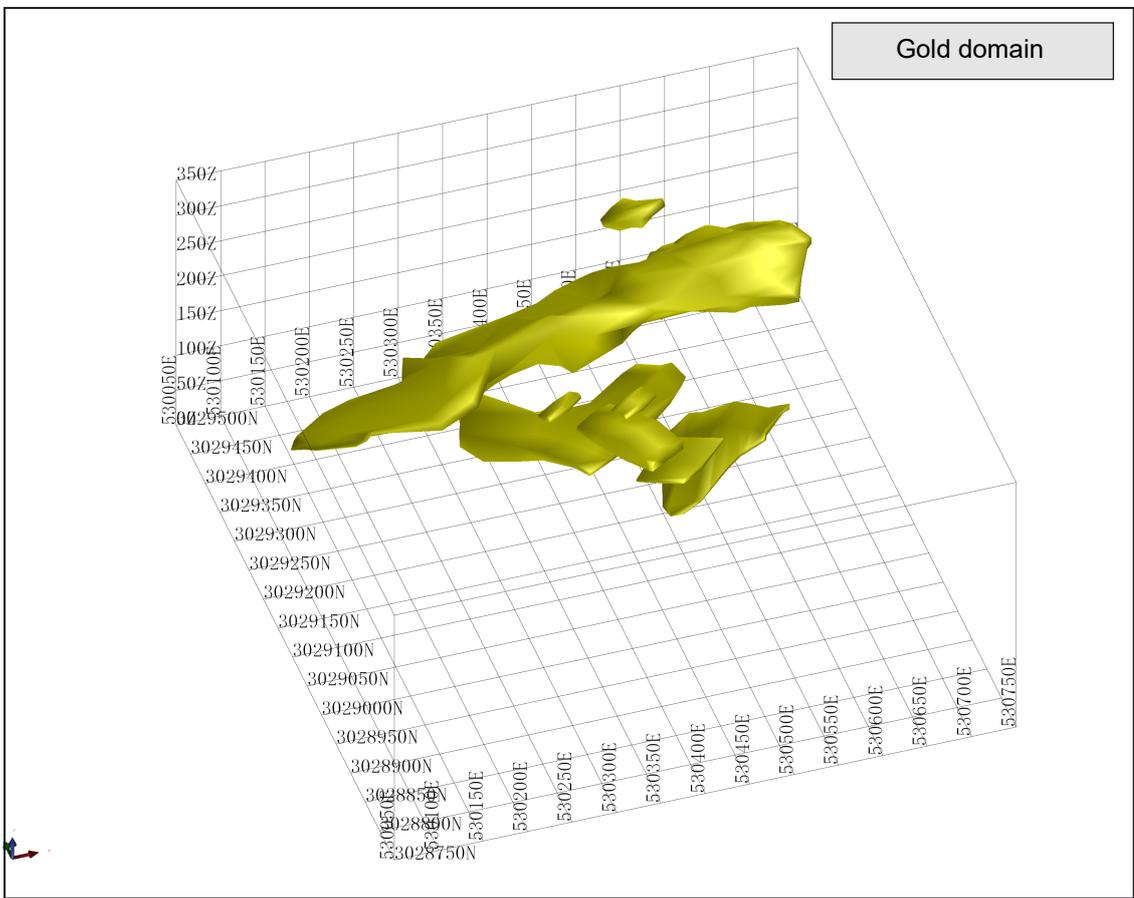
Considering the gold deposit and lead-zinc deposit are located within different units with no major overlapping between two deposits, the correlation analysis was completed only for Lead and Zinc.

As only lead and zinc were assayed for all samples, the correlation analysis was completed based on available assay results for Pb and Zn. Correlation matrices for all combined mineralization are shown in **Table 14-3**.

**Table 14-3 BYP Project – Lead-Zinc Deposit Metals Correlation Matrix**

	Zn	Pb
Zn	1	
Pb	0.47	1

According to the above correlation analysis results, the correlation coefficient between Pb and Zn is 0.47 which is consistent with the characteristics of the deposit type. RPM considers this correlation to be reasonable although there is evidence for additional domaining requirements.



Note: Wireframes outside of mining licence area are not displayed

<b>LEGEND</b>

<b>CLIENT</b>	<b>PROJECT</b>	
	NAME <b>Sivercorp BYP Au-Pb-Zn Project</b>	
	DRAWING <b>Domain Groupings</b>	
FIGURE No. <b>14-8</b>	PROJECT No. <b>ADV-HK-00157</b>	Date <b>June 2024</b>

**Table 14-4 Summary Statistics for 2m Composites for Au in Au Mineralization Domain**

<b>Au Domain</b>											
<b>Pod</b>	1	2	3	4	5	6	7	8*	9	10	11*
<b>Number</b>	8	30	86	5	4	2375	18	2	6	21	37
<b>Minimum</b>	0.55	0.07	0.03	0.31	1.18	0.00	0.60	1.85	1.06	0.12	0.17
<b>Maximum</b>	5.02	4.11	2.79	2.26	2.67	23.10	6.78	3.44	3.05	2.22	2.13
<b>Mean</b>	2.34	1.41	0.81	1.14	1.57	2.35	2.69	2.65	2.12	0.95	0.91
<b>Variance</b>	2.50	1.18	0.37	0.59	0.54	7.18	3.73	1.27	0.78	0.48	0.18
<b>Std Dev</b>	1.58	1.09	0.61	0.77	0.74	2.68	1.93	1.13	0.88	0.69	0.43
<b>CV</b>	0.68	0.77	0.76	0.68	0.47	1.14	0.72	0.43	0.42	0.72	0.47
<b>Percentiles</b>											
<b>10</b>	0.55	0.16	0.32	0.31	1.18	0.35	0.71	1.85	1.06	0.16	0.42
<b>20</b>	0.71	0.45	0.41	0.31	1.18	0.57	0.88	1.85	1.06	0.26	0.53
<b>30</b>	1.03	0.50	0.50	0.43	1.18	0.77	1.10	1.85	1.09	0.46	0.69
<b>40</b>	1.48	0.76	0.54	0.56	1.18	1.02	1.30	1.85	1.50	0.53	0.77
<b>50</b>	1.89	1.00	0.58	0.85	1.18	1.37	2.34	1.85	2.11	0.70	0.89
<b>60</b>	1.91	1.38	0.68	1.15	1.20	1.83	2.96	2.17	2.31	0.88	1.01
<b>70</b>	2.67	2.04	0.80	1.28	1.22	2.50	3.17	2.49	2.55	1.45	1.06
<b>80</b>	3.50	2.36	0.99	1.41	1.52	3.67	4.18	2.80	2.86	1.63	1.06
<b>90</b>	4.20	3.03	1.67	1.84	2.09	5.78	4.69	3.12	3.00	1.93	1.30
<b>95</b>	4.61	3.13	2.42	2.05	2.38	7.49	6.66	3.28	3.03	2.00	1.85
<b>97.5</b>	4.82	3.41	2.70	2.16	2.53	10.24	6.72	3.36	3.04	2.11	1.95

Note: \*Objects which are mostly outside of current 2024 applied mining license area after the adjustment of inflection points, 2024

**Table 14-5 Summary Statistics for 2m Composites for Pb in Pb-Zn Mineralization Domain (obj 1-15)**

<b>Pb Domain</b>															
<b>Pod</b>	1	2	3	4	5	6	7	8*	9	10	11	12*	13	14*	15*
<b>Number</b>	32	571	144	21	43	151	135	37	20	12	1	5	7	2	1
<b>Minimum</b>	0.01	0.00	0.00	0.09	0.21	0.00	0.01	0.14	0.03	0.00	0.74	0.00	0.21	0.29	0.55
<b>Maximum</b>	3.42	8.64	5.47	1.48	1.72	2.28	4.85	5.83	9.66	4.51	0.74	1.79	1.38	0.33	0.55
<b>Mean</b>	0.89	0.62	0.60	0.44	0.59	0.28	0.28	1.12	1.32	1.05	0.74	0.81	0.51	0.31	0.55
<b>Variance</b>	0.94	0.72	0.63	0.13	0.12	0.17	0.27	1.28	4.65	1.52	0.00	0.62	0.16	0.00	0.00
<b>Std Dev</b>	0.97	0.85	0.79	0.35	0.34	0.42	0.52	1.13	2.16	1.23	0.00	0.79	0.40	0.03	0.00
<b>CV</b>	1.08	1.37	1.31	0.81	0.58	1.48	1.88	1.01	1.64	1.18	0.00	0.97	0.77	0.09	0.00
<b>Percentiles</b>															
<b>10</b>	0.10	0.09	0.03	0.09	0.24	0.01	0.03	0.20	0.03	0.03	0.74	0.00	0.21	0.29	0.55
<b>20</b>	0.17	0.15	0.10	0.18	0.29	0.03	0.04	0.35	0.06	0.16	0.74	0.00	0.25	0.29	0.55
<b>30</b>	0.25	0.19	0.16	0.22	0.32	0.05	0.06	0.45	0.18	0.29	0.74	0.00	0.31	0.29	0.55
<b>40</b>	0.33	0.26	0.28	0.25	0.40	0.07	0.09	0.73	0.39	0.36	0.74	0.00	0.33	0.29	0.55
<b>50</b>	0.47	0.34	0.36	0.30	0.49	0.11	0.10	0.80	0.63	0.43	0.74	0.54	0.38	0.29	0.55
<b>60</b>	0.55	0.44	0.47	0.37	0.57	0.15	0.17	1.00	0.93	0.97	0.74	1.09	0.42	0.29	0.55
<b>70</b>	0.98	0.60	0.60	0.49	0.71	0.24	0.26	1.08	1.18	1.18	0.74	1.14	0.44	0.30	0.55
<b>80</b>	1.55	0.91	0.89	0.67	0.84	0.41	0.35	1.50	1.43	1.39	0.74	1.20	0.47	0.31	0.55
<b>90</b>	2.30	1.37	1.20	0.73	1.00	0.85	0.62	2.19	2.61	1.72	0.74	1.49	0.76	0.32	0.55
<b>95</b>	2.81	1.94	2.38	1.10	1.22	1.30	0.91	2.98	3.08	2.86	0.74	1.64	1.07	0.32	0.55
<b>97.5</b>	3.39	2.56	3.01	1.29	1.34	1.47	1.45	4.11	6.37	3.68	0.74	1.71	1.23	0.32	0.55

Note: \*Objects which are mostly outside of current 2024 applied mining license area after the adjustment of inflection points, 2024

**Table 14-6 Summary Statistics for 2m Composites for Pb in Pb-Zn Mineralization Domain (obj 16-31)**

<b>Pb Domain</b>																
<b>Pod</b>	16*	17*	18	19	20	21*	22*	23	24	25*	26*	27	28*	29*	30	31
<b>Number</b>	6	24	2	9	5	1	13	3	5	21	32	22	29	15	13	138
<b>Minimum</b>	0.15	0.08	0.25	0.47	0.26	0.32	0.00	0.80	0.20	0.21	0.14	0.00	0.04	0.20	0.03	0
<b>Maximum</b>	1.43	1.52	0.30	6.78	0.57	0.32	1.10	5.71	1.76	13.87	2.81	3.02	1.42	4.71	0.86	7.29
<b>Mean</b>	0.69	0.53	0.27	1.67	0.43	0.32	0.36	3.39	0.90	3.95	0.98	0.51	0.78	1.91	0.21	0.26
<b>Variance</b>	0.20	0.15	0.00	3.94	0.02	0.00	0.13	6.09	0.39	21.79	0.48	0.50	0.16	1.21	0.06	0.46
<b>Std Dev</b>	0.45	0.38	0.03	1.98	0.13	0.00	0.37	2.47	0.62	4.67	0.70	0.71	0.40	1.10	0.24	0.68
<b>CV</b>	0.65	0.72	0.13	1.19	0.30	0.00	1.02	0.73	0.69	1.18	0.71	1.38	0.51	0.58	1.16	2.63
<b>Percentiles</b>																
<b>10</b>	0.15	0.14	0.25	0.47	0.26	0.32	0.00	0.80	0.20	0.21	0.29	0.01	0.08	0.29	0.03	0.02
<b>20</b>	0.19	0.20	0.25	0.54	0.26	0.32	0.00	0.80	0.20	0.33	0.44	0.01	0.11	0.80	0.04	0.03
<b>30</b>	0.32	0.26	0.25	0.62	0.31	0.32	0.11	0.80	0.40	0.74	0.62	0.02	0.53	1.36	0.04	0.04
<b>40</b>	0.44	0.34	0.25	0.70	0.36	0.32	0.21	1.37	0.60	0.78	0.68	0.16	1.00	1.72	0.05	0.07
<b>50</b>	0.55	0.40	0.25	0.87	0.39	0.32	0.23	2.23	0.62	1.24	0.74	0.22	1.00	1.79	0.06	0.11
<b>60</b>	0.71	0.46	0.26	1.08	0.43	0.32	0.29	3.09	0.65	3.05	0.90	0.50	1.00	2.13	0.14	0.14
<b>70</b>	0.81	0.62	0.27	1.36	0.49	0.32	0.35	3.87	0.97	4.72	1.05	0.64	1.00	2.29	0.27	0.19
<b>80</b>	0.83	0.81	0.28	1.74	0.55	0.32	0.55	4.48	1.30	5.66	1.30	0.73	1.00	2.34	0.36	0.31
<b>90</b>	1.08	1.03	0.29	2.43	0.56	0.32	0.91	5.10	1.53	12.61	2.11	0.77	1.00	2.72	0.41	0.52
<b>95</b>	1.26	1.23	0.29	4.61	0.57	0.32	1.01	5.41	1.64	13.52	2.55	1.73	1.06	3.22	0.57	0.87
<b>97.5</b>	1.35	1.37	0.30	5.70	0.57	0.32	1.06	5.56	1.70	13.70	2.75	2.36	1.19	3.97	0.71	1.19

Note: \*Objects which are mostly outside of current 2024 applied mining license area after the adjustment of inflection points, 2024

**Table 14-7 Summary Statistics for 2m Composites for Zn in Pb-Zn Mineralization Domain (obj 1-15)**

Zn Domain															
Pod	1	2	3	4	5	6	7	8*	9	10	11	12*	13	14*	15*
<b>Number</b>	32	571	144	21	43	151	135	37	20	12	1	5.00	7.00	2.00	1.00
<b>Minimum</b>	0.02	0.00	0.00	0.38	0.37	0.00	0.09	0.48	0.01	0.00	1.71	0.00	0.18	1.49	3.20
<b>Maximum</b>	4.98	15.89	8.04	5.66	9.15	8.43	14.24	9.22	2.30	12.90	1.71	1.02	4.44	1.51	3.20
<b>Mean</b>	1.16	1.23	1.10	2.82	1.82	1.77	2.14	2.71	0.38	2.92	1.71	0.22	1.70	1.50	3.20
<b>Variance</b>	1.55	2.09	1.43	1.73	3.57	2.12	4.01	5.15	0.33	15.89	0.00	0.20	1.82	0.00	0.00
<b>Std Dev</b>	1.25	1.45	1.20	1.31	1.89	1.46	2.00	2.27	0.57	3.99	0.00	0.45	1.35	0.02	0.00
<b>CV</b>	1.07	1.17	1.09	0.47	1.04	0.82	0.93	0.84	1.51	1.37	0.00	2.08	0.80	0.01	0.00
Percentiles															
<b>10</b>	0.02	0.21	0.06	1.41	0.48	0.31	0.39	0.58	0.02	0.07	1.71	0.00	0.18	1.49	3.20
<b>20</b>	0.13	0.38	0.18	1.51	0.72	0.75	0.71	0.83	0.06	0.38	1.71	0.00	0.40	1.49	3.20
<b>30</b>	0.35	0.55	0.34	1.74	0.79	0.94	0.83	1.01	0.07	0.52	1.71	0.00	0.79	1.49	3.20
<b>40</b>	0.65	0.70	0.55	2.37	0.99	1.10	1.11	1.31	0.10	0.64	1.71	0.00	1.24	1.49	3.20
<b>50</b>	0.76	0.87	0.82	2.68	1.09	1.37	1.61	1.69	0.16	0.79	1.71	0.01	1.44	1.49	3.20
<b>60</b>	0.99	1.08	0.98	2.96	1.56	1.69	1.96	2.59	0.21	0.99	1.71	0.02	1.58	1.49	3.20
<b>70</b>	1.54	1.30	1.25	3.59	1.70	2.04	2.77	3.49	0.28	2.57	1.71	0.03	1.79	1.50	3.20
<b>80</b>	1.66	1.58	1.71	3.71	2.23	2.55	3.25	4.01	0.32	4.45	1.71	0.04	1.82	1.50	3.20
<b>90</b>	2.26	2.33	2.48	4.30	3.44	3.91	4.34	5.81	1.18	7.46	1.71	0.53	2.60	1.51	3.20
<b>95</b>	3.70	3.51	3.49	4.91	5.20	5.07	5.79	7.07	1.26	10.07	1.71	0.78	3.52	1.51	3.20
<b>97.5</b>	4.91	5.23	3.79	5.28	8.23	5.64	7.11	7.71	1.78	11.49	1.71	0.90	3.98	1.51	3.20

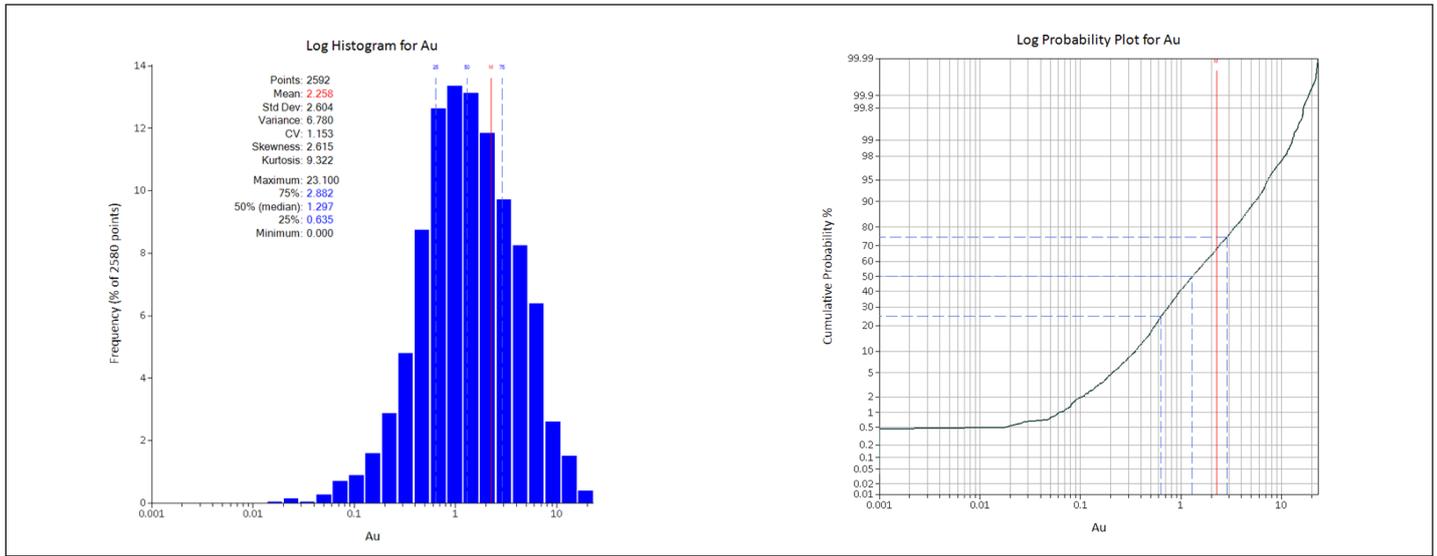
Note: \*Objects which are mostly outside of current 2024 applied mining license area after the adjustment of inflection points, 2024

**Table 14-8 Summary Statistics for 2m Composites for Zn in Pb-Zn Mineralization Domain (obj 16-31)**

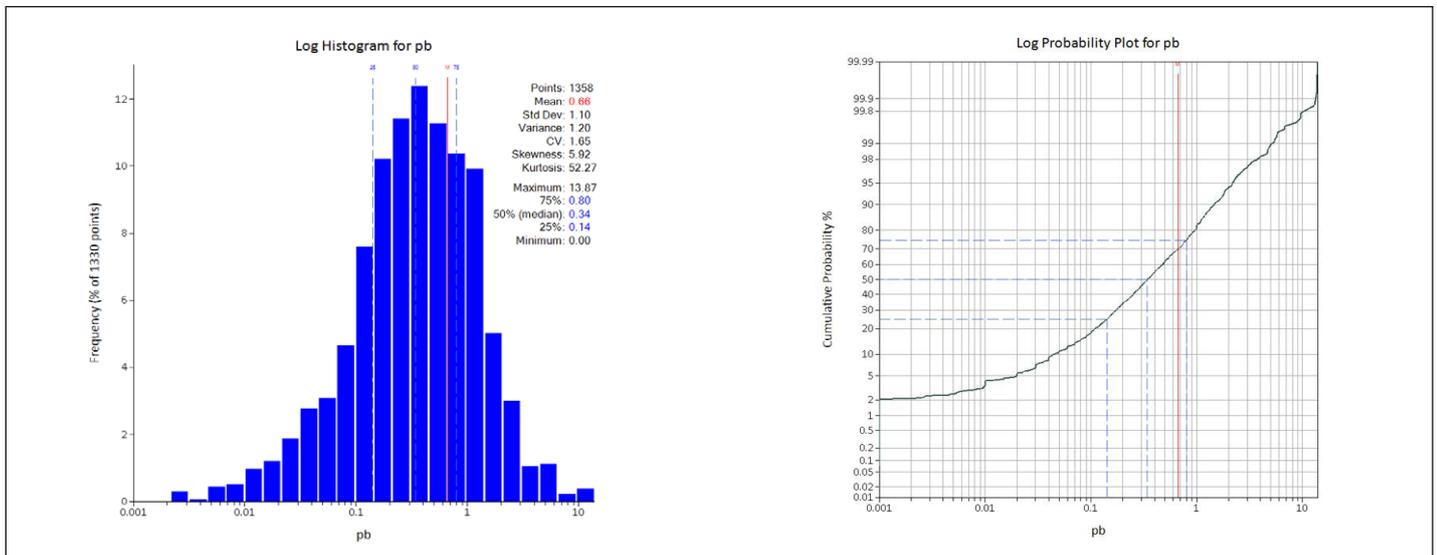
Zn Domain																
Pod	16*	17*	18	19	20	21*	22*	23	24	25*	26*	27	28*	29*	30	31
<b>Number</b>	6	24	2	9	5	1	13	3	5	21	32	22	29	15	13	138
<b>Minimum</b>	0.48	0.36	1.31	0.06	1.26	1.80	0.00	0.29	0.08	0.27	0.02	0.06	0.33	0.51	0.52	0.12
<b>Maximum</b>	3.57	4.77	2.68	18.40	1.77	1.80	3.29	4.11	0.61	14.18	3.52	6.22	2.57	9.71	2.33	15.05
<b>Mean</b>	1.70	1.51	1.99	4.78	1.50	1.80	1.14	2.22	0.22	4.19	1.04	0.94	1.20	4.86	1.32	3.33
<b>Variance</b>	2.06	1.27	0.94	34.69	0.04	0.00	1.21	3.65	0.05	16.20	0.94	1.79	0.28	9.98	0.30	10.20
<b>Std Dev</b>	1.43	1.13	0.97	5.89	0.20	0.00	1.10	1.91	0.22	4.03	0.97	1.34	0.53	3.16	0.55	3.19
<b>CV</b>	0.85	0.75	0.49	1.23	0.13	0.00	0.96	0.86	0.98	0.96	0.93	1.42	0.44	0.65	0.42	0.96
Percentiles																
<b>10</b>	0.48	0.47	1.31	0.06	1.26	1.80	0.00	0.29	0.08	0.58	0.03	0.07	0.95	0.64	0.60	0.44
<b>20</b>	0.53	0.61	1.31	0.17	1.26	1.80	0.00	0.29	0.08	0.63	0.17	0.18	1.00	1.71	0.87	1.06
<b>30</b>	0.65	0.81	1.31	0.21	1.31	1.80	0.28	0.29	0.10	0.79	0.38	0.26	1.00	2.81	0.93	1.45
<b>40</b>	0.73	0.93	1.31	0.93	1.36	1.80	0.69	0.69	0.12	1.07	0.69	0.32	1.00	3.18	1.01	1.90
<b>50</b>	0.78	1.01	1.31	2.58	1.45	1.80	0.79	1.28	0.12	3.38	0.82	0.45	1.00	3.61	1.09	2.20
<b>60</b>	1.02	1.37	1.58	4.02	1.53	1.80	1.07	1.88	0.13	4.93	0.86	0.68	1.00	4.78	1.30	2.85
<b>70</b>	1.63	1.56	1.86	4.90	1.54	1.80	1.40	2.46	0.16	5.21	1.07	0.84	1.03	6.41	1.44	3.51
<b>80</b>	3.02	2.19	2.13	6.55	1.56	1.80	1.62	3.01	0.19	5.93	1.67	1.11	1.21	8.13	1.78	4.88
<b>90</b>	3.52	2.89	2.41	9.49	1.67	1.80	2.75	3.56	0.40	8.16	2.50	1.95	2.20	9.23	2.04	7.77
<b>95</b>	3.54	3.67	2.54	13.94	1.72	1.80	3.23	3.83	0.51	12.71	3.09	2.34	2.36	9.54	2.15	11.07
<b>97.5</b>	3.56	4.22	2.61	16.17	1.74	1.80	3.26	3.97	0.56	13.53	3.38	4.11	2.41	9.62	2.24	12.54

Note: \*Objects which are mostly outside of current 2024 applied mining license area after the adjustment of inflection points, 2024

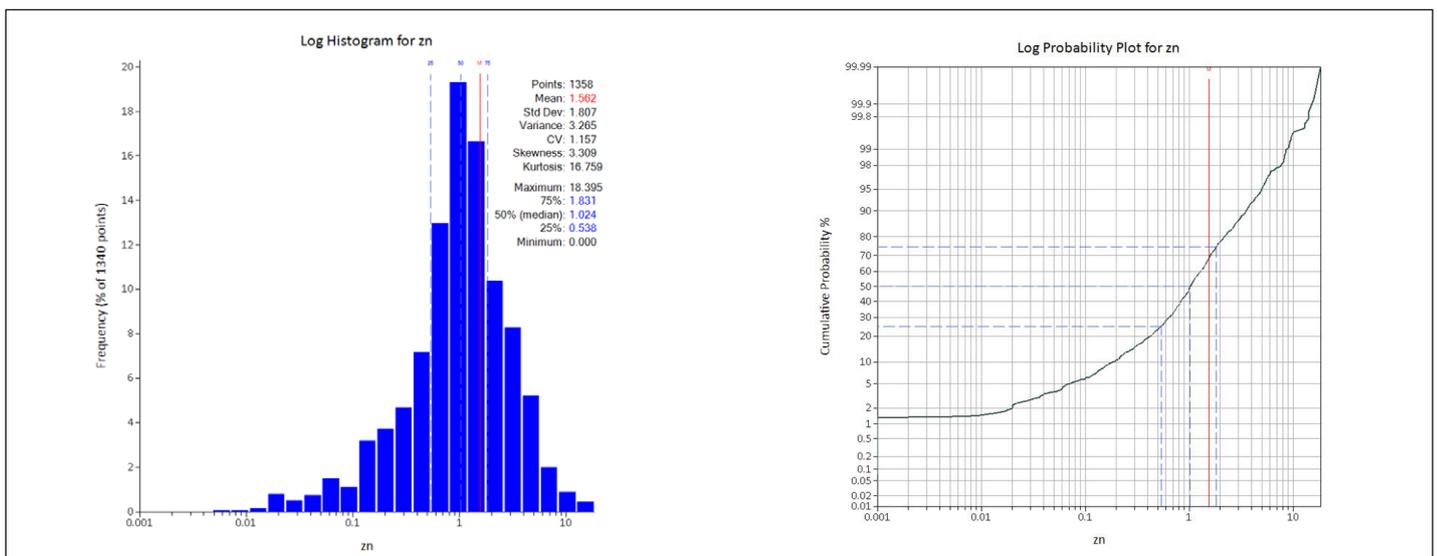
## Log Histogram and Probability Plots for Au



## Log Histogram and Probability Plots for Pb



## Log Histogram and Probability Plots for Zn



**RPM**GLOBAL

LEGEND

CLIENT

SILVERCORP METALS INC.

PROJECT

NAME  
**Silvercorp BYP Au-Pb-Zn Project**

DRAWING  
**Log Histogram and Probability Plots for Au, Pb, Zn**

FIGURE No.  
14-9

PROJECT No.  
ADV-HK-00157

Date  
June 2024

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

## 14.4.2 Top-Cuts

Visual analysis of the grade distributions within drill holes indicates that gold and lead equivalent high-grade outliers occur in the database which may impact the actual estimation results.

Analysis of the statistics indicates that the composite data for gold and lead-zinc are positively skewed with moderate coefficients of variation. The application of top cuts is considered necessary prior to using the data for linear grade interpolation.

To assist in the selection of appropriate top cuts, the composite data was imported into Supervisor software, where population histograms, probability plots and the coefficient of variation statistics were generated for all domains. The histogram and probability plots are shown in **Figure 14-10** to **Figure 14-12**.

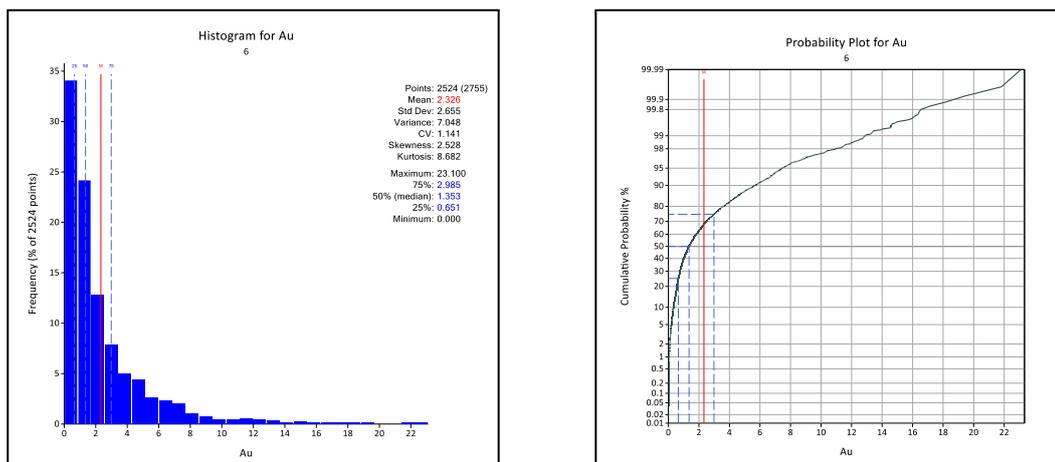
Top cuts were determined for all main gold and lead-zinc zones using the shape of distribution on the log probability plots and population histograms, and determining the spatial location of the samples subject to high grade cuts. Top-cuts were not applied for domains with insufficient samples. High grade top cuts were then applied for estimation of each domain; this ensured appropriate treatment of the grade distribution within both the gold and lead-zinc domains.

Following a review of the plots, different top-cut values were determined for all main domains. Top cuts applied to all elements of the main domains are summarized in **Table 14-9**.

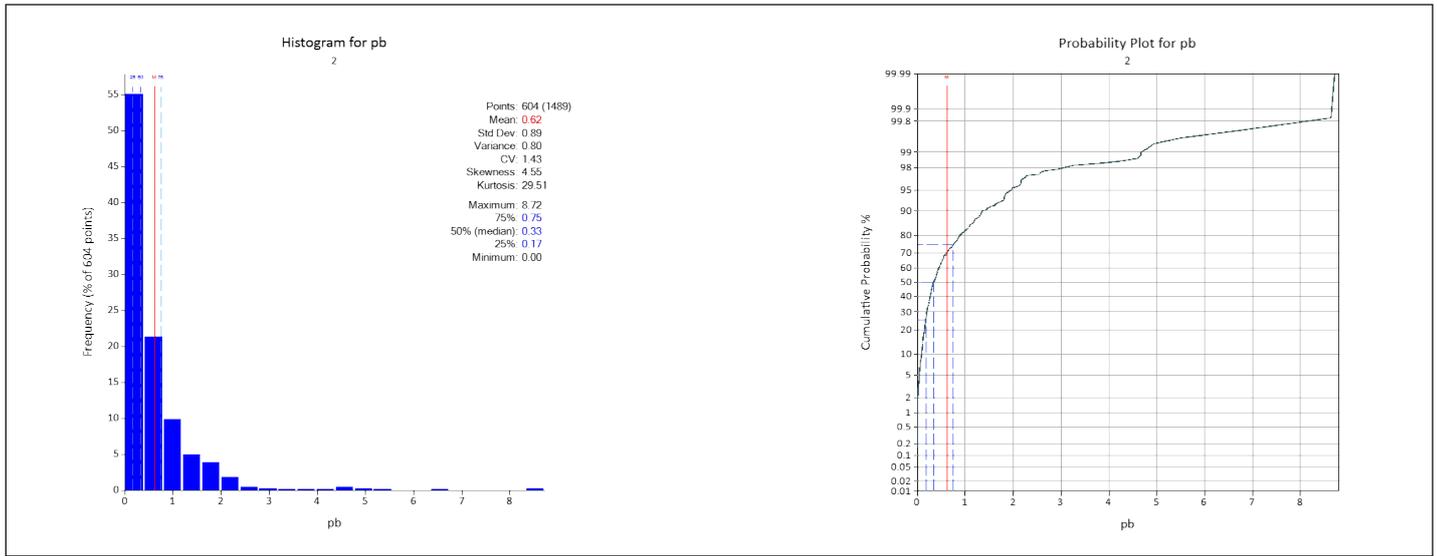
**Table 14-9**      **BYP Project – Top-Cuts Applied to Domains**

Grouped Composite Data	Domain	Assign	Au	Pb	Zn
Gold Zone	6	Cut Value (g/t)	16	-	-
		Number Cut	9	-	-
Lead-Zinc Zone	2	Cut Value (%)	-	6	9
		Number Cut	-	3	4
	3	Cut Value (%)	-	4	6
		Number Cut	-	1	1
	6	Cut Value (%)	-	2	6.5
		Number Cut	-	1	1

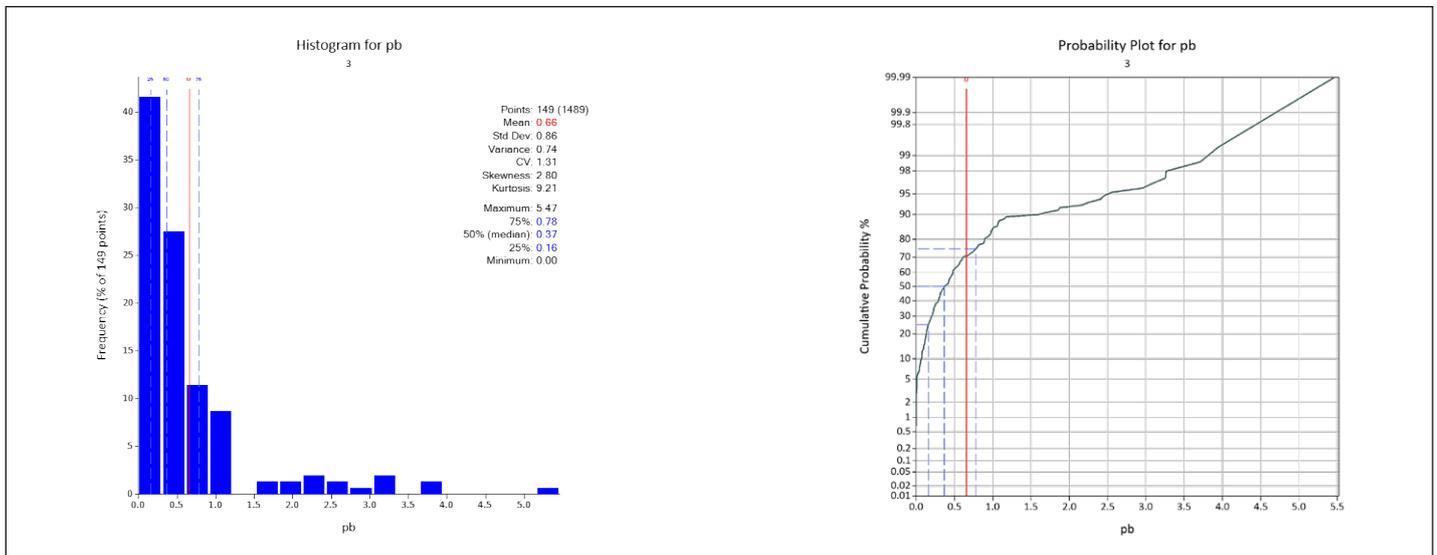
**Figure 14-10**      **Histogram and Probability Plots for Gold Domain 6**



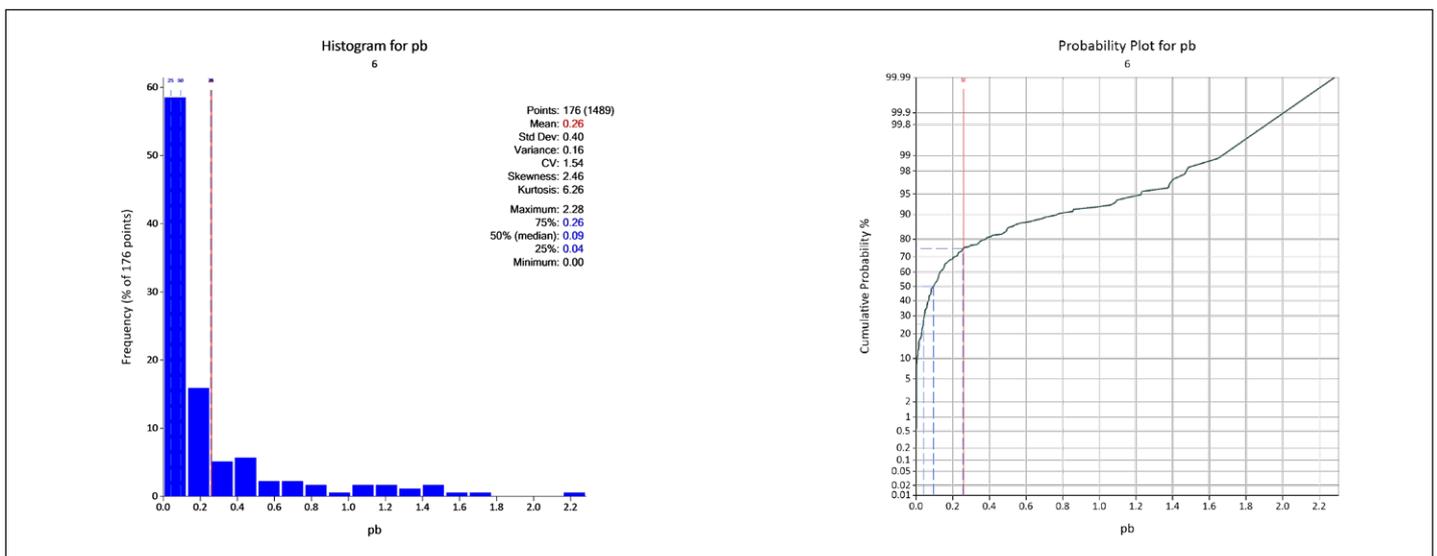
## Histogram and probability plots for lead domain 2



## Histogram and probability plots for lead domain 3



## Histogram and probability plots for lead domain 6



**RPMGLOBAL**

LEGEND

CLIENT

SILVERCORP METALS INC.

PROJECT

NAME  
**Silvercorp BYP Au-Pb-Zn Project**

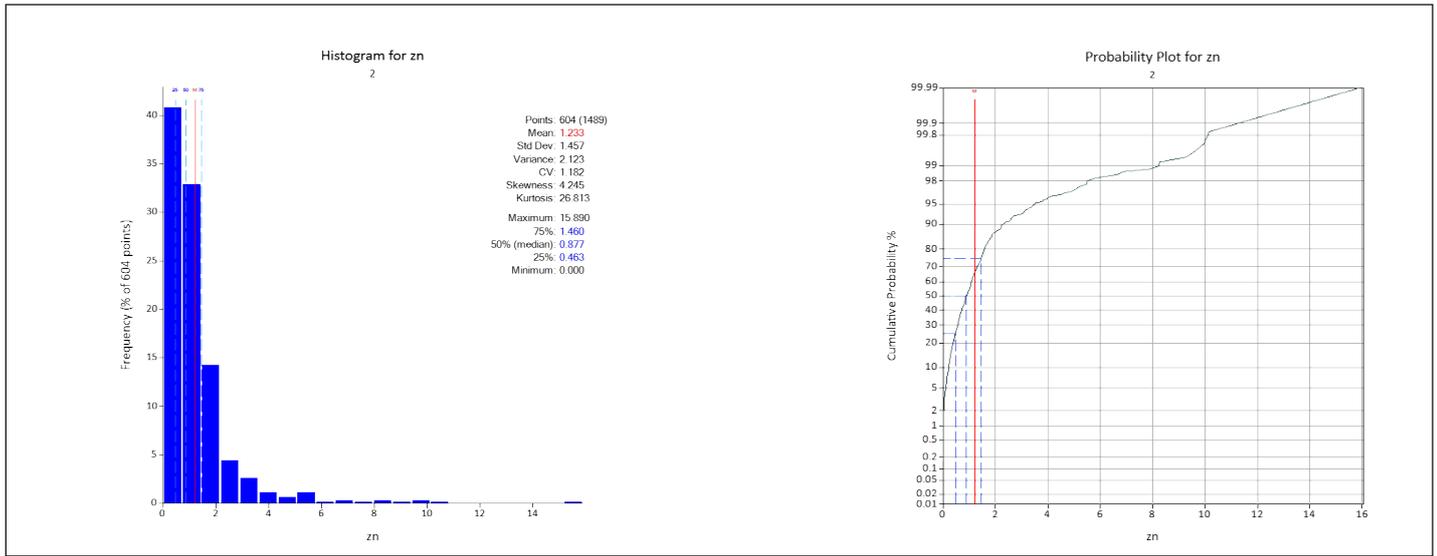
DRAWING  
**Histogram and probability plots  
for lead domain 2, 3, 6**

FIGURE No.  
14-11

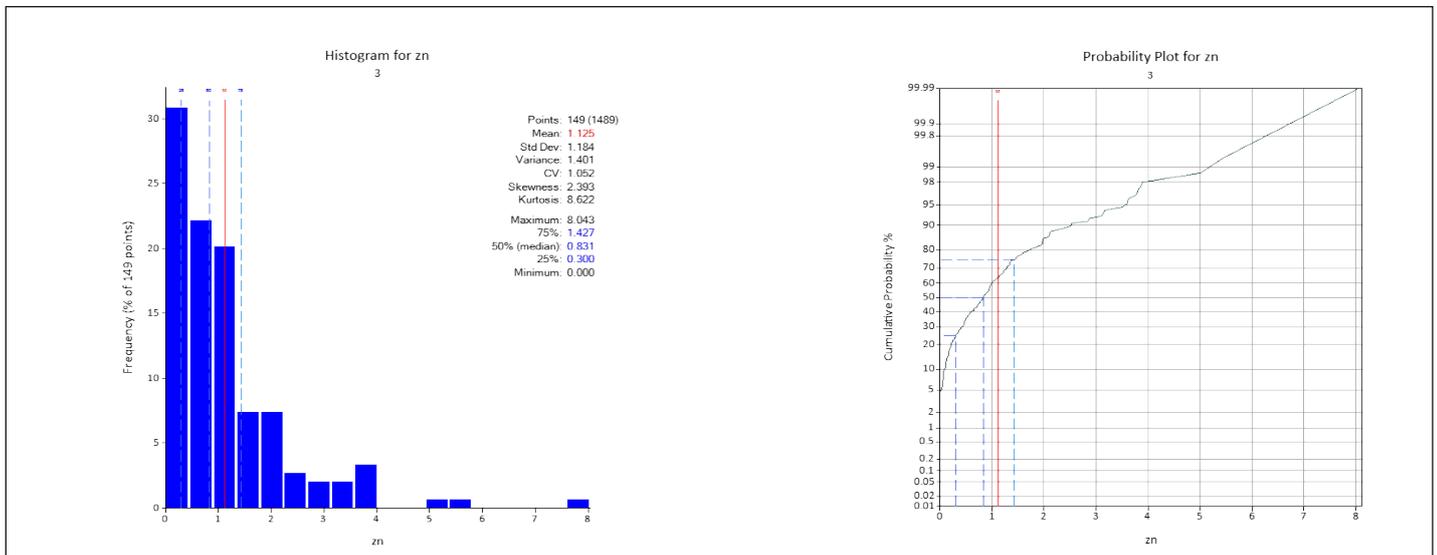
PROJECT No.  
ADV-HK-00157

Date  
June 2024

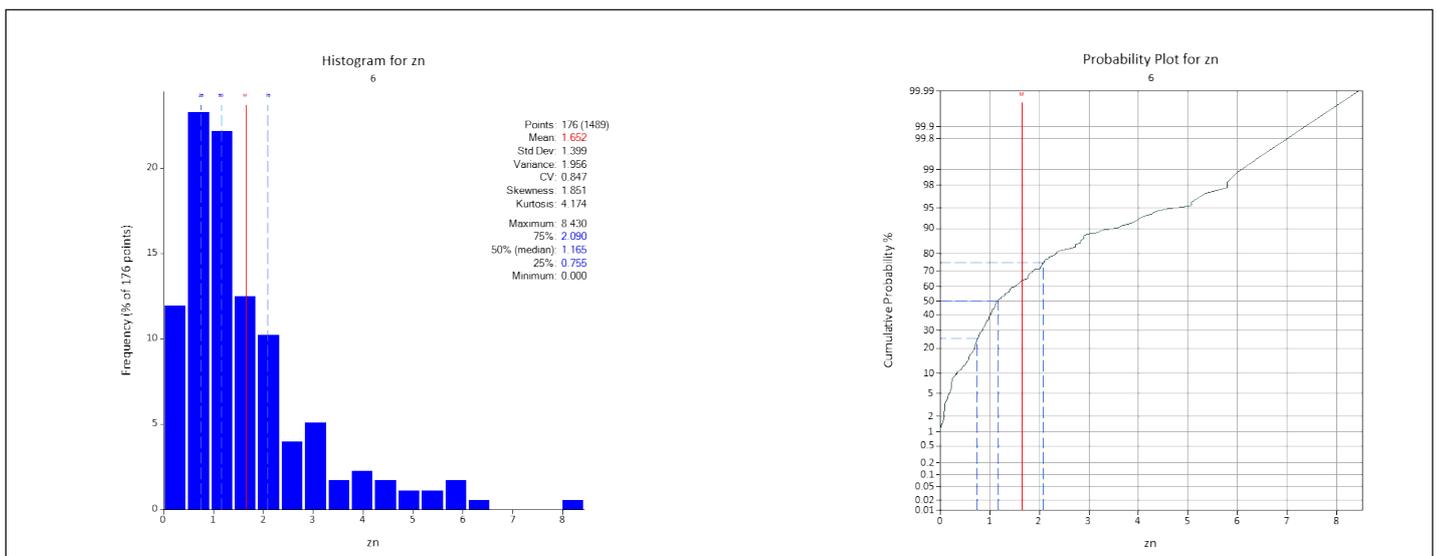
## Histogram and probability plots for zinc domain 2



## Histogram and probability plots for zinc domain 3



## Histogram and probability plots for zinc domain 6



**RPMGLOBAL**

LEGEND

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT

**SILVERCORP METALS INC.**

PROJECT

NAME  
**Silvercorp BYP Au-Pb-Zn Project**

DRAWING  
**Histogram and probability plots for zinc domain 2, 3, 6**

FIGURE No.  
14-12

PROJECT No.  
ADV-HK-00157

Date  
June 2024

## 14.5 Geospatial Analysis

### 14.5.1 Variography

Mineralization continuity was confirmed via variography. Variography examines the spatial relationship between composites, and seeks to identify the directions of mineralization continuity and to quantify the ranges of grade continuity. Variography was also used to determine the random variability or ‘nugget effect’ of the deposit. The results provide the basis for determining appropriate kriging parameters for resource estimation.

RPM has calculated experimental variograms for the main gold mineralization object 6, and three main lead and zinc mineralization objects 2, 3 and 6 for the north, east and southwest domains. All variography was completed using Supervisor software.

The 2 m composite sample data was transformed into a normal distribution using a normal scores transformation to help identify the main directions of mineralization continuity from the skewed original data. The experimental variograms are normalised against the sample variance so that the sill value is 1 and the structures are viewed as ratios or proportions of the sill.

A two structured nested spherical model was found to model the experimental variogram reasonably well. The down-hole variogram provides the best estimate of the true nugget values which was 0.21(Au), 0.08(Pb) and 0.13(Zn) for the north domain, 0.16(Pb) and 0.15(Zn) for the east domain and 0.04(Pb) and 0.04(Zn) for the southwest domain.

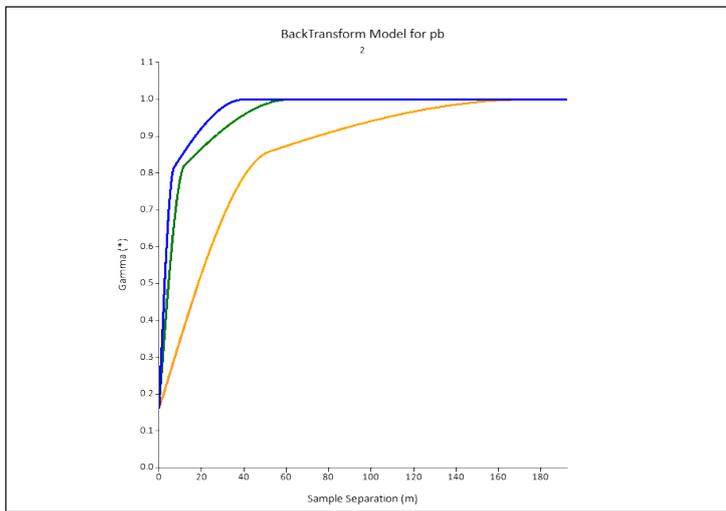
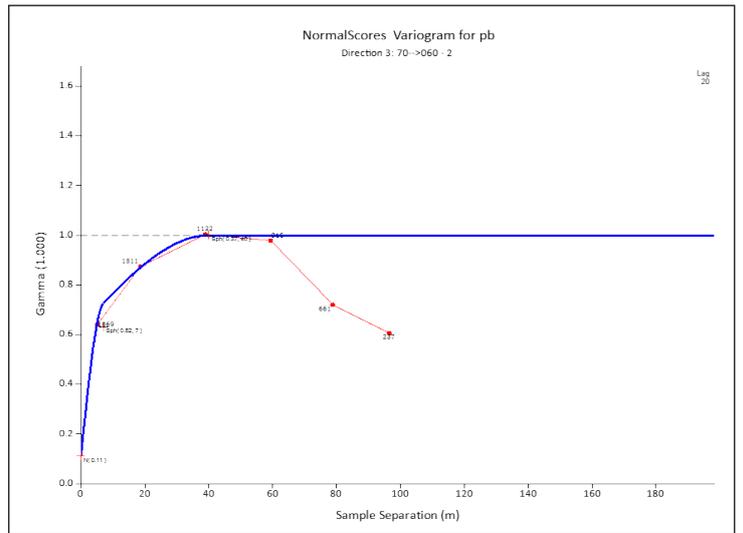
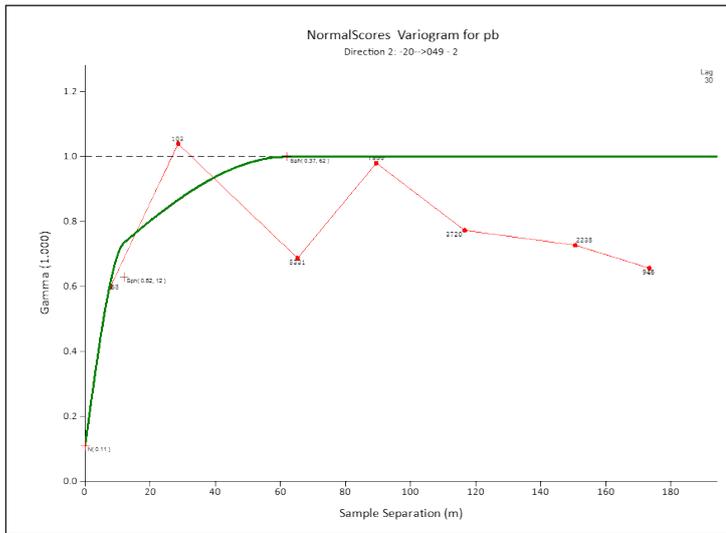
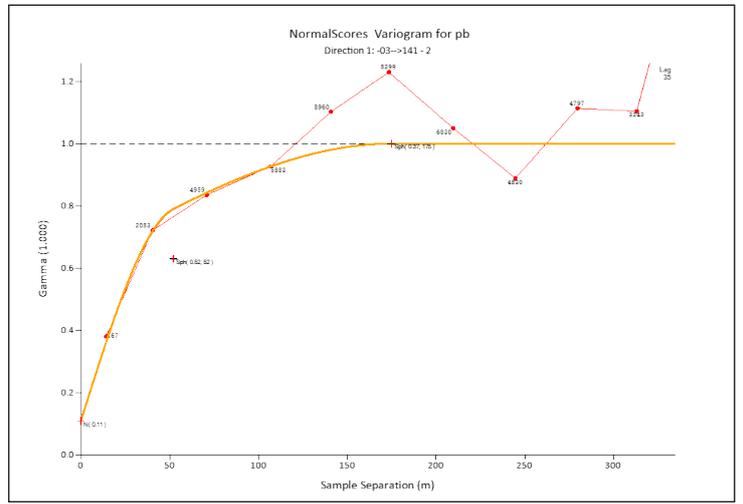
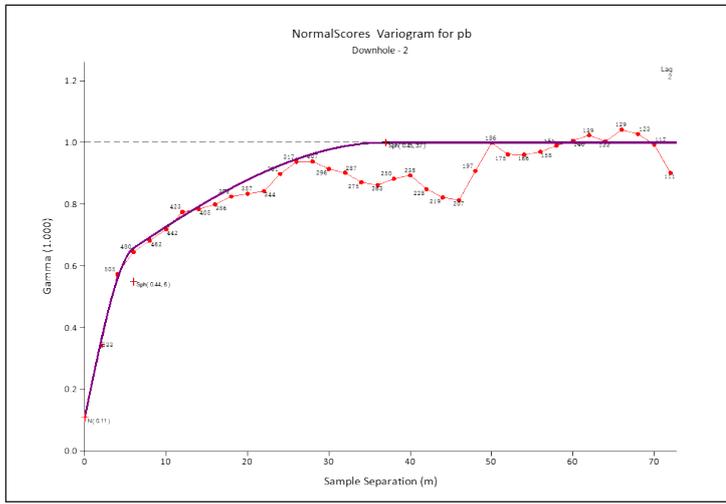
The orientation of the plane of mineralization was aligned with the interpreted wireframe for the main objects. The experimental variograms were calculated with the first direction aligned along the main mineralization continuity while the second direction was aligned in the plane of mineralization at 90° to the first orientation. The third direction was orientated perpendicular to the mineralization plane, across the width of the mineralization.

RPM modelled the down-hole and three orthogonal variograms of Au, Pb and Zn for each domain respectively. The variograms displayed reasonable structure. Interpreted variogram parameters are shown in **Table 14-10**. Full details of the variogram maps and continuity models can be found in **Figure 14-12** to **Figure 14-18**.

**Table 14-10    BYP Project – Interpreted Variogram Analysis**

Zone	Domain	Element	Nugget co	Structure 1				Structure 2			
				C1	A1	Semi1	Minor1	C2	A2	Semi2	Minor2
Gold Domain	All Areas	Au	0.21	0.7	29.0	1.2	1.6	0.1	142.0	3.5	6.5
Lead-zinc Domain	North Area	Pb	0.08	0.7	69.0	1.1	11.5	0.2	324.0	1.6	7.0
		Zn	0.13	0.5	66.0	2.3	9.4	0.3	359.0	5.6	8.2
	East Area	Pb	0.16	0.6	52.0	4.3	7.4	0.3	175.0	2.8	4.4
		Zn	0.15	0.7	40.0	1.3	5.0	0.2	143.0	1.9	3.1
	Southwest Area	Pb	0.04	0.8	96.0	1.4	10.7	0.1	172.0	1.4	3.3
		Zn	0.04	0.9	55.0	1.9	9.2	0.1	161.0	1.3	8.1





**RPM**GLOBAL

LEGEND

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT

SILVERCORP METALS INC.

PROJECT

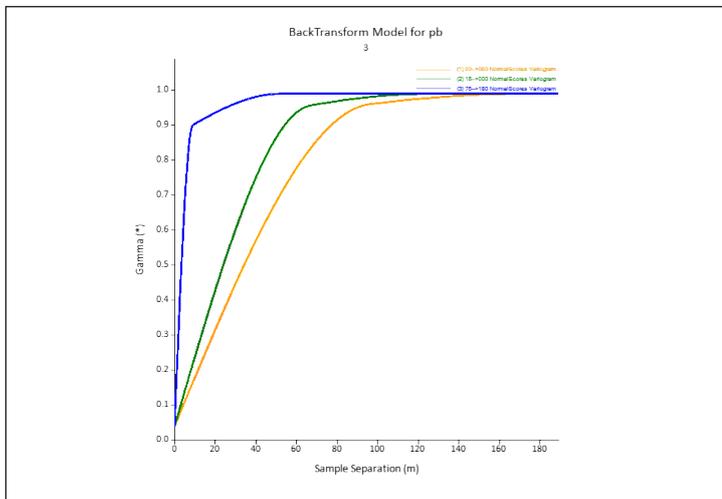
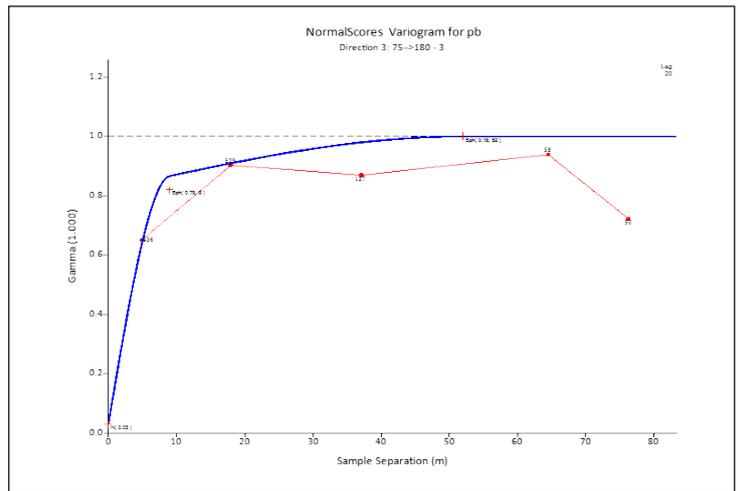
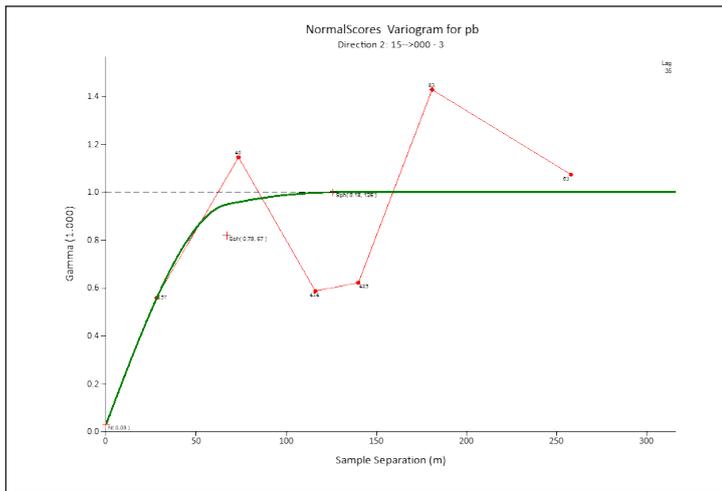
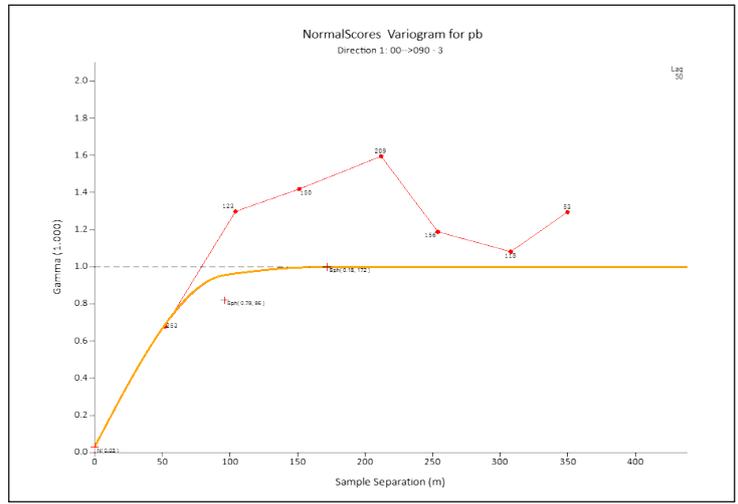
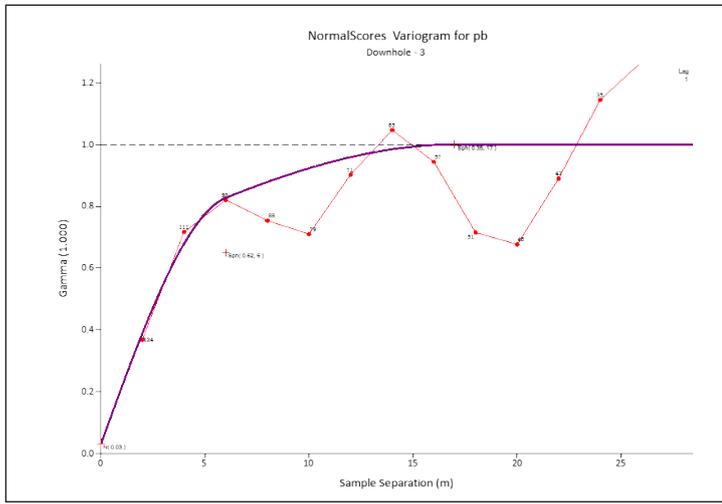
NAME  
**Silvercorp BYP Au-Pb-Zn Project**

DRAWING  
Variogram Maps  
and Continuity Models - Pb (Object 2)

FIGURE No.  
14-14

PROJECT No.  
ADV-HK-00157

Date  
June 2024



**RPM**GLOBAL

**LEGEND**

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

**CLIENT**

**SILVERCORP** METALS INC.

**PROJECT**

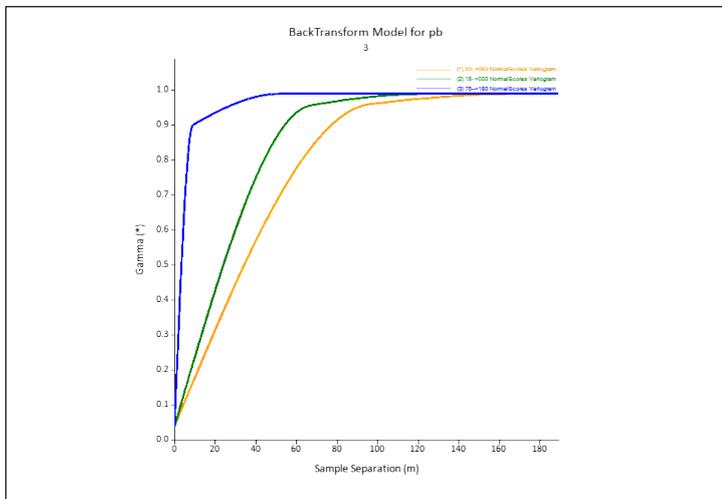
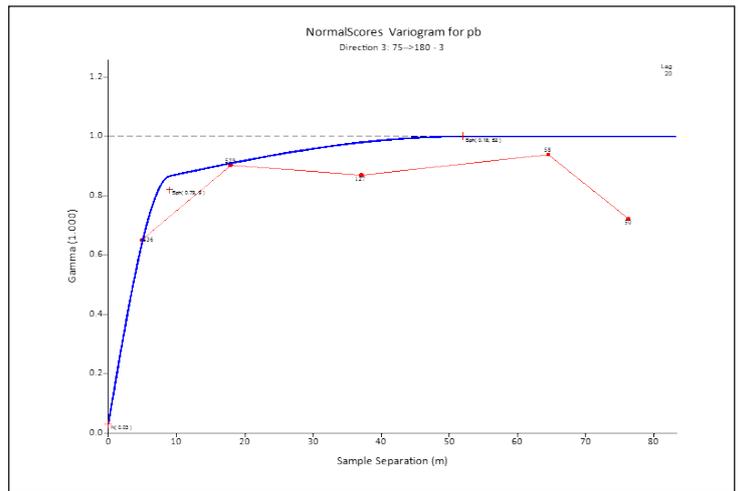
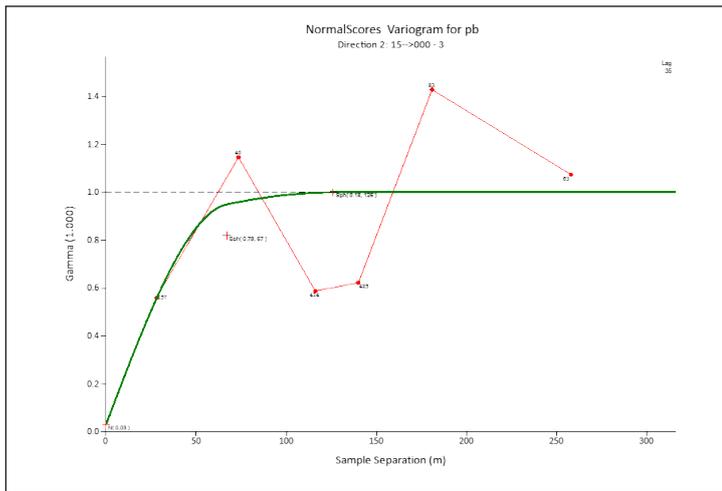
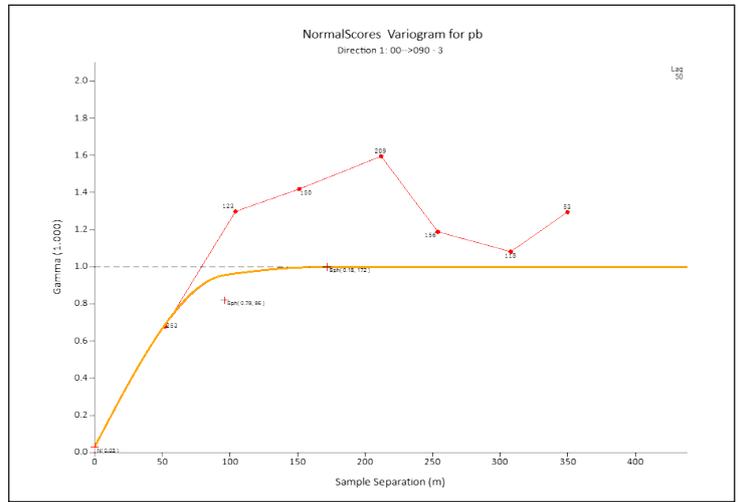
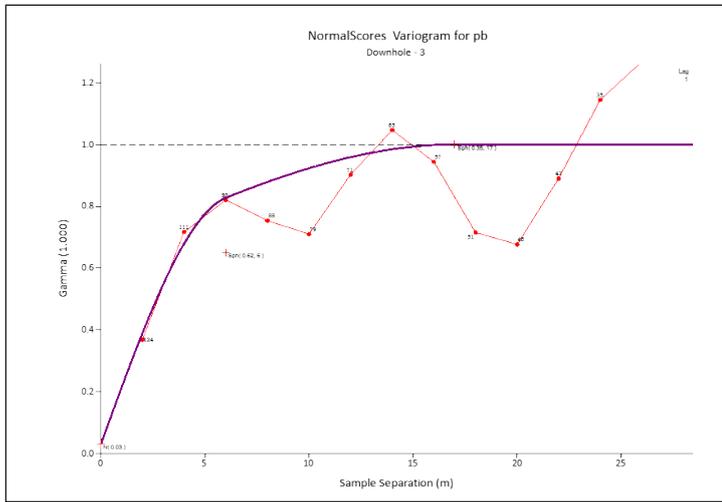
NAME  
**Silvercorp BYP Au-Pb-Zn Project**

DRAWING  
**Variogram Maps and Continuity Models - Pb (Object 3)**

FIGURE No.  
**14-15**

PROJECT No.  
**ADV-HK-00157**

Date  
**June 2024**



**RPM**GLOBAL

LEGEND

CLIENT

SILVERCORP METALS INC.

PROJECT

NAME  
**Silvercorp BYP Au-Pb-Zn Project**

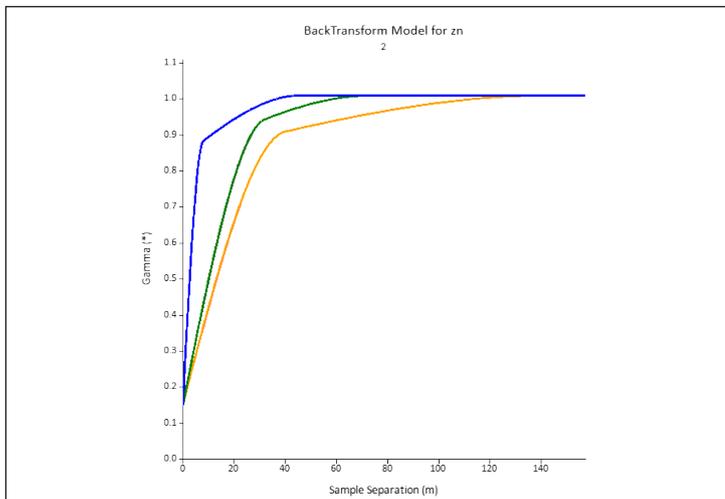
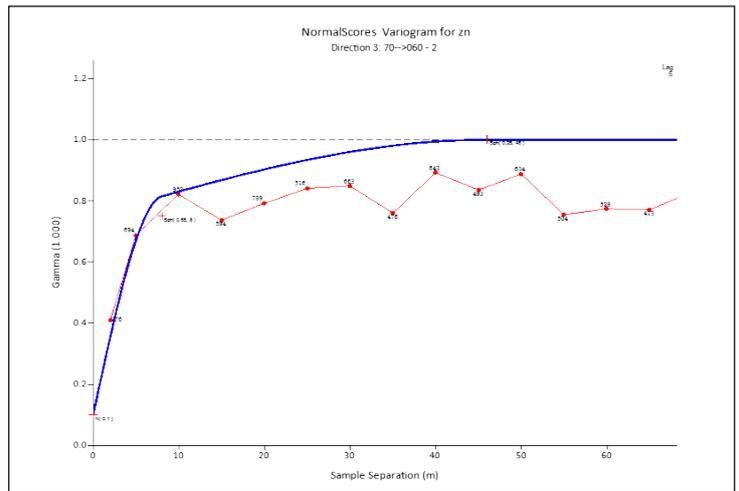
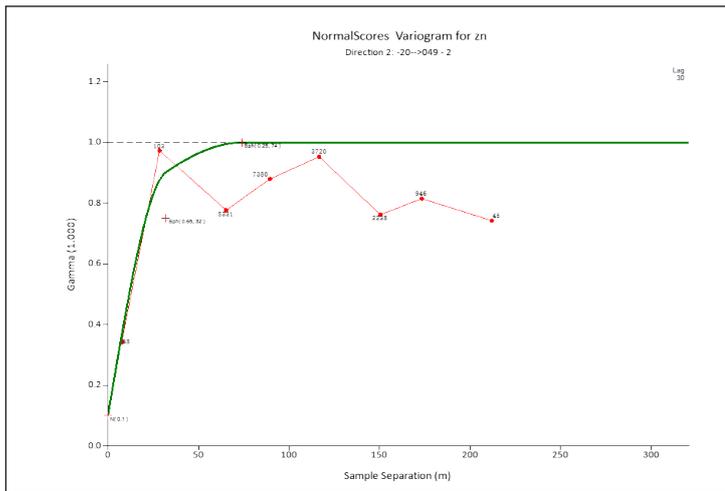
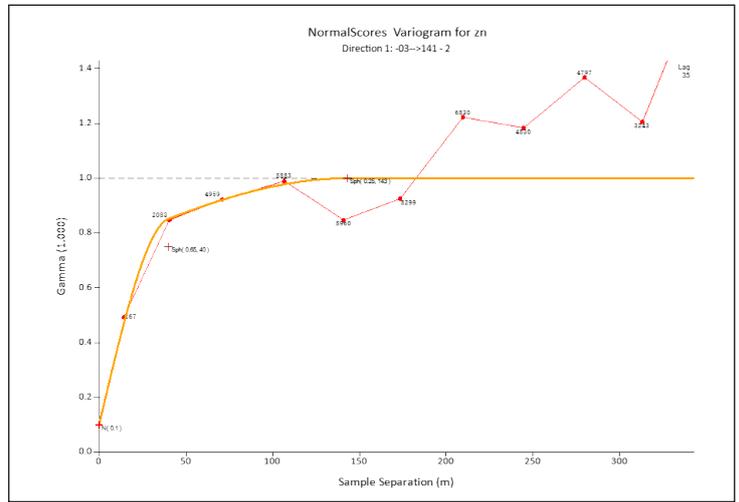
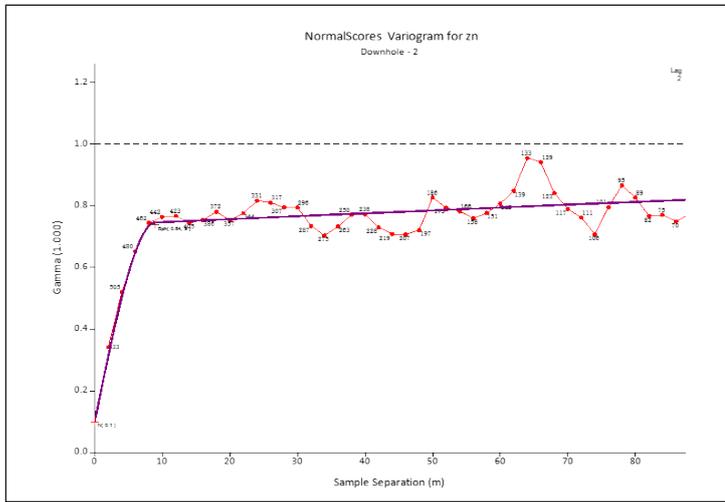
DRAWING  
**Variogram Maps and Continuity Models - Pb (Object 3)**

FIGURE No.  
14-16

PROJECT No.  
ADV-HK-00157

Date  
June 2024

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE



**RPM**GLOBAL

LEGEND

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT

**SILVERCORP** METALS INC.

PROJECT

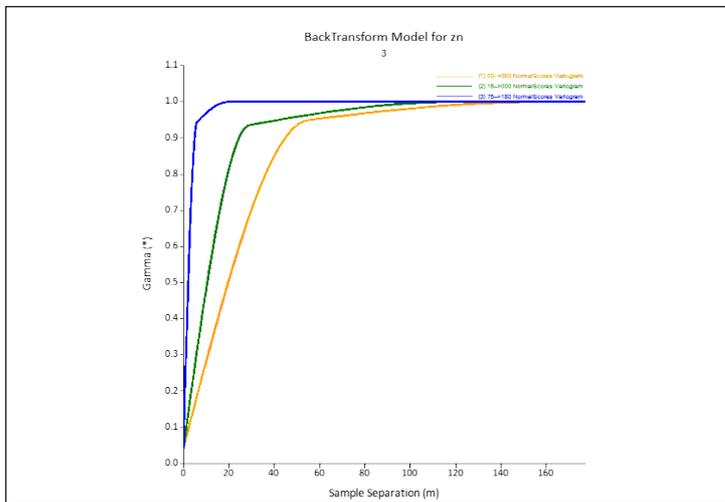
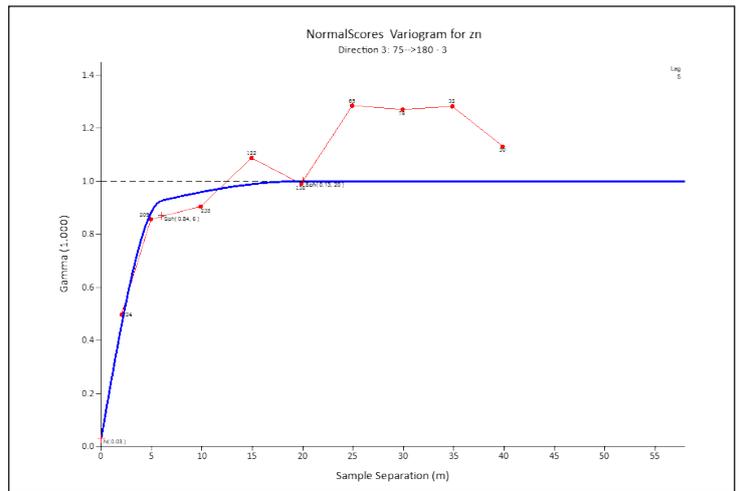
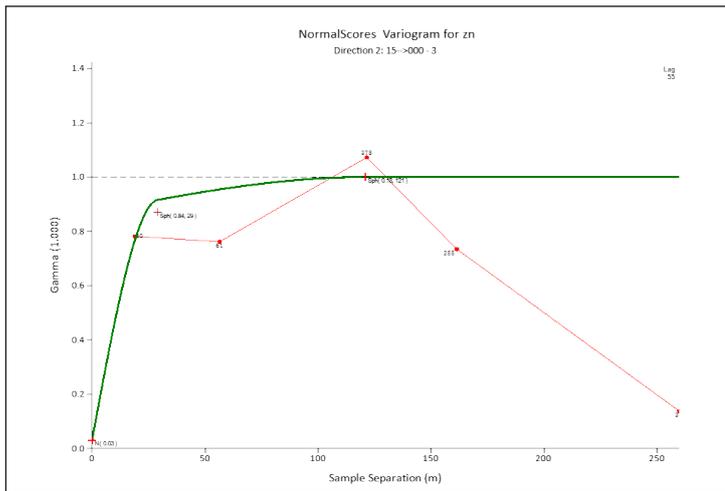
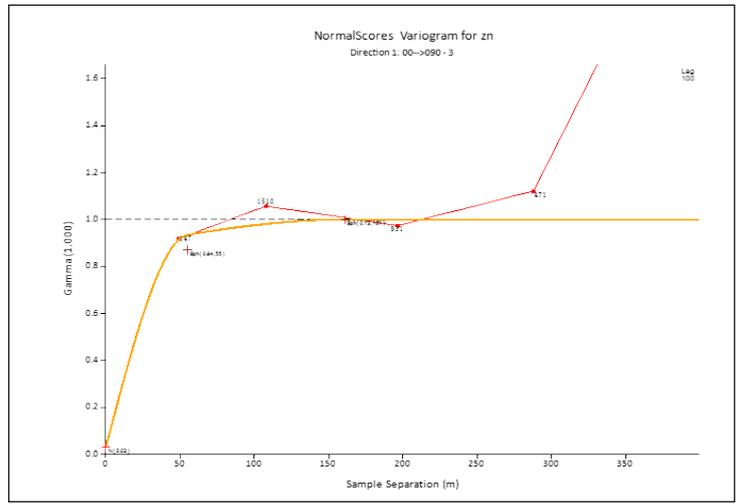
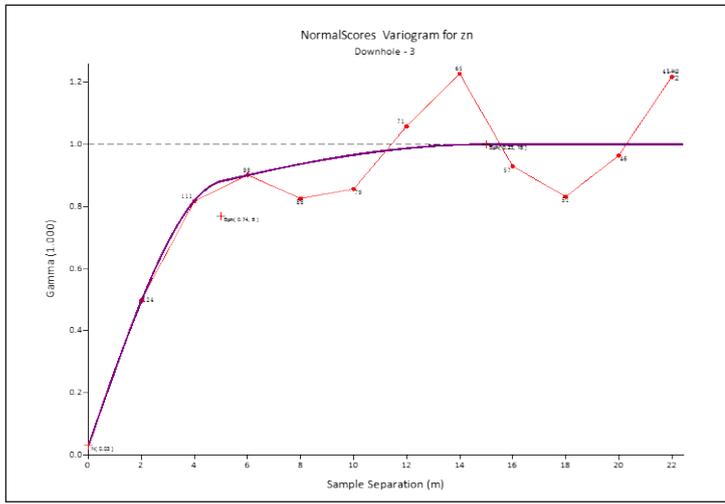
NAME  
**Silvercorp BYP Au-Pb-Zn Project**

DRAWING  
**Variogram mMaps  
and Continuity Models - Zn (Object 2)**

FIGURE No.  
**14-17**

PROJECT No.  
**ADV-HK-00157**

Date  
**June 2024**



**RPM**GLOBAL

LEGEND

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT

SILVERCORP METALS INC.

PROJECT

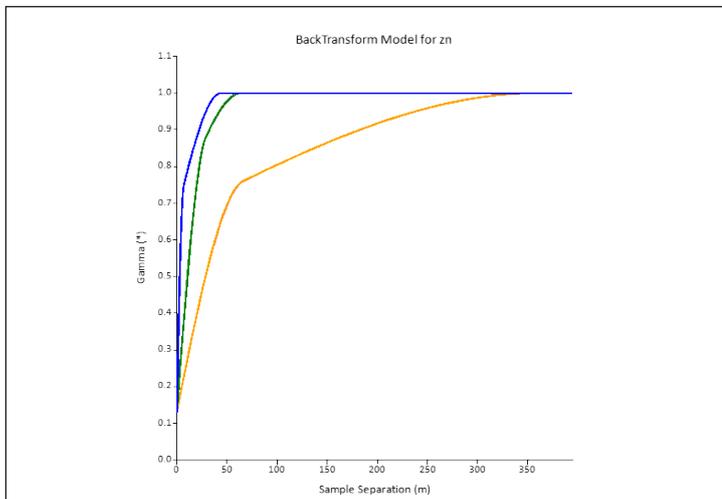
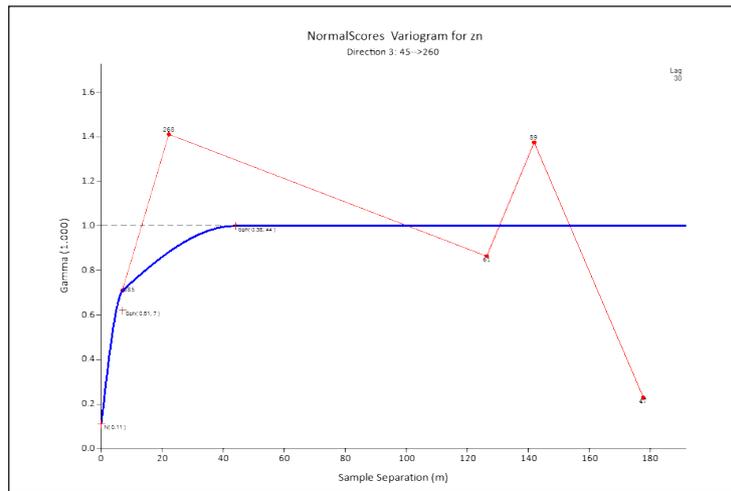
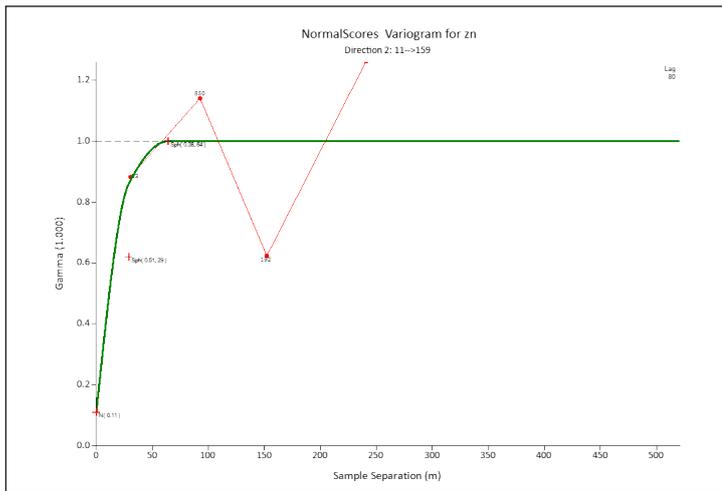
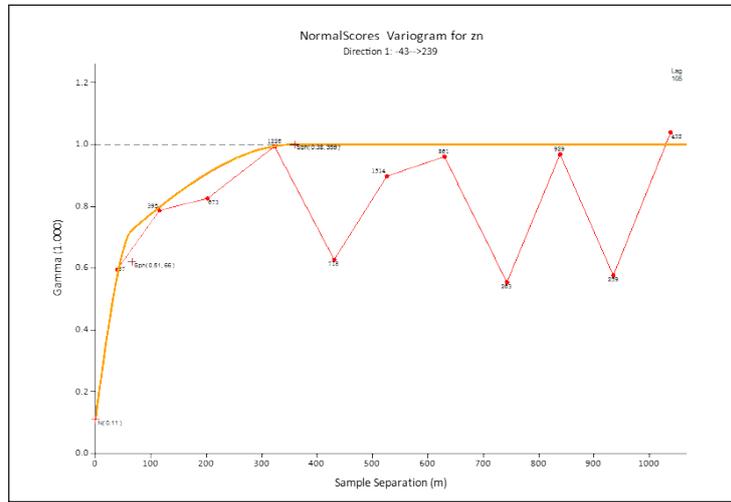
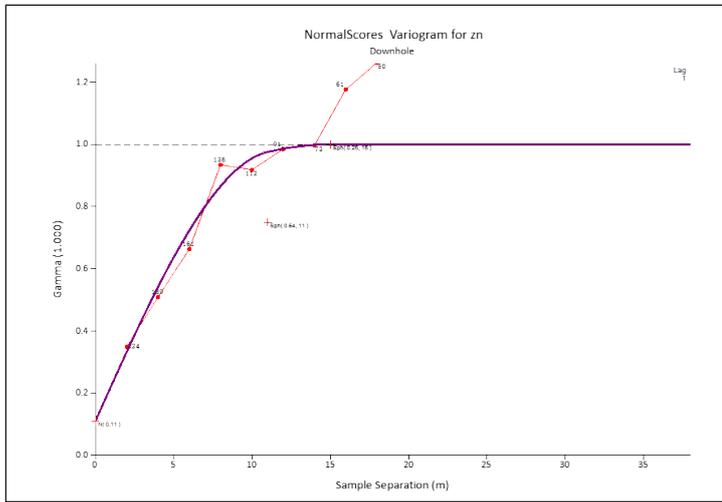
NAME  
**Silvercorp BYP Au-Pb-Zn Project**

DRAWING  
**Variogram Maps and Continuity Models - Zn (Object 3)**

FIGURE No.  
14-18

PROJECT No.  
ADV-HK-00157

Date  
June 2024



**RPM**GLOBAL

**LEGEND**

--

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

**CLIENT**

**SILVERCORP** METALS INC.

**PROJECT**

NAME  
**Silvercorp BYP Au-Pb-Zn Project**

DRAWING  
**Variogram Maps and Continuity Models - Zn (Object 6)**

FIGURE No.  
**14-19**

PROJECT No.  
**ADV-HK-00157**

Date  
**June 2024**

## 14.6 Mineral Resource Estimation

### 14.6.1 Block Model

A single Surpac block model was created to encompass the full extent of the deposit. Block model parameters are listed in **Table 14-11**. The block dimensions used for the model were 20 m NS by 20 m EW by 8 m vertical with sub-cells of 2.5 m by 2.5 m by 1 m.

The parent block size was selected on the basis of Kriging Neighbourhood Analysis (“KNA” - **Section 14.6.3**), while sub-cells were selected to provide sufficient resolution to the block model relative to the mineralization wireframes, all underground developments and depletion models.

**Table 14-11    BYP Au-Pd-Zn Project - Block Model Parameters**

Model Name	BYP_OK_20240315.MDL		
	Y	X	Z
Minimum Coordinates	3,028,300	529,000	-400
Maximum Coordinates	3,030,000	530,800	550
Block Size (Sub-blocks)	20(2.5)	20 (2.5)	8(1)
Rotation	0		
Attributes:			
au_ppm	OK gold estimated using cut grades - Reportable		
pb_eq	Pb Equivalence = pb_pct + zn_pct*1.4168 + au_cla*3.066		
Zn_eq	Zn Equivalence = Zn_pct + pb_pct*0.7058 + au_cla *2.1638		
pb_pct	OK lead estimated using cut grades - Reportable		
zn_pct	OK zinc estimated using cut grades - Reportable		
bd	bulk density		
bd_wet	wet density		
class	Med-Measured, ind-Indicated, inf-Inferred		
class_code	1=Med, 2=ind, 3=inf		
m_license	in, out		
mined	y=yes, n=no		
pass_au	OK estimation pass number for gold		
pass_pbzn	OK estimation pass number for lead and zinc		
pod_au	Pod number of wireframe (object 1-11)		
pod_pbzn	Pod number of wireframe (object 1-30)		
type	air, min, waste		

### 14.6.2 Block Model Coding

The block model was coded with categories in the “type” attribute. **Table 14-12** below shows block model coding for type in the order they were coded, and **Table 14-13** shows block model coding for the mineralization domains.

**Table 14-12    Block Model Coding – Type**

Type	Order	Assignment Methodology
waste	1	All blocks outside of mineralized wireframes and below “byp_topo.dtm” were coded as “waste”.
min	2	All block inside mineralized wireframes (wireframes_au_20181127.dtm and wireframes_pbzn_20181127.dtm) were coded as “min”.
air	3	All blocks above “byp_topo.dtm” were coded as “air”

**Table 14-13 Block Model Coding – Domain**

Zone	Pod	Assignment Methodology
Au	1-11	Au wireframes – Pod numbers were assigned as same as the object numbers
Pb & Zn	1-31	Pb and Zn wireframes – Pod numbers were assigned as same as the object numbers

### 14.6.3 Kriging Neighbourhood Analysis

Kriging neighborhood analysis (KNA) is conducted to minimize the conditional bias that occurs during grade estimation as a function of estimating block grades from point data. Conditional bias typically presents as overestimation of low-grade blocks and underestimation of high grade blocks due to use of non-optimal estimation parameters and can be minimized by optimizing parameters such as:

- block size
- size of sample search neighborhood
- number of informing samples

The degree of conditional bias present in a model can be quantified by computing the theoretical regression slope and kriging efficiency of estimation at multiple test locations within the region of estimation. These locations are selected to represent portions of the deposit with excellent, moderate and poor drill (sample) coverage.

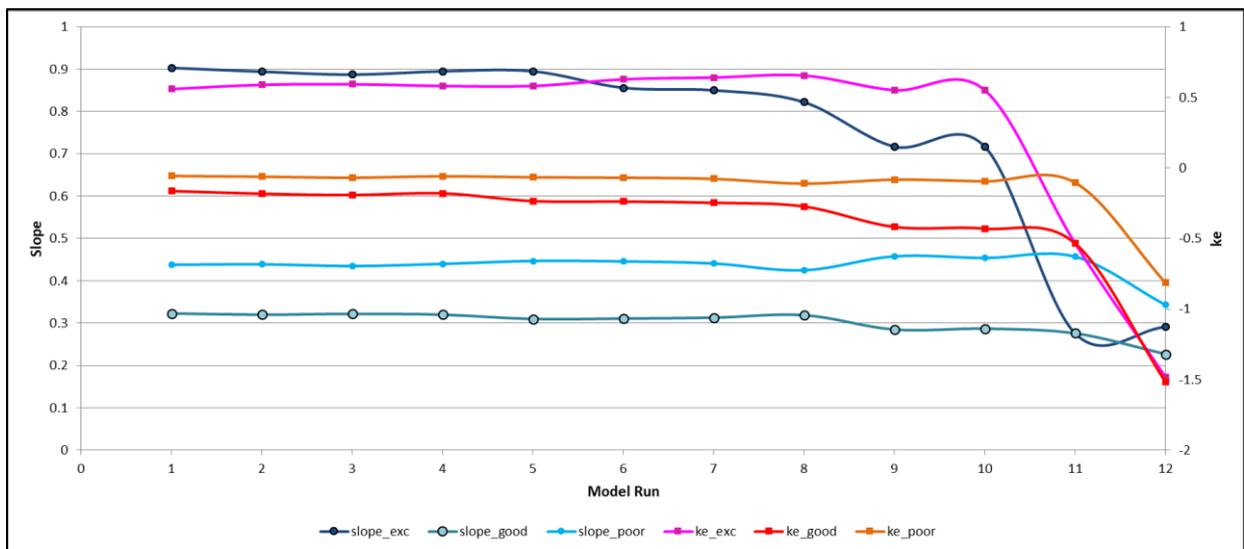
#### 14.6.3.1 Block Size

To test the optimal block size for existing drilling in the Project area, single blocks within the main object of the Au mineralization zone (Object 6) were assessed at excellent, good and poor sample coverage locations. A range of block sizes were assessed for regression slope and kriging efficiency and summarized in **Table 14-14** and below in **Figure 14-20**.

**Table 14-14 Block Sizes Assessment**

Iteration	1	2	3	4	5	6	7	8	9	10	11	12
y	5	10	10	10	20	20	20	20	40	40	50	100
x	5	10	10	10	20	20	20	20	40	40	50	100
z	4	4	8	2	2	4	8	16	4	8	4	8

**Figure 14-20 Block Size Analysis Chart**



Results from the chart above indicate that the slope of regression and kriging efficiency 'sill' out around model runs five and eight. These iterations represent block sizes of 20 m by 20 m in the Y and X planes and are deemed appropriate for the Project drill spacing of approximately 40-50 m by 40-50 m. RPM chose iteration six as the optimal block size for the block model as there is a higher likelihood of using 4m as a minimum mining thickness in the case of any future mining occurring at the Project.

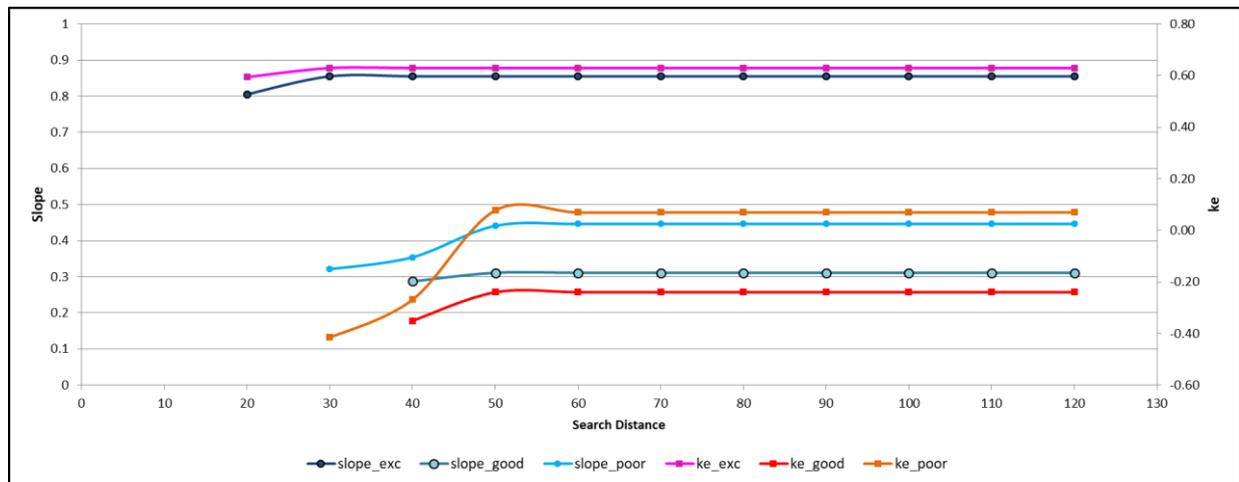
### 14.6.3.2 Search Distance

A range of search radii were assessed for regression slope and kriging efficiency and summarized in **Table 14-15** and **Figure 14-21** as below.

**Table 14-15 Search Radii Assessed**

Iteration	1	2	3	4	5	6	7	8	9	10	11	12
Search Distance (m)	10	20	30	40	50	60	70	80	90	100	110	120

**Figure 14-21 Search Radii Analysis Chart**



The results above were used as a guide in determining optimal search distance radii for each interpolation pass. The first interpolation pass adopted a search radius of 50 m.

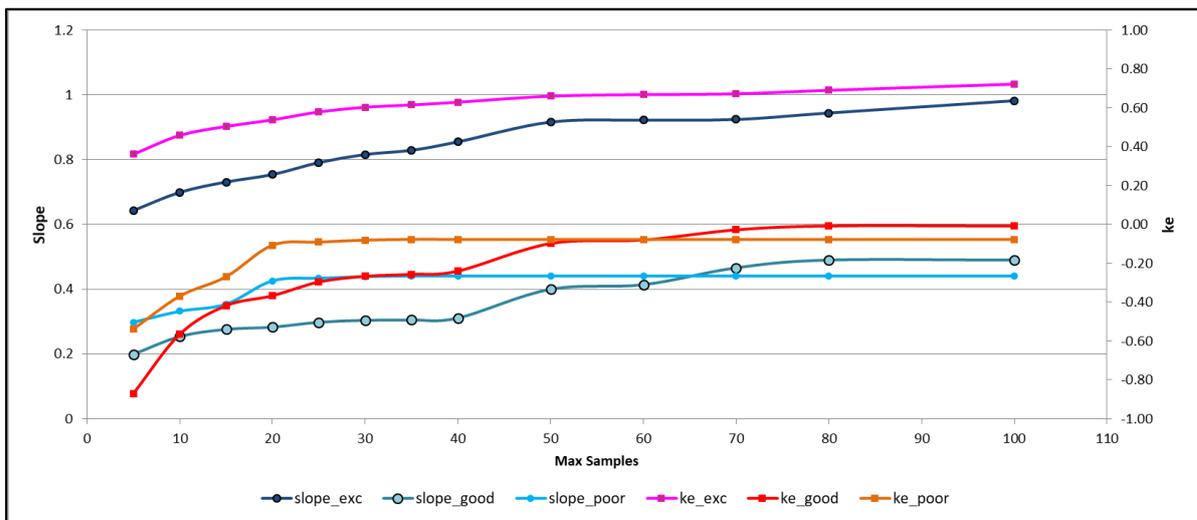
### 14.6.3.3 Number of Informing Samples

A range of maximum samples were assessed for regression slope and kriging efficiency and summarized in **Table 14-16** and **Figure 14-22**.

**Table 14-16 Maximum Number of Samples Assessed**

Iteration	1	2	3	4	5	6	7	8	9	10	11	12	13
Max Sample	100	80	70	60	50	40	35	30	25	20	15	10	5

**Figure 14-22 Maximum Number of Samples Analysis Chart**



Based on the results above, a maximum number of 40 samples was adopted for the estimate.

## 14.6.4 Grade Interpolation

### 14.6.4.1 General

The Ordinary Kriging (“OK”) algorithm was used for the grade interpolation and the wireframes were used as a hard boundary for the grade estimation of each object. OK was selected as it results in a degree of smoothing which is appropriate for the clustered nature of the sample density.

### 14.6.4.2 Search Parameters

An orientated search ellipse with an ‘ellipsoid’ search was used to select data for interpolation. Each ellipse was oriented based on kriging parameters and were consistent with the interpreted geology. Variogram parameters of the main lodes were applied to the associated adjacent lodes. Differences between the kriging parameters and the search ellipse may occur in order to honor both the continuity analysis and the mineralization geometry. Search neighborhood parameters were derived from the KNA analysis discussed in **Section 14.6.3**.

Three passes were used to estimate the three elements (Au, Pb and Zn) into the block model.

For the gold interpolation, a first pass radius of 50 m and a second pass of 100 m were used with a minimum number of samples of 6 and 2. A third pass search radius of 400 m was used with a minimum of two samples to ensure all blocks within the mineralization lodes were estimated. In all estimations, the maximum number of samples used was set to 40. The search parameters are shown in **Table 14-17**.

**Table 14-17    BYP Project – OK Estimation Parameters for Au**

Parameter	Pass 1	Pass 2	Pass 3
Search Type	Ellipsoid	Ellipsoid	Ellipsoid
Bearing	67.3°		
Dip	39.6°		
Plunge	-6.4°		
Major-Semi Major Ratio	1		
Major-Minor Ratio	2		
Search Radius	50m	100m	400
Minimum Samples	6	4	2
Maximum Samples	40	40	40
Block Discretization	5X by 5Y by 2Z	5X by 5Y by 2Z	5X by 5Y by 2Z
Percentage Blocks Filled	85%	13%	2%

For the Pb and Zn interpolation, a first pass radius of 100 m and a second pass of 200 m were used with a minimum number of samples of 6 and 4. A third pass search radius of 800 m was used with a minimum of two samples to ensure all blocks within the mineralization lodes were estimated. In all estimations, the maximum number of samples used was set to 40. The search parameters are shown in **Table 14-18**.

**Table 14-18    BYP Project – OK Estimation Parameters for Pb and Zn**

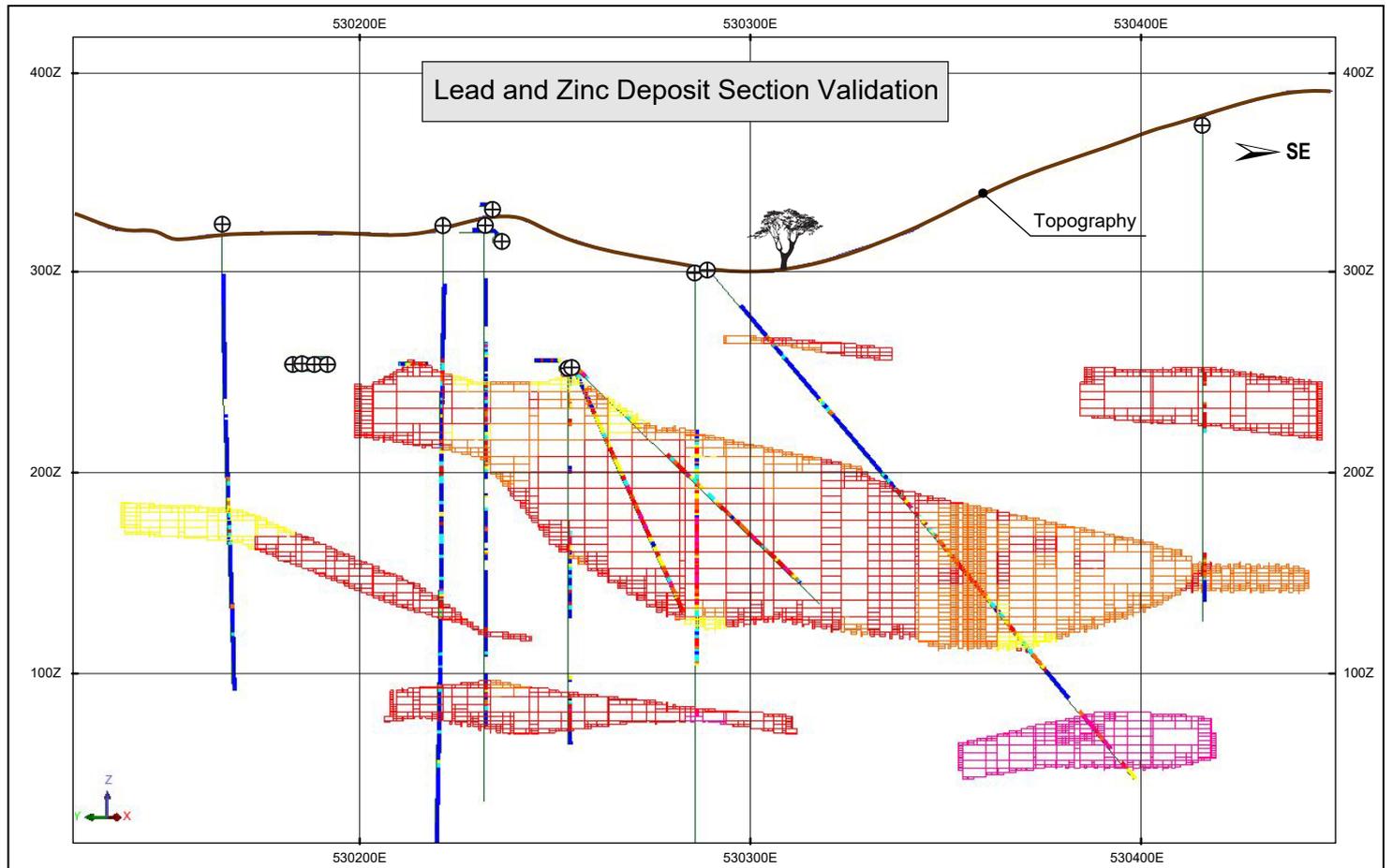
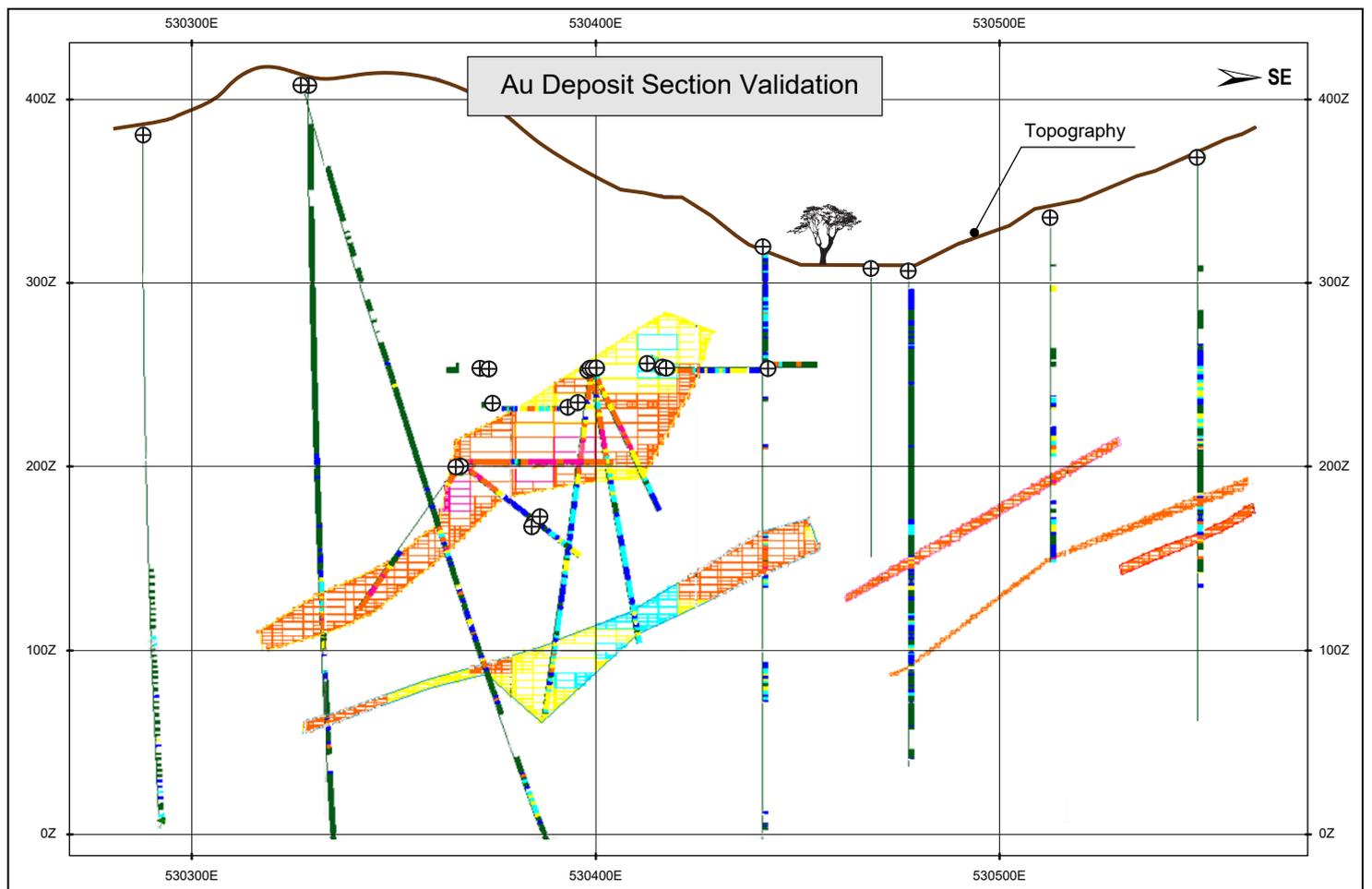
Parameter	Pass 1	Pass 2	Pass 3
Search Type	Ellipsoid	Ellipsoid	Ellipsoid
Bearing	90° to 240°		
Dip	-15° to 25°		
Plunge	-40° to 0°		
Major-Semi Major Ratio	1		
Major-Minor Ratio	2		
Search Radius	100m	200m	800m
Minimum Samples	6	4	2
Maximum Samples	40	40	40
Block Discretization	5X by 5Y by 2Z	5X by 5Y by 2Z	5X by 5Y by 2Z
Percentage Blocks Filled	86%	11%	3%

## 14.6.5 Model Validation

A four step process was used to validate the estimates at each prospect.

Firstly, a qualitative assessment was completed by slicing sections through the block model in positions coincident with drilling such as shown below in **Figure 14-23**. Overall, the assessment indicated that the trend of the modelled grade was consistent with the drill hole grades.

A quantitative assessment of the estimate was completed by comparing the average grades of the top-cut composite file input against the block model output for all the lodes. The comparative results are tabulated in **Table 14-19** and **Table 14-20**.



**RPM**GLOBAL

LEGEND					
Au(g/t)		PbEq(%)			
0.1-0.3	0.5-1	3-5	0-0.5	1-1.5	2-5
0.3-0.5	1-3	5-99	0.5-1	1.5-2	5-99

DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT <b>SILVERCORP</b> METALS INC.	PROJECT		
	NAME <b>Silvercorp BYP Au-Pb-Zn Project</b>		
	DRAWING <b>Block Grades - Sectional Validation</b>		
FIGURE No. 14-23	PROJECT No. ADV-HK-00157	Date June 2024	

**Table 14-19 Average Composite Input v Block Model Output – Gold Zone**

Domain	Wireframe	Block Model_OK			Composites		Difference (%)	
	Object Volume	Resource Volume	Estimated Volume	Au g/t	Number of Comps	Au g/t	Resource volume VS Object Volume	Comps grades VS Block grades
1	13,289	13,406	13,406	2.15	8	2.34	0.88	-8.00
2	118,964	119,756	119,756	1.47	30	1.41	0.67	4.06
3	574,575	575,213	575,213	0.86	86	0.81	0.11	6.32
4	6,457	6,438	6,438	1.10	5	1.14	-0.29	-3.26
5	4,480	4,531	4,531	1.52	4	1.57	1.14	-2.65
6	2,882,573	2,883,375	2,881,781	2.27	2375	2.13	0.03	6.37
7	186,651	186,738	186,738	2.52	18	2.69	0.05	-6.06
8*	20,513	20,494	20,494	2.65	2	2.65	-0.09	0.13
9	48,444	48,456	48,456	2.14	6	2.12	0.02	0.78
10	25,322	25,219	25,219	0.95	21	0.95	-0.41	-0.45
11*	234,288	234,231	234,231	0.98	37	0.91	-0.02	8.31
<b>Total</b>	<b>4,115,556</b>	<b>4,117,857</b>	<b>4,116,263</b>	<b>1.97</b>	<b>2,592</b>	<b>2.06</b>	0.06	<b>-4.20</b>

Note: \*Objects which are mostly outside of current 2024 applied mining license area after the adjustment of inflection points, 2024

**Table 14-20 Average Composite Input v Block Model Output – Lead and Zinc Zone**

Domain	Wireframe	Block Model_OK			Composites			Block Model vs Comps difference			
	Object Volume	Resource Volume	Estimated Volume	Pb %	Zn %	Number of Comps	Pb %	Zn %	Resource volume VS Object Volume	Comps grades VS Block grades_Pb	Comps grades VS Block grades_Zn
1	622,021	622,144	622,144	0.74	1.11	59	0.74	1.05	0.02	0.20	6.07
2	3,736,332	3,735,625	3,735,625	0.58	1.26	604	0.62	1.23	-0.02	-7.80	1.94
3	1,798,863	1,799,475	1,799,475	0.61	1.16	149	0.66	1.13	0.03	-6.82	3.33
4	320,415	320,531	320,531	0.38	2.67	23	0.41	2.68	0.04	-7.46	-0.28
5	177,559	177,819	177,819	0.57	1.57	51	0.58	1.84	0.15	-0.66	-14.73
6	3,752,987	3,752,656	3,738,931	0.18	1.64	176	0.26	1.65	-0.01	-28.84	-0.84
7	692,745	692,863	661,775	0.24	1.90	135	0.27	2.14	0.02	-9.92	-11.28
8*	408,846	408,869	408,869	1.07	2.74	40	1.07	2.72	0.01	0.90	0.78
9	125,581	125,400	125,400	1.86	0.42	22	1.66	0.40	-0.14	12.33	5.69
10	214,879	214,819	214,819	1.23	3.06	14	0.93	2.60	-0.03	32.30	17.59
11	44,815	44,781	44,781	0.73	1.71	1	0.74	1.71	-0.08	-0.04	-0.02
12*	74,693	74,638	74,638	1.16	0.32	6	1.58	0.75	-0.07	-26.51	-58.01
13	479,838	479,881	479,881	0.53	1.70	8	0.79	1.59	0.01	-33.03	7.13
14*	25,966	25,900	25,900	0.31	1.50	3	0.26	1.36	-0.25	18.68	10.32
15*	15,994	16,144	16,144	0.55	3.20	2	1.25	4.24	0.94	-55.77	-24.48
16*	131,150	131,469	131,469	0.86	1.61	8	0.78	1.84	0.24	11.39	-12.48
17*	260,891	261,169	261,169	0.50	1.51	26	0.50	1.46	0.11	-1.58	3.43
18	171,970	172,019	172,019	0.27	1.99	3	0.24	1.81	0.03	12.90	9.98
19	198,757	198,819	198,819	1.27	3.59	10	1.54	4.40	0.03	-17.86	-18.30
20	100,016	100,306	100,306	0.47	1.46	5	0.43	1.50	0.29	7.54	-2.22
21*	16,007	14,800	14,800	0.32	1.80	1	0.32	1.80	-7.54	0.00	0.02
22*	160,742	159,950	159,950	0.38	1.12	13	0.36	1.14	-0.49	6.70	-1.55
23	84,558	84,650	84,650	3.30	2.21	4	2.80	1.75	0.11	18.07	26.65
24	80,329	80,219	80,219	1.24	0.27	6	1.12	0.31	-0.14	11.34	-13.74
25*	179,226	179,106	179,106	4.67	4.34	25	4.22	3.93	-0.07	10.63	10.37
26*	271,894	271,725	271,725	0.92	1.20	35	0.93	1.10	-0.06	-1.01	8.43
27	158,148	158,200	158,200	0.43	1.30	18	0.47	1.17	0.03	-8.56	11.00

Domain	Wireframe	Block Model_OK				Composites			Block Model vs Comps difference		
	Object Volume	Resource Volume	Estimated Volume	Pb %	Zn %	Number of Comps	Pb %	Zn %	Resource volume VS Object Volume	Comps grades VS Block grades_Pb	Comps grades VS Block grades_Zn
28*	553,356	553,350	553,350	0.68	1.24	32	0.73	1.27	0.00	-7.30	-1.79
29*	179,110	178,575	178,575	1.82	4.83	16	1.80	4.62	-0.30	1.28	4.65
30	310,898	310,813	310,813	0.25	1.27	13	0.21	1.32	-0.03	18.22	-3.64
31	205,491	205,363	205,363	0.22	2.78	138	0.26	3.33	-0.06	-15.88	-16.59
<b>Total</b>	<b>15,554,077</b>	<b>15,552,078</b>	<b>15,507,265</b>	<b>0.60</b>	<b>1.58</b>	<b>1,646</b>	<b>0.68</b>	<b>1.53</b>	<b>-0.01</b>	<b>-11.43</b>	<b>3.44</b>

Note: \*Objects which are mostly outside of current 2024 applied mining license area after the adjustment of inflection points, 2024

There appears to be a good comparison between model volumes and block estimated grades with those of the wireframe volumes and composite averages for each lode at each Prospect. The minor fluctuation of Au, Pb and Zn grades have likely resulted from clustering of composite data.

To check the interpolation of the block model correctly honored the drilling data, validation was carried out by comparing the interpolated blocks to the cut sample composite data for the combined mineralization lodes for each domain. The swath plots were completed by comparing interpolated block grades to the cut sample composite data for the X direction in 50m intervals and the Z direction in 20m intervals for object 6 of the Au domain and the X direction in 25m intervals and the Y direction in 25m intervals for object 2 of the Pb and Zn domain. The swath plot analysis results for Au, Pb and Zn are shown in **Figure 14-24** and **Figure 14-25**.

The validation plots show good correlation between the cut composite grades and the block model grades when compared in different orientations. The trends shown by the composite data are honored by the block model. The direct observation of sections on screen show that the model estimate has honored the drill hole data at the local scale.

The comparisons show the effect of the interpolation, which results in smoothing of the block grades compared to the composite grades.

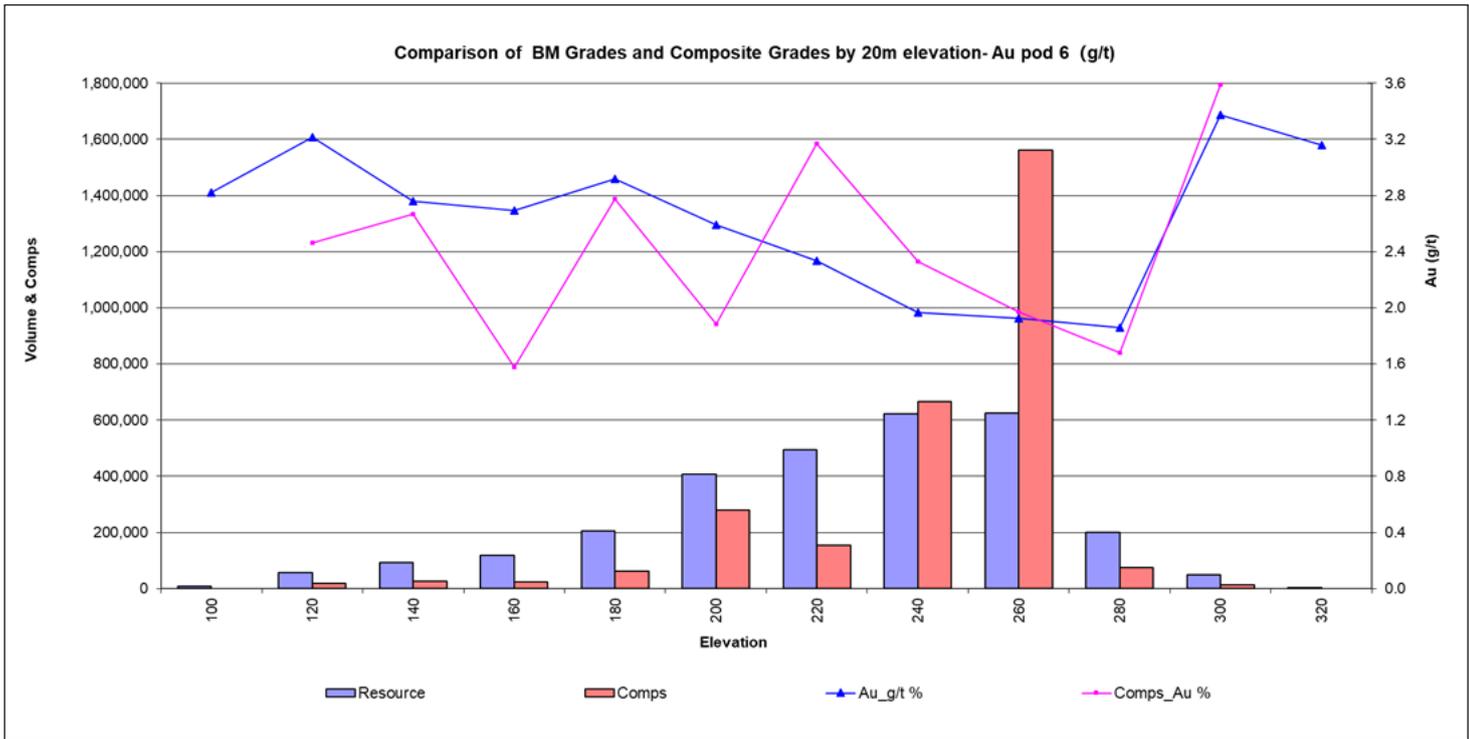
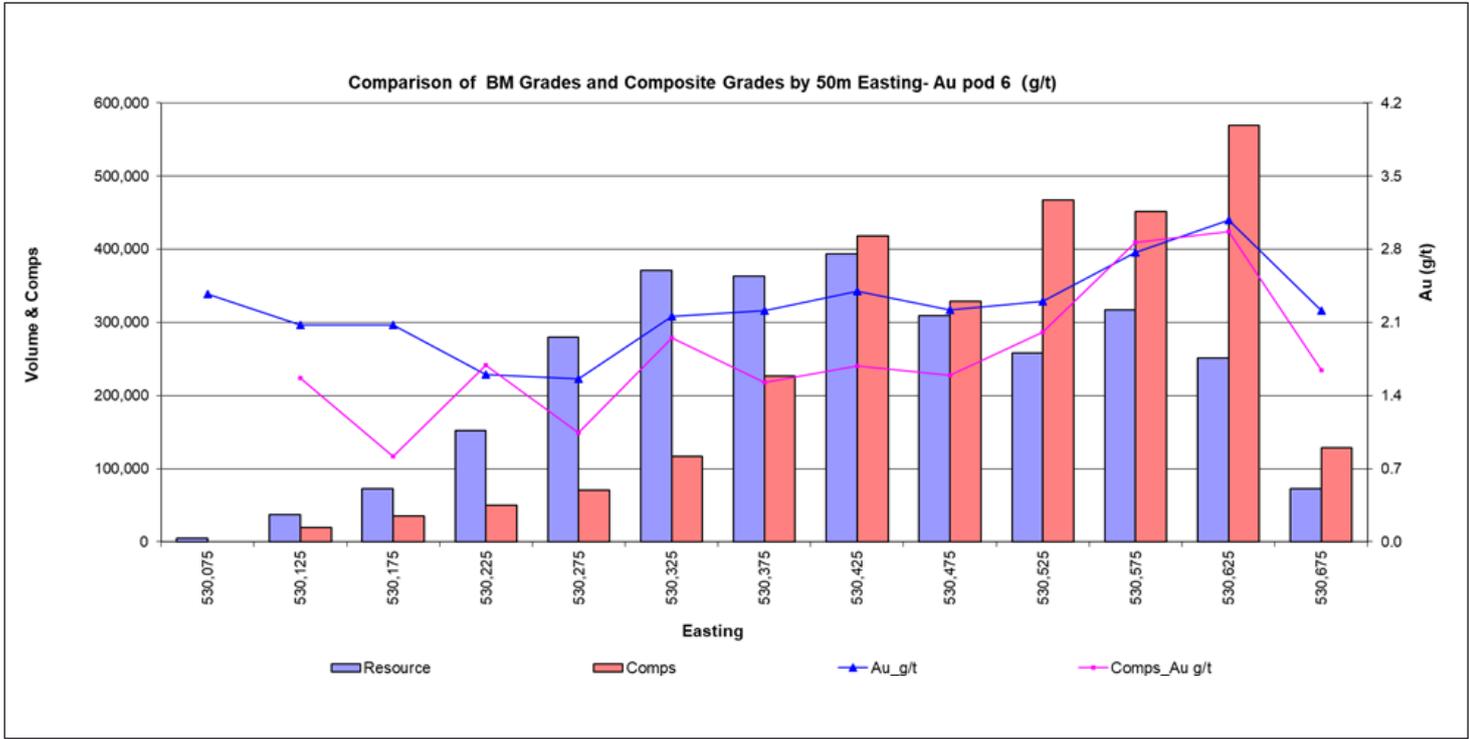
RPM believes the estimate is representative of the composites and is indicative of the known controls of mineralization and the underlying data.

Finally, the comparison reconciliation table between historical production data and block model reported data were summarized as below **Table 14-21**.

The table shows that the depleted model's information which were constructed in the RPM block models are mostly consistent with the historical production data which were provided by Silvercorp. The historical production data indicated a slightly lower total tonnage and higher average grades for gold, lead and zinc likely resulting from reduced mining dilution and exclusion of waste.

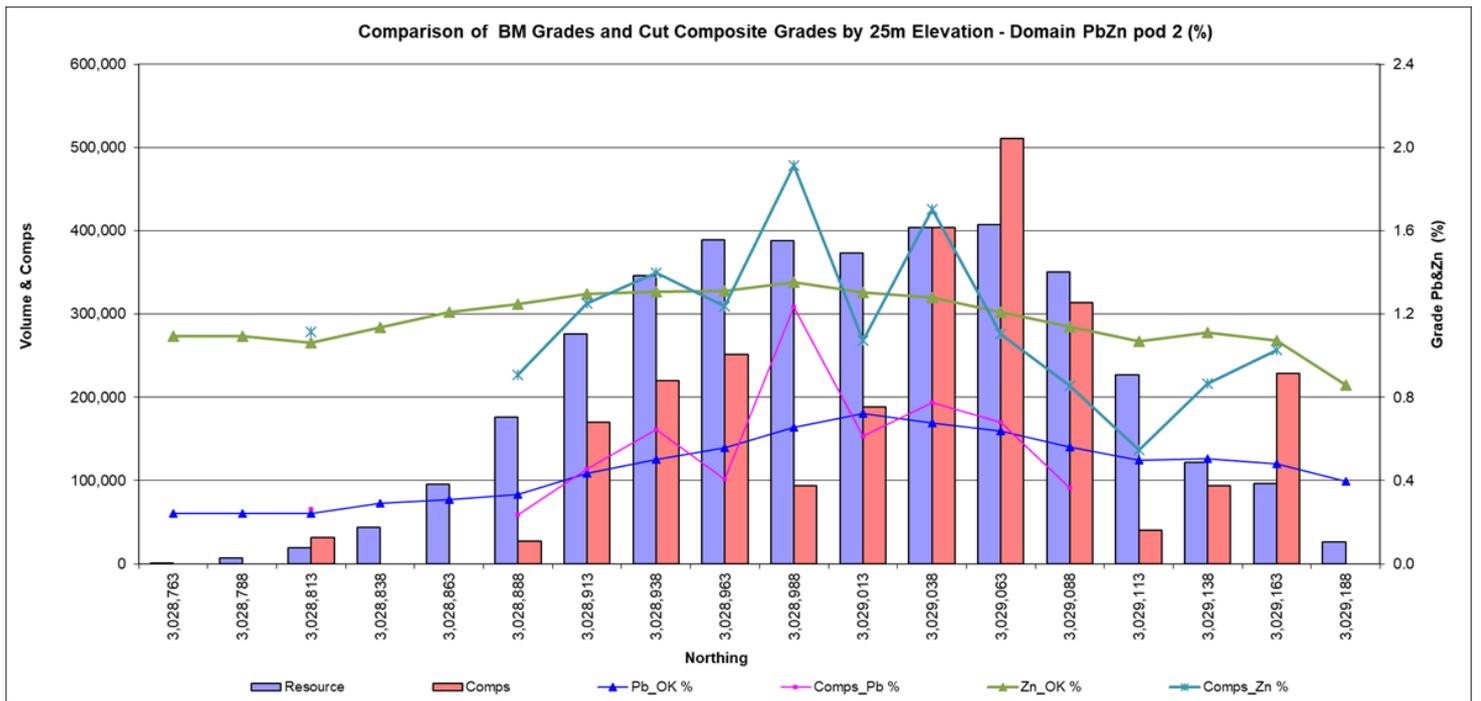
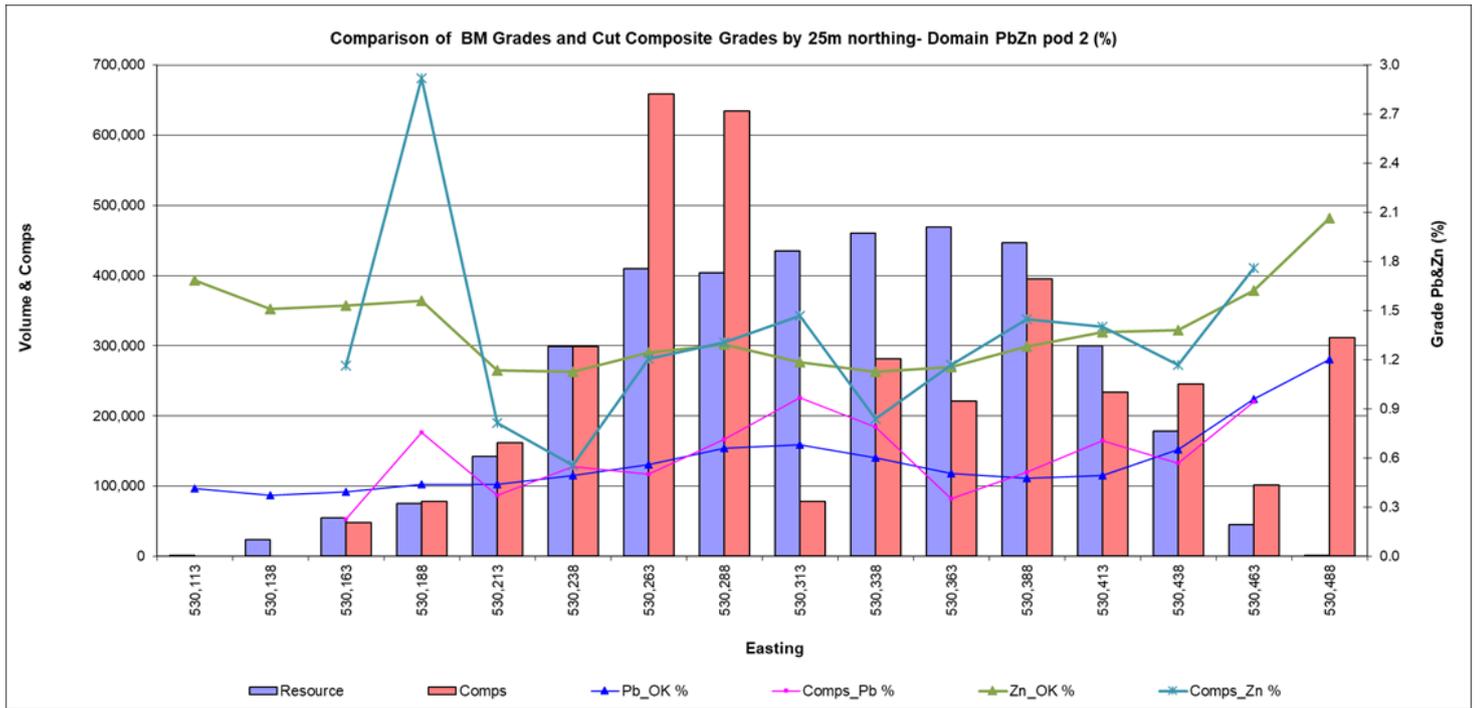
**Table 14-21 Reconciliation Summary Table**

Depleted resource reported by RPM block model					
<b>Gold deposit</b>	Tonnes (t)	Grade Au (g/t)		Metal Au (t)	
	239,068	2.63		0.63	
<b>Lead and Zinc deposit</b>	Tonnes (t)	Grade Pb (%)	Grade Zn (%)	Metal Pb (t)	Metal Zn (t)
	350,756	0.29	2.15	1012	7554
Depleted resource reported by 2018 resource reconciliation report					
<b>Gold deposit</b>	Tonnes (t)	Grade Au(g/t)		Metal Au (t)	
	221,000	3.56		0.79	
<b>Lead and Zinc deposit</b>	Tonnes (t)	Grade Pb (%)	Grade Zn (%)	Metal Pb (t)	Metal Zn (t)
	307,000	0.46	2.90	1412	8903
Difference					
<b>Gold deposit</b>	Tonnes	Grade Au		Metal Au	
	-8%	26%		20%	
<b>Lead and Zinc deposit</b>	Tonnes	Grade Pb	Grade Zn	Metal Pb	Metal Zn
	-14%	37%	26%	28%	15%



<b>LEGEND</b>
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

<b>CLIENT</b>	<b>PROJECT</b>	
	NAME <b>Silvercorp BYP Au-Pb-Zn Project</b>	
	DRAWING <b>Block Model Validation by Easting and Elevation for Au Pod 6</b>	
	FIGURE No. 14-24	PROJECT No. ADV-HK-00157



<b>LEGEND</b>
DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

<b>CLIENT</b>	<b>PROJECT</b>	
	NAME <b>Silvercorp BYP Au-Pb-Zn Project</b>	
	DRAWING Block Model Validation by X and Z Directions for Au Pod 6	
	FIGURE No. 14-25	PROJECT No. ADV-HK-00157

## 14.6.6 Mineral Resource Classification

The BYP deposit shows good continuity within the main mineralized lodes which allowed the drill hole intersections to be modelled into coherent, geologically robust wireframes. Consistency is evident in the thickness of the structure, and the distribution of grade appears to be reasonable along strike and down dip.

The Mineral Resource was classified as Measured, Indicated and Inferred Resource based on data quality, sample spacing, and lode continuity for the gold areas. The Measured Mineral Resource was confined to the main deposit within gold areas of close spaced diamond drilling of less than 25m by 25m and where underground development was constructed, the Indicated Mineral Resource was confined to the main deposit within gold areas of close-spaced diamond drilling of less than 50m by 50m, and where the continuity and predictability of the lode positions was good. The spacing was deemed appropriate for the application of Measured and Indicated Mineral Resource after considering the mineralization and grade continuity, the relatively low to moderate nugget effect, low coefficient of variance statistics and variogram ranges of approximately 50m -100m for Au analysis results. The Inferred Mineral Resource was assigned to areas of the deposit where drill hole spacing was greater than 100m by 100m for gold domains, where small isolated pods of mineralization occur outside the main mineralized zones, and to geologically complex zones.

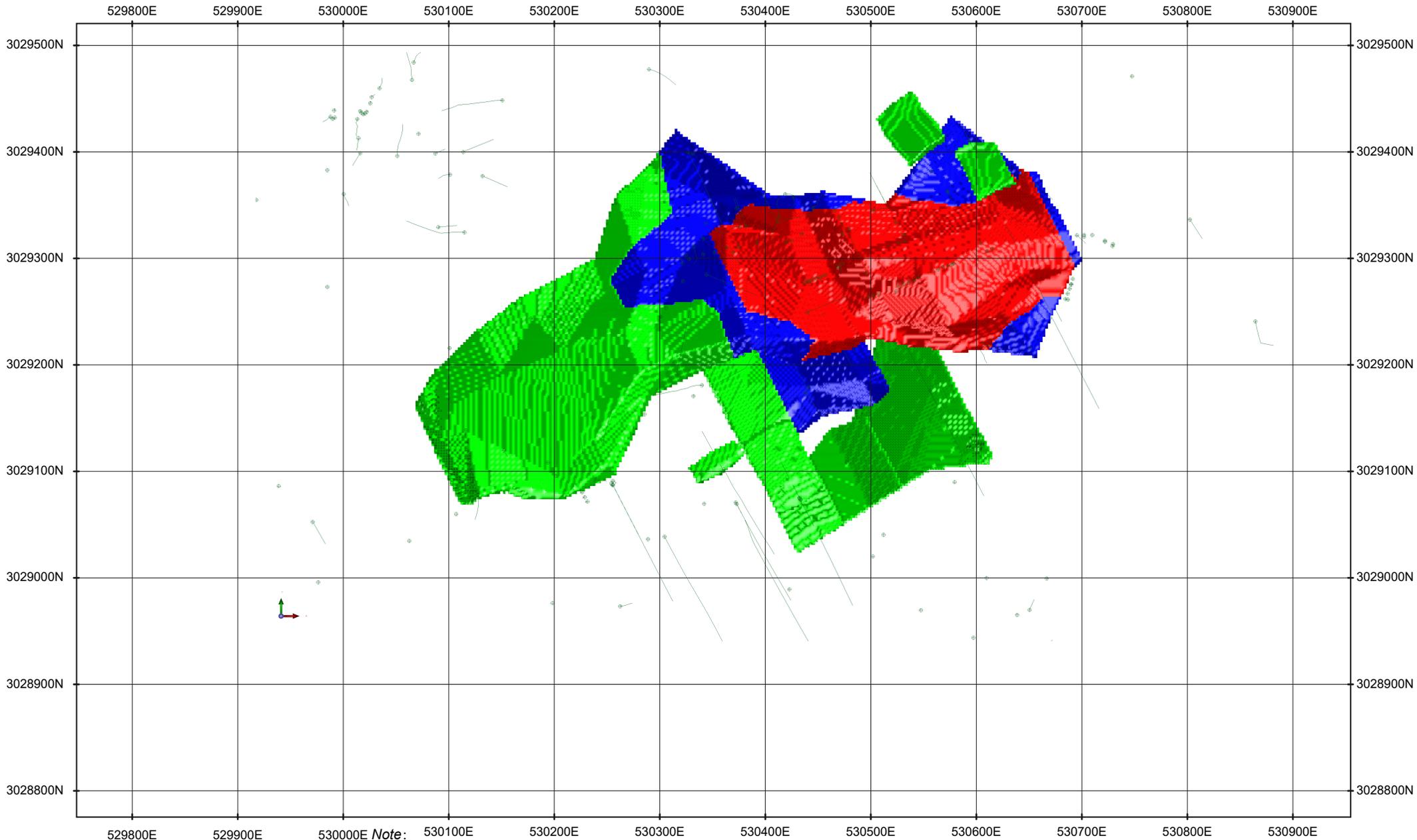
Meanwhile, Mineral Resource was classified as Indicated and Inferred Resource based on data quality, sample spacing, and lode continuity for the lead-zinc areas. No Measured resource was defined in lead-zinc areas as the exploration spacing is relatively large. The Indicated Mineral Resource was confined to the main deposit within lead-zinc areas of close spaced diamond drilling of less than 100m by 100m, and where the mineralization was intersected with underground developments or depleted areas. All the other areas with spacing more than 100m by 100m, or small isolated pods were defined as Inferred Resource.

The resource block model has an attribute “class\_au” for all gold blocks and “class\_pbzn” for all lead and zinc blocks within the resource wireframes coded as either “mes” for Measured, “ind” for Indicated or “inf” for Inferred. The Mineral Resource classification is shown in **Figure 14-26** and **Figure 14-27**.

The extrapolation of the lodes along strike has been limited to half of the distance of the previous section drill spacing or half the distance to un-mineralized holes on the next section. Extrapolation of lodes down-dip has been limited to a distance to half of the previous down-dip drill spacing. Areas of extrapolation have been classified as Inferred Mineral Resource.

Internal audits have been completed by RPM which verified the technical inputs, methodology, parameters and results of the estimate. The lode geometry and continuity has been adequately interpreted to reflect the applied level of Indicated and Inferred Mineral Resource. The data quality is good and the drill holes have detailed logs produced by qualified geologists. A recognised laboratory has been used for all analyses. The Mineral Resource statement relates to global estimates of tons and grade.

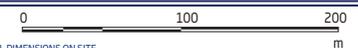
This Report has been prepared in accordance with NI 43-101 and discloses a Mineral Resource Estimate (“MRE”).



Blocks outside of mining licence area are not displayed

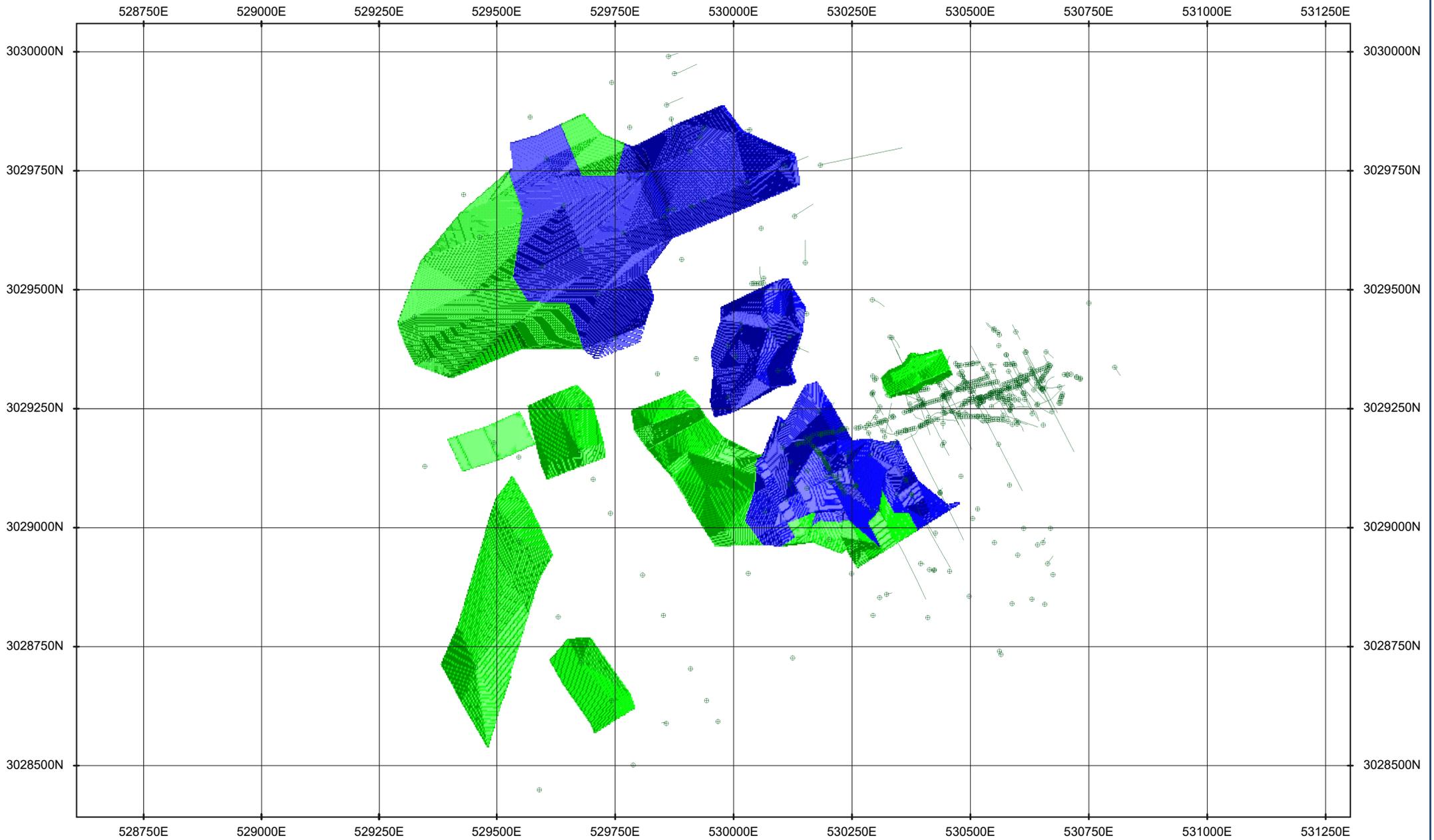
LEGEND	
<span style="color: blue;">■</span> Indicated	<span style="color: red;">■</span> Measured
<span style="color: green;">■</span> Inferred	<span style="border: 1px solid black; border-radius: 50%; padding: 2px;">⊕</span> Drill Hole





DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT	PROJECT
	NAME <b>Silvercorp BYP Au-Pb-Zn Project</b>
	DRAWING <b>Au Mineral Resource Classification - Plan View</b>
	FIGURE No. 14-26
Date June 2024	



Note: Blocks outside of mining licence area are not displayed

LEGEND	
<span style="color: blue;">■</span>	Indicated
<span style="color: green;">■</span>	Inferred
	Drill Hole





DO NOT SCALE THIS DRAWING - USE FIGURED DIMENSIONS ONLY. VERIFY ALL DIMENSIONS ON SITE

CLIENT	PROJECT
	NAME <b>Silvercorp BYP Au-Pb-Zn Project</b>
	DRAWING Pb - Zn Mineral Resource Classification - Plan View
	FIGURE No. 14-27
	PROJECT No. ADV-HK-00157
	Date June 2024

## 14.6.7 Mineral Resource Statement

RPM has independently estimated the Mineral Resources contained within the Project, based on the data collected by Silvercorp as at 30<sup>th</sup> June 2024. The Mineral Resource estimate and underlying data complies with the guidelines provided in the CIM Definition Standards under NI 43-101. Therefore, RPM believes it is suitable for public reporting. The Mineral Resources were completed by Mr. Song Huang of RPM. The Mineral Resources are reported at a number of Au and Pb equivalent cut-off values.

The Statement of Mineral Resources has been constrained by the topography and historical depletion wireframes. RPM used cut-off grades of 1.2 g/t Au for the gold area, and 2.2% Zn equivalent for Pb & Zn area. Two physically separate domains are reported by RPM:

- Gold Area: This resource area is physically separate from the Lead and Zinc Area and hosts Carlin style gold mineralization which was the focus of the recent resource drilling and underground development.
- Lead and Zinc Area: This resource area is physically separate from the Gold Area and hosts primarily Mississippi Valley Type lead zinc mineralization.

The results of the Mineral Resource estimate for the BYP deposit are presented in **Table 14-22** and RPM has reported the resource at different Au and Zn<sub>Eq</sub> cut-off grades in **Table 14-23** and **Table 14-24**.

**Table 14-22 BYP Project Mineral Resource Estimate as at 30<sup>th</sup> June 2024 (1.2 g/t Au and 2.2% Zn<sub>Eq</sub> cut-off)**

Area	Classification	Au Mineral Resource		
		Quantity	Au	Au
		Mt	g/t	koz
Gold area	Measured	3.3	2.7	294
	Indicated	1.8	2.8	162
	Measured & Indicated	5.1	2.8	456
	Inferred	1.6	2.2	116

Area	Classification	Pb and Zn Mineral Resource				
		Quantity	Pb	Zn	Pb Metal	Zn Metal
		Mt	%	%	kt	kt
Lead and Zinc area	Indicated	3.8	0.6	2.3	25	87
	Inferred	2.8	0.7	2.5	19	71

Note:

1. The Statement of Estimates of Mineral Resources has been compiled under direction of Mr. Song Huang, who is a full-time employee of RPM and Member of the Australian Institute of Geoscientists and has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity that they have undertaken to qualify as a Qualified Person as defined in the CIM Standards of Disclosure.
2. All Mineral Resources figures reported in the table above represent estimates based on drilling completed up to 30<sup>th</sup> June 2024. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
3. Silvercorp holds a 70% equity interest of BYP project, the Statement of Mineral Resources is reported on a 100% basis and does not reflect the ownership status.
4. Zn Equivalent (Zn<sub>Eq</sub>) calculated using long term "Energy & Metals Consensus Forecasts" June 2024 average of USD\$2,220/oz for Au, USD\$2,370/t for Pb, USD\$3,110/t for Zn (increasing 20% by prediction) and processing recovery of 87.41% Au, 85.87% Pb and 92.71% Zn based on 2018 BYP development and utilization plan report. Based on grades and contained metal for Au, Pb and Zn, it is assumed that all commodities have reasonable potential to be economically extractable.
  - a. The formulas used for equivalent grade is:  $Zn_{Eq} = Zn + Pb \cdot 0.7058 + Au \cdot 2.1638$
  - b. The formula used for Au ounces is:  $Au\ Oz = [Tonnage \times Au\ grade\ (g/t)] / 31.1035$
5. Mineral Resources are reported on a dry in-situ basis.
6. Mineral Resources are reported at a 1.2 g/t Au cut-off or a 2.2% Zn equivalent cut-off. Cut-off parameters were selected based on an RPM internal cut-off calculator in which the gold price of USD\$2,220 per ounce, Lead price of USD\$2,370/t and Zinc price of USD\$3,110/t, inflated by 120% of prices from "Energy & Metals Consensus Forecasts" to reflect long term price movements were applied, and the mining cost of USD\$41 per tonne, processing cost of USD\$16 per tonne milled and processing recovery of 87.41% Au, 85.87% Pb and 92.71% Zn.
7. Mining license depth limit of "Above RL -220m" was applied for the Mineral Resource reporting.
8. The Mineral Resources referred to above have not been subject to detailed economic analysis and therefore have not been demonstrated to have actual economic viability.

**Table 14-23 Mineral Resource Estimate at Various Au Cut-offs**

Au g/t	Classification	Tons	Au	Au
Cut-off		Mt	g/t	Koz
0	Measured	4.1	2.4	315
	Indicated	3.0	2.0	191
	Inferred	3.1	1.6	158
0.4	Measured	4.1	2.4	314
	Indicated	3.0	2.0	191
	Inferred	3.1	1.6	158
0.8	Measured	3.8	2.5	309
	Indicated	2.2	2.5	175
	Inferred	2.7	1.7	149
1.2	Measured	3.3	2.7	294
	Indicated	1.8	2.8	162
	Inferred	1.6	2.2	116
1.6	Measured	2.8	3.0	269
	Indicated	1.5	3.1	149
	Inferred	1.1	2.6	93
2	Measured	2.2	3.3	232
	Indicated	1.3	3.3	136
	Inferred	0.8	2.9	76
2.4	Measured	1.8	3.6	206
	Indicated	1.0	3.7	115
	Inferred	0.5	3.3	55

Note: Figures in above table reported the resource at various Au cutoff

**Table 14-24 Mineral Resource Estimate at Various Zn<sub>Eq</sub> Cut-offs**

Zn <sub>Eq</sub> %	Classification	Tons	Pb	Pb	Zn	Zn
Cut-off		Mt	%	Kt	%	Kt
0	Indicated	19.6	0.5	90	1.4	280
	Inferred	13.2	0.5	61	1.6	205
0.5	Indicated	19.6	0.5	90	1.4	280
	Inferred	13.2	0.5	61	1.6	205
1	Indicated	18.0	0.5	87	1.5	269
	Inferred	12.7	0.5	59	1.6	202
1.5	Indicated	12.5	0.5	67	1.7	213
	Inferred	8.6	0.5	45	1.8	156
2	Indicated	5.6	0.6	34	2.1	117
	Inferred	3.8	0.6	24	2.4	89
2.2	Indicated	3.8	0.6	2.3	25	87
	Inferred	2.8	0.7	2.5	19	71
2.5	Indicated	2.4	0.7	16	2.5	60
	Inferred	2.0	0.7	15	2.8	57
3	Indicated	0.5	1.1	6	2.8	15
	Inferred	1.0	1.1	10	3.1	31

Note: Figures in above table reported the resource at various Zn<sub>Eq</sub> cutoff

## Selection of Reportable Cut-off Grade

Reportable cut-off grades for the BYP Au-Pb-Zn deposits were determined based on RPM's internal cost pricing within China and the preliminary metallurgical study completed:

- Metal Prices, based on Energy & Metals Consensus Forecasts" June, 2024 (increased by 20% for long term expectations):
  - Gold: USD\$2,220 per ounce.
  - Lead: USD\$2,370 per tonne.
  - Zinc: USD\$3,110 per tonne
- Mining Cost of USD \$41 /ton;
- 5% dilution and 5% ore loss were applied;
- Processing costs of USD \$16 per tonne milled, and
- Processing recoveries of:
  - Gold: 87.41%.
  - Lead: 85.87%.
  - Zinc: 92.71%

Additional mining design and more detailed and accurate cost estimate mining studies and test work are required to confirm economic viability of extraction.

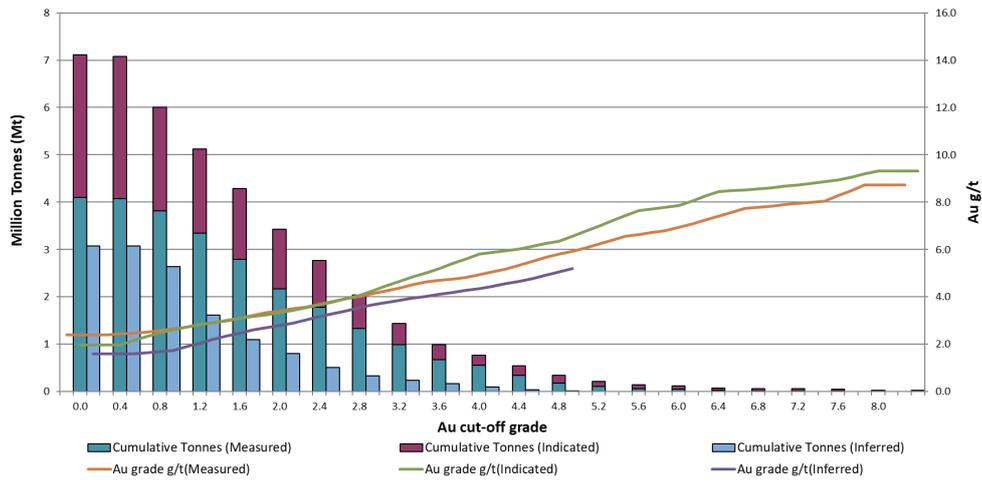
It is further noted that in the development of any mine it is likely that given the location of the Project that detailed CAPEX is required and is not included in the mining costs assumed. RPM has utilized operating costs based on data from the 2018 development and utilization report and processing recoveries based on the latest metallurgical test work as outlined in **Section 13**, along with the prices noted above in determining the appropriate cut-off grade. Given the above analysis RPM considers the Project has reasonable prospects for eventual economic extraction, however, highlights that additional studies and drilling is required to confirm economic viability.

No dilution or Ore loss factors have been included within the Mineral Resource Estimate.

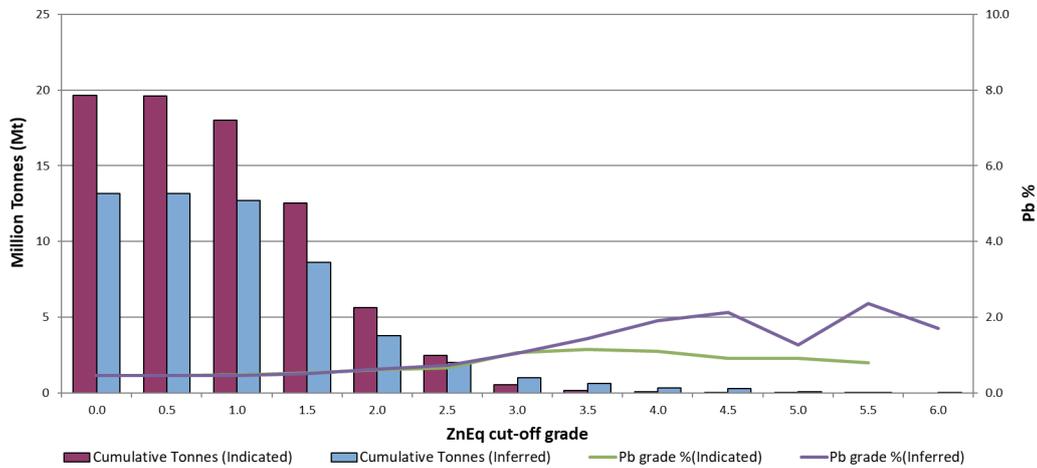
The grade tonnage curves for the BYP Deposit Mineral Resource are shown in **Figure 14-28**.

To show the tonnage and grade distribution throughout the entire deposit, a bench breakdown has been prepared using 25 m bench height for gold area and 50m bench height for lead and zinc area which are shown graphically in **Figure 14-29**.

### Tonnes and Grade - All Resources for BYP project Au



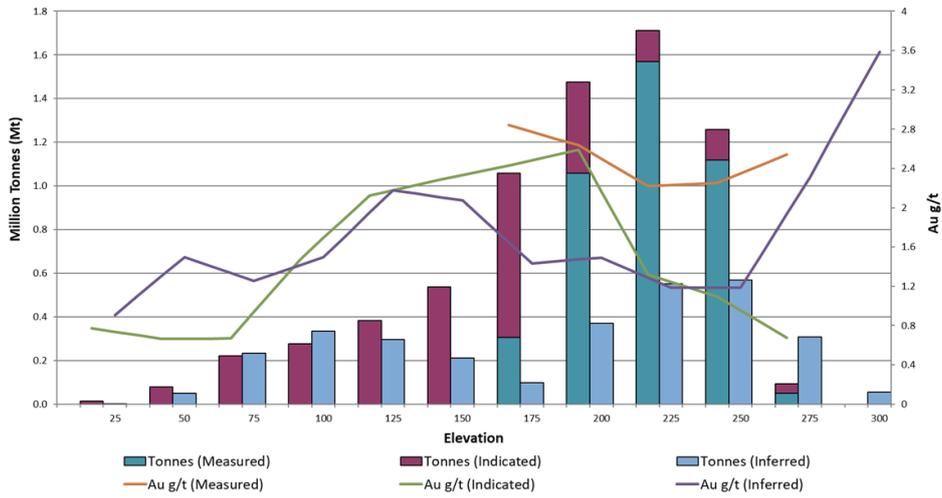
### Tonnes and Grade - All Resources for BYP project Pb



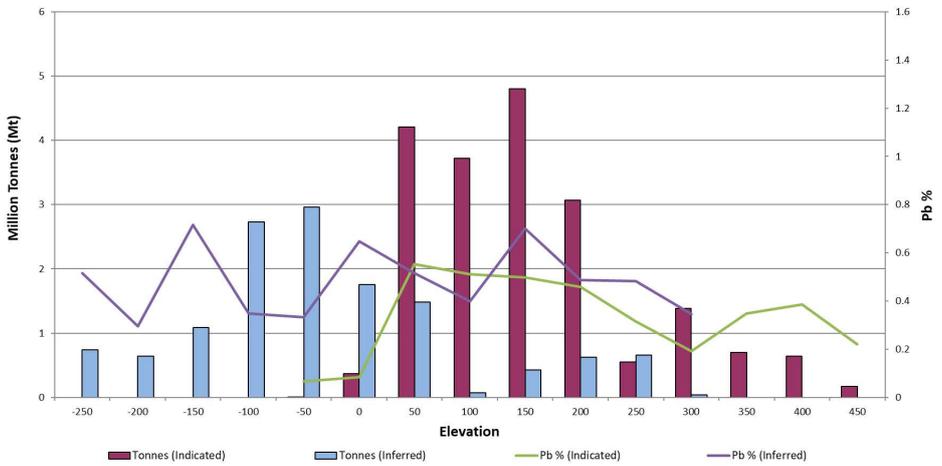
### Tonnes and Grade - All Resources for BYP project Zn



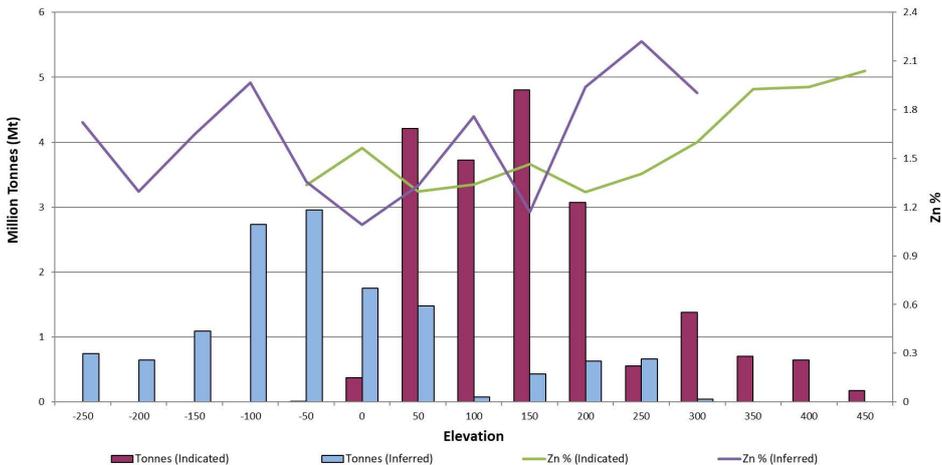
### Tonnes and Bench - All Resources for BYP project Au



### Tonnes and Bench - All Resources for BYP project Pb



### Tonnes and Bench - All Resources for BYP project Zn



### 14.6.8 Risks and Opportunities

The key risks to the Project include:

- Considering the variable market price the deposit may not be economically extractable if the metal prices decrease or operating costs increase.
- RPM considers that sampling and assaying methodology and procedures were satisfactory for the recent drilling. Quality Assurance/Quality Control (“QA/QC”) protocols were adequate, and a review of the data did not show any consistent bias or reasons to doubt the assay data. Standard gold sample Gau-18a returned assays with slightly lower grades than the standard values at around -3D limit lines. All other CRMs show good correlation with original values and assays inside the  $\pm 3D$  limit lines. Due to a slight bias shown by a few CRM samples and an inadequate number of total samples, there is a low risk to the accuracy and representativeness of the QA/QC samples.
- A total of 104 density measurements were obtained from core drilled at the Project. Among the 104 samples, 24 density samples were taken from gold mineralization zones, 50 density samples were taken from lead-zinc mineralization zones and the remaining 30 density samples were taken from wall-rock zones. This number of mineralized density measurements is at the lower end of the range for being a statistically significant number of samples to determine a density regression equation. Considering the variable market price for Lead and Zinc, the Lead and Zinc deposit may not be economically extractable if the metal prices decrease.
- The Company currently holds surface land use rights over the Project valid until 2063. However, the Company does not hold valid Mining Licenses and, as at the Effective Date has not applied for the Mining Licenses for gold, lead and zinc. In addition, several other permits are required to be granted to allow extraction of any minerals. If these permits and licences are not granted the Project cannot recommence production.
- There are no detailed management plans as in the monitoring phase.

The key opportunities for the Project include:

- RPM considers there is good potential to expand the currently defined resource with further drilling. Mineralization is open along strike and dip directions for both gold and lead-zinc mineralization. Extensional drilling of the main zones may delineate continuations of the known mineralization.
- There are some mineralized samples at lower elevations without adequate controlling exploration works. There is potential for additional underground exploration to discover concealed mineralization.
- There is an opportunity to increase the level of confidence in the Inferred Mineral Resource with closer spaced extensional and infill drilling within the main mineralized zones.
- Further exploration would be designed to target potential extensional areas and upgrade resource classification. RPM considers a total of 24 drill holes for around 9,000 m (12 drill holes for extensional drilling and 12 drill holes for infill drilling) would be appropriate. Drill holes could be drilled from underground levels to reduce the total exploration cost. RPM estimates a minimum exploration cost of around USD 500,000 to USD 800,000.

### 14.6.9 Dilution and Ore Losses

The block model is undiluted with no ore loss factors applied. As a result, appropriate dilution and ore loss factors must be applied for any future mining and economic analysis.

### 14.6.10 Other Information

RPM is aware the Company does not have the required permits and licences to commence production, which is still under application process, and not aware of any other factors, including environmental, permitting, legal, title, taxation, socio-economic, marketing and political or other relevant factors, which could materially affect the Mineral Resource.

## 15 Mineral Reserve Estimates

While the Project was in operation previously, as at the Effective date of this Report, the Project is under care and maintenance with no suitable mining study has been undertaken to current market conditions to allow for an estimate of Mineral Reserves.

## 16 Mining Methods

*Note: The word “ore” is used in this section in a generic sense and does not imply that mineral reserves have been estimated. At the time of report writing, the Company had not prepared an estimate of mineral reserves.*

As noted in **Section 6** of this report, underground mining was carried out in the lead-zinc zone of the BYP mine for more than five years before the Client acquired the Project. The development by the previous owners was completed using tracked equipment.

Upon Silvercorp acquiring the mine, the Company employed contractors to mine the lead-zinc sections of the mine until 2011 and the gold sections of the mine until 2014. During the 2018 site visit, RPM noted that the later workings in the gold section of the mine had been mined using trackless equipment. During the 2024 site visit, RPM noted that underground roadways were flooded and not accessible due to irregular pumping of the underground water inflows. The entrances of No.1 Main Adit, No.1 Auxiliary Adit, No. 2 Adit and ventilation shaft were all locked for safety.

RPM also inspected the shaft and head frame that the Company partially developed in 2012. The shaft is approximately 4 m diameter and was planned to go down to the 115 mRL (265 m in length). Planned ore hoisting capacity was 1,000 tpd.

Shrinkage stoping method was utilised in the lead-zinc section of the mine, with stopes left open after extraction. A slightly different form of shrinkage stoping method was utilised in the gold section of the mine and there was evidence that paste backfill operations had been successfully commissioned but discontinued some time before mining ceased. RPM noted the stope extraction sequence was bottom up, with the inter-level extraction sequence being top-down (as described in the AMC technical report dated August 2012).

RPM was informed that the Company intends to recommence paste backfill operations when mining recommences. RPM noted that in order to complete the levels that have been developed, focus on backfilling mined out stops would need to be incorporated into the start-up schedule in order to enable full extraction of the gold mineralized zones.

During the 2018 and 2024 site visits, RPM noted that the condition of facilities was deteriorating. It is RPM's opinion that all surface mining related facilities including transport tracks, the vertical shaft, the entrances of the inclined shafts, and mining equipment (excavators and trucks) need be replaced or refurbished before production can recommence.

## 17 Recovery Methods

*Note: The word “ore” is used in this section in a generic sense and does not imply that mineral reserves have been estimated. At the time of report writing, the Company had not prepared an estimate of mineral reserves.*

The 500 tpd processing facility on site was used to process both the lead-zinc sulphide and the gold mineralized material. It has a two-stage crushing circuit followed by classification and dual flotation circuits (lead and zinc). The two different mineralization types from the mine were treated separately in batches. Lead-zinc flotation used both flotation circuits to produce lead and zinc concentrates whereas the gold flotation only used the lead flotation circuit to produce a gold bearing pyrite concentrate.

According to the RPM's inspection of 2024 site visit to the BYP mine site, the processing plant is now in need of replacement as the current processing facility has been idle for 10 years without proper maintenance. The Company has stated it intends to dismantle the 500 tpd processing plant and replace it with a 1,500 tpd processing plant that follows the same processing flow sheet.

RPM has not been provided with any information, studies or plans for future operations, as such none are presented.

## 18 Project Infrastructure

RPM notes that the Project infrastructure includes several areas which were previously utilised in the operations which ceased in 2014. The below provides a high-level review of the areas and has not completed a detailed assessment. While RPM is aware that the Company plans to restart operations, no updated studies or designs have been provided to reflect current market conditions.

### 18.1 Tailings Management

The tailings management facilities (TMF) currently in place at the BYP Project consists of a tailings storage facility (TSF) and a Paste Backfill Plant. The TSF was commissioned in August 2011 and is located approximately 1 km southwest of the processing plant. The area is classified as Grade 6 in terms of seismicity and a seismic acceleration of 0.05 g was used in developing the TSF design specifications. The TSF is classified as a Grade V facility based on the wall height (24 m) and the working volume (245,000 m<sup>3</sup>).

It is assumed that, at the dry density of 1.36 t/m<sup>3</sup>, this volume is equivalent to 333,000 t of tailings. The tailing dam is typical valley fill embankment dam with no furthering wall lifting.

The TSF has a masonry dam wall behind which tailings are delivered via a pipeline and allowed to drain to the desired dry density. Dam embankment slopes are designed at 1:2 with concrete layer thickness of 4 m. The preliminary design requires the final downstream slope and upstream slope of the dam to be formed at an overall slope of 1:0.8 and 1:0.2 respectively. The dam base is embedded 50 cm into the bedrock.

Immediately downstream of the dam embankment is a surface water cut-off trench. There are cut-off trenches at both sides to prevent scouring of the abutments by rainwater run-off. Supernatant water from the TSF is removed via a vertical reinforced concrete decant structure. It is diverted around the embankment via a concrete-lined drainage culvert.

Seepage control is affected by geo-membrane and geo-textile impervious layers together with an intercepting drain and collector system discharging into a downstream water storage pond for settling and recycling. The preliminary TMF design provides for a cut-off drain through the dam base to capture seepage from the TSF and to improve stability under dynamic conditions by lowering the phreatic surface.

A reclaim pond constructed below the dam intercepts seepage and discharge water to effect zero discharge for no rainfall seasons. About 75 - 85% of the water was recycled back to the mill plant for reuse when in operation.

The Paste Backfill plant was constructed with processing capacity of 300t/a.

During the 2024 site visit, RPM noted that the TSF and ancillary sedimentation tank (seepage monitoring facilities) are still under limited maintenance. Remote monitoring is to be used for regular supervision of local environmental protection department, and prevention of accidental entry by surrounding villagers.

### 18.2 Waste Rock Storage

During previous operations, waste rock that was not used underground was stored in stockpiles near the mine portals or used for construction purposes.

All waste storage facilities have not been used since July 2014.

### 18.3 Power Supply

Power for the existing plant, via an existing 10 kV power line, was drawn from the town of Baiyunpu, Hunan Province power authority grid, which is 7 km away from the mine.

## 18.4 Access

A major highway runs along the southern edge of the BYP Project area. Access to the site is via a 3 km sealed road connecting to the highway. On the site, a network of gravel roads allow access to all areas (portals, process plant, Backfill Plant, water supply areas etc.).

## 18.5 Water Supply

During previous operations, process water was primarily sourced from tailings filtering and TSF returns (approximately 75% to 85% returns) supplemented by water sourced from the underground mine dewatering system.

Water for drilling and dust suppression was also sourced from the underground mine dewatering system.

Potable water for domestic use was sourced from local springs and streams as well as No.1 decline inflow. All these sources have been tested and qualify as acceptable potable water (as noted in the 2018 development and utilization plan).

The Company does not intend to modify the water supply sources or methods.

## 18.6 Other

Other infrastructure includes contractor housing, surface maintenance workshop, explosives magazine, fuel farm, administration buildings, warehouse, and concentrate storage facility. Since 2014, these facilities have had limited or no maintenance and will need to be replaced and/or relocated as part of the Company's plan to recommence mining and processing.

## 19 Market Studies and Contracts

RPM understands that previous concentrate production was sold to smelters in Hunan Province.

As at the Effective Date of the Report, there are no contracts signed between the Company and smelting plants.

## 20 Environmental Studies, Permitting and Social and Community Impact

### 20.1 Introduction

RPM has undertaken this Environmental and Social (E&S) review of the Project in accordance with the requirements of Canadian National Instrument 43-101 ("NI 43-101"). Specifically, RPM has, where relevant and material, provided information and comment on the following:

- Project risks arising from environmental, social, and health and safety issues.
- Any non-governmental organization impact on sustainability of mineral and/or exploration projects.
- Status for the compliance with relevant host country laws, regulations and permits.
- Sufficient funding plans for remediation, rehabilitation and closure and removal of facilities in a sustainable manner.
- Environmental liabilities of its projects or properties.
- Historical experience of dealing with concerns of local governments and communities on the sites of its mines, exploration properties, and relevant management arrangements.
- Any claims that may exist over the land on which exploration or mining activity is being carried out, including any ancestral or native claims.

The Company is planning to apply for renewal of the mining license in late 2024, in conjunction with safety and environmental certificates which need renewal after the update of mining license. RPM is aware no mining or processing operations occur on-site, a such no management plans are in place for water, tails and waste storage other than ongoing monitoring.

### 20.2 Laws and Regulations

The Project was in operation under the following Chinese laws, regulations and guidelines:

#### Laws:

1. Law of Environmental Protection PRC (1989, amended in 2014)
2. Law of Minerals Resources of PRC (1986, amended in 2009)
3. Production Safety Law of the PRC (2002, amended in 2021)
4. Law of Occupational Disease Prevention (2001, amended in 2018)
5. Environmental Impact Assessment (EIA) Law (2002, amended in 2018)
6. Law on Prevention & Control of Atmospheric Pollution (1987, amended in 2015)
7. Law on Prevention & Control of Noise Pollution (1996, amended in 2021)
8. Law on Prevention & Control of Water Pollution (1984, amended in 2008)
9. Law on Prevention & Control Environmental Pollution by Solid Waste (1995, amended in 2016)
10. Forestry Law (1984, amended in 2019)
11. Water Law (1988, amended in 2016)
12. Water & Soil Conservancy Law (1991, amended in 2010)

13. Land Administration Law (1986, amended in 2019)
14. Protection of Wildlife Law (1989, amended in 2022)
15. Energy Conservation Law (1997, amended in 2018)
16. Management Regulations of Prevention & Cure of Tailings Pollution (1992, amended in 1999)
17. Management Regulations of Dangerous Chemical Materials (2002, amended in 2013)

#### **Regulation Guidelines:**

1. Regulations on the Administration of Construction Project Environmental Protection (1998, amended in 2017)
2. Regulations on Administration of Chemicals Subject to Supervision & Control (1995, amended in 2011)
3. Environment Protection Design Regulations of Metallurgical Industry (YB9066-1995)
4. Comprehensive Emission Standard of Wastewater (GB8978-1996)
5. Environmental Quality Standard for Surface Water (GB3838-2002)
6. Environmental Quality Standard for Groundwater (GB/T14848-93)
7. Ambient Air Quality Standard (GB3095-2012)
8. Comprehensive Emission Standard of Atmospheric Pollutants (GB16297-1996)
9. Standard of Boundary Noise of Industrial Enterprise (GB12348-2008)
10. Control Standard on Cyanide for Waste Slugs (GB18053-2000)
11. Standard for Pollution Control on Hazardous Waste Storage (GB18597-2001)
12. Identification Standard for Hazardous Wastes-Identification for Extraction Procedure- Toxicity (GB5085.1-7-2007)
13. Standard of Landfill and Pollution Control of Hazardous Waste (GB 18598-2001)
14. Environmental Quality Standard for Noise (GB3096-2008)
15. Evaluating Indicator System for Lead and Zinc Industry Cleaner Production (Trial) (2007)

### **20.3 Waste and Tailings Disposal Management**

During the 2011-2014 mining operations, the waste from the Project was predominately waste rock produced during mining, tailings, and some minor sanitary waste. Waste rock had been deposited in stockpiles adjacent to mine portals and has also been utilized for construction purposes. RPM has been informed the waste rock is non-acid generating, consisting mainly of limestone, sandstone and siltstone that are comprised of calcite, quartz, chlorite and sericite, kaolin and clay minerals. Waste rock not used for construction has been stockpiled and covered with soil and re-vegetated. For stabilization of the area, retaining walls were built downstream of the waste rock stockpiles. An interception ditch was constructed upstream to prevent the slope surface from washing out, as well as to avoid water and soil loss.

Tailings generated from the processing plant were discharged into a purpose built TSF via a 1 km gravity-fed tailings pipeline.

## 20.4 Site Monitoring

During the 2011-2014 mining operations, comprehensive monitoring plans were developed for the Project. The monitoring plan included air/dust emission, noise, and wastewater, and monitoring was carried out by qualified persons and licensed institutes. For the water environment, an intensive monitoring program was developed and implemented, including sanitary wastewater and surface water by the Xinshao County Environmental Protection Bureau. A review in May 2012 indicated that results for surface water, sanitary / process wastewater, and mining water were in compliance with relevant standards. In addition, the TSF Project completion acceptance inspection monitoring results for wastewater discharge, air emission, noise, and solid waste disposal were in compliance with relevant standards, as required by the EIA.

As the mining site had suspended production for around 10 years, most of the site monitoring systems have stopped working except domestic water monitoring system and the tailing dam seepage monitoring system. The tailing dam seepage monitoring works were completed regularly by local municipal emergency department by treated water sampling and assaying. All historical monitoring results do not show that any harmful elements exceed standards and pose potential risks of environmental pollution.

The tailing dam design of the downstream wall of ratio 1:0.8 meet with the safety requirement of Chinese regulation. Considering that there are not any TSF stability monitoring reports available for review, RPM recommends that TSF stability tests should be done regularly and the analysis report should be compiled for better tracing and recording. The latest compiled TSF Flood Drainage System Test Report at May 2024 indicated that the drainage system of tailing dam is still well maintained and could meet with the normal flood drainage requirements.

All related systems which include air/dust emission, noise, and wastewater treatment are now being reviewed by qualified persons and licensed institutes, and all environmental conclusions provided on the updated study.

## 20.5 Status with Project E&S Approvals and Permitting Requirements

During the 2011-2014 mining operation stage, the following permits and approvals were obtained by the Company:

- Environment Assessment Report and Approval,
- Safety Pre-assessment Report & Registration,
- Safety Production Permit,
- Geological Hazards Assessment Report and Approval,
- Mining License,
- Business license,
- Land use right certificate, and
- Forest land use right permit.

Although the business license and land use right certificate are still valid as at the Effective Date of this Report, all other licenses have expired as the mine production has been suspended for around 10 years. The Company has stated that the new mining license will be applied for in late 2024 once all review processes are completed, and other reports and certificates (including the safety and environmental certificates) will then be compiled by related research institutes or applied for through government departments.

### 20.5.1 Status with Project E&S Compliance

Based on the review of the available information, RPM considers that the Project is currently in compliance the relevant Chinese National E&S legislative requirements for a suspended mining and mineral processing operation.

## 20.6 Social

RPM was informed that residents in the Project area reportedly have a positive attitude to the development of the BYP Project. Public participation in this Project includes information disclosure, the use of inquiry forms, and public interaction for the promotion and improvement of the reclamation process. As the Project is suspended further stakeholder engagement will be undertaken.

The nearest significant community is the Jukoupu Village, approximately 3 km to the southwest of the BYP processing plant. Xinshao County village is approximately 21 km to the southeast. The area surrounding the Project is predominantly agricultural with the exception of the scenic protected area (Tourism).

Yunxiang Mining has made a number of cash donations and contributions to local capital projects and community support programs within the Xinshao County. No records of public complaints in relation to the activities of the Project were sighted by the RPM team.

There are no cultural minority groups within the general Project area. The cultural mosaic of the broader Xinshao County is predominantly Han Chinese. RPM is not aware of any cultural heritage sites located within the Project area, ancestral or native title claims over the land on which exploration or mining activity has been undertaken.

Yunxiang Mining reportedly has good relations with the local Xinshao County, with which it consults on local issues, and with Shaoyang City. Relations with statutory bodies are also reported to be positive, and the Company has not received any notices of breach of environmental conditions in regard to the Project.

RPM understands BYP production activities were undertaken in compliance with the relevant Chinese regulations. Formal contracts are signed for all full-time employees and the wages paid are above minimum wage. Annual medical surveillance checks are conducted for employees before and during employment, as well as when leaving the Company. No child labor or under-age labor is used.

RPM has not sighted a Stakeholder Engagement Plan for the Project (i.e. including a register of the historical stakeholder engagement), nor information on whether there is any non-governmental organization impact on sustainability of the Project. RPM assumes these will be undertaken as of future studies.

## 20.7 Biodiversity

A "landscape protected area" where a Buddhist nunnery is located was established in 2020 which has been gazetted as the "Xinshao BaishuiDong National Scenic Nature Park". It was found that the south boundary of the original mining license overlapped with a portion of the National Scenic Nature Park so the Company has adjusted the coordinates of the inflection points of the mining license to remove the overlap. The revised mining license renewal application was submitted in 2022 and the formal review process for the license renewal is still underway.

The other land surrounding the Project area is used predominantly for agriculture and there are no ecological forests or strict land control zones in the Project area. The current vegetation within the Project area is mainly secondary vegetation resulting from farming activities.

Larger wild mammals are not found in the region. Occasionally, small nesting birds in the area are observed. The surrounding villagers raise domestic animals such as chickens, ducks, pigs, sheep, goats, and cows.

## 20.8 Remediation and Reclamation

Remediation and reclamation plans have been developed during the BYP Project approval stage, including measures during project construction, operation, and closure. More details can be referred to the latest released EIA report for the Project.

## 20.9 Site Closure Plan

The mine closure will comply with Chinese National Requirements such as Article 21 (Closure Requirements) of the Mineral Resources Law (1986, amended in 2009) and Articles 33 and 34 of the Rules of Implementation Procedures of the Mineral Resources Law of the People's Republic of China (1994).

Normally, the site closure planning process will include the following components as set out below:

1. Identify all site closure stakeholders (e.g. government, employees, community etc.).
2. Undertake stakeholder consultation to develop agreed site closure criteria and post-operational land use.
3. Maintain records of stakeholder consultation.
4. Establish a site rehabilitation objective in line with the agreed post-operational land use.
5. Describe and define the site closure liabilities (i.e. determined against agreed closure criteria).
6. Establish site closure management strategies and cost estimates (i.e. to address and reduce site closure liabilities).
7. Establish a financial accrual process for site closure.
8. Describe the post-site closure monitoring activities and program (i.e. to demonstrate compliance with the rehabilitation objective and closure criteria).

Based on the Chinese National Requirements, a site decommissioning plan will be produced at least one year before mine closure. Site rehabilitation and closure cost estimates will be made at that time.

## 21 Capital and Operating Costs

Production at the BYP Au-Pb-Zn Project has been suspended since 2014 and no Ore Reserves have been estimated or reported for the Project to date. As such, no OPEX or CAPEX are presented in this report.

## 22 Economic Analysis

No economic analysis has been undertaken as part of this Report.

## 23 Adjacent Properties

There are a number of small and medium-sized gold deposits in the area directly adjacent to the Property, including Gaojiaao, Hongmiao, and Sanlanmiao. All these deposits are hosted in the same Devonian clastic sedimentary sequence (Kang R.H., 2002). Inclusion of the description of these deposits here does not imply that material of similar quantity or grade may be found on the Property.

The medium-sized Gaojiaao mine is located about 4 km southwest of the Property. Gold mineralization occurs as stratiform and lenticular zones and veins in Devonian argillaceous siltstone, siltstone and quartz sandstone with a general northwest strike. Stratiform and lenticular zones are conformable with stratigraphy with a dip angle from 35° to 48°. Individual mineralized zones are from 70 m to 320 m in length, from 4 m to 13 m in width, and from 20 m to 100 m in dip extension. Gold veins occur in northwest trending faults with variable dips to the northeast. Individual veins are from 140 m to 220 m in length, from 4.0 m to 7.3 m in average width and from 20 m to 220 m in dip extension. The dominant host rock is oxidized siltstone. Gold mineralization at the Gaojiaao mine is associated with pyritization, silicification and bleaching. Gaojiaao has been in production with open pit mining and heap leaching recovery since 1989.

The Qualified Person has not reviewed any documents regarding the above deposits, and any information is provided for reference only.

## 24 Other Relevant Data and Information

Although the Company has yet to develop a detailed mine production plan and schedule for a new mining stage, according to the 2018 development and utilization report compiled by the Hunan Lantian Exploration Design Ltd Company, the planned mining and processing capacity of the Project will be 450,000t/a (including 300,000 t/a for lead-zinc and 150,000 t/a for gold).

According to the Client's development plan, once the updated mining license is received, the re-organization and expansion of the mine infrastructure will commence. It is expected the transition period will take 12 to 18 months and the production will be able to resume after the issue of the required environmental and safety permits. RPM have not reviewed any plans or studies to support the re commencement of operations.

## 25 Interpretation and Conclusions

The following interpretations and conclusions have been made on the BYP Au-Pb-Zn Project from the findings of the Technical Report:

- The Project consists of two styles of mineralization with fine grained disseminated Carlin-type gold deposit and a carbonate-hosted MVT-type lead-zinc deposit.
- A Mineral Resource estimate was completed by RPM using the Ordinary Kriging method. The Mineral Resource estimate in this Technical Report is reported using cut-off grades which are deemed appropriate for the style of mineralization and the current status of the Mineral Resources.
- Within the gold resources, the Measured category comprises 3.3 million tonnes (Mt) at an average grade of 2.7 g/t Au for 294,000 ounces of contained gold, the Indicated category comprises 1.8 million tonnes (Mt) at an average grade of 2.8 g/t Au for 162,000 ounces of contained gold, and the Inferred category comprises an additional 1.6 Mt at an average grade of 2.2 g/t Au for 116,000 ounces, at a 1.2 g/t Au cutoff grade.
- Within the lead-zinc resources, the Indicated category comprises 3.8 Mt at an average grade of 0.6% Pb and 2.3% Zn with 25,000 t of contained lead and 87,000 t of contained zinc, and the Inferred category comprises 2.8 Mt at an average grade of 0.7% Pb and 2.5% Zn for 19,000 t of contained lead and 71,000 t of contained zinc, all at a 2.2% Zn<sub>Eq</sub> cutoff grade.
- Significant mineralized drill hole intersections exist at depth, but with insufficient data to permit wireframing and inclusion in the estimation of Mineral Resources. RPM considers these deep intersections to be high priority targets for additional exploration when underground operations restart.
- The potential for increasing the confidence in the Mineral Resource is considered by RPM to be good through infill drilling to convert resources to higher categories and step-out drilling to extend known mineralization and identify and delineate additional zones of mineralization.
- Metallurgical test work has been carried out to adequate standards to allow proposed gold processing flow sheets to be designed for the Project. Testwork and outcomes of the pilot plant for the basis for the gold circuit which is proposed to consist of locked-cycle flotation of pyrite and gold by one-stage rougher / two-stage scavenger / two-stage cleaner processing, the lead circuit will consist of locked-cycle flotation by one-stage rougher / two-stage scavenger / three-stage cleaner processing, and the zinc circuit will consist of one-stage rougher / two-stage scavenger / four-stage cleaner processing.
- The processing recoveries are forecast to be 87.4% for gold into a concentrate at a grade of 48.6 g/t Au; 85.9% for lead into a concentrate at a grade of 56.0% Pb, 5.1% Zn, and 170 g/t Ag; and 92.7% for zinc into a concentrate at a grade of 52.4% Zn, 0.8% Pb, and 54 g/t Ag.

## 26 Recommendations

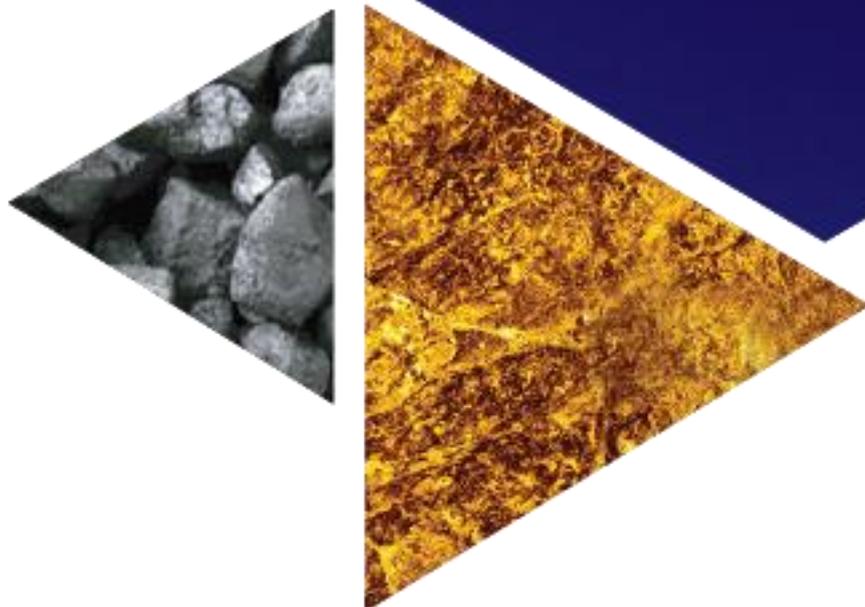
The recommendations provided are based on observations made during the site visit and subsequent geological and metallurgical reviews and from the Mineral Resource estimate detailed in **Section 14**.

- Approximately 50% of gold mineralized bodies have been classified as Measured, 26% of the gold mineralized bodies and 55% of the lead-zinc mineralized bodies have been classified as Indicated, and 24% of the gold mineralized bodies and 45% of the lead-zinc mineralized bodies have been classified as Inferred. Mineral Resources are estimated with insufficient confidence to allow the application of Modifying Factors to support mine planning and evaluation of the economic viability of the remainder of the deposit. RPM recommends additional drilling to increase confidence in the existing Inferred Mineral Resource, focusing on the areas with widely spaced drilling and resultant low levels of confidence. RPM considers a total of 24 drill holes for around 9,000m (12 drill holes for extensional drilling and 12 drill holes for infill drilling would be appropriate). Drill holes could be drilled from underground levels to reduce the total exploration cost. RPM estimates a minimum exploration cost of around USD 500,000 to 800,000.
- Further monitoring of the QAQC which indicated a slight bias, overestimation and underestimation observed in two standard samples of high-grade assays at the ALS Laboratory is recommended. RPM suggests more frequent use of internal standard samples to closely monitor the accuracy of assays.
- RPM recommends that the Company continues recording density measurements which would cost approximate USD 25,000, ensuring that the density measurement intervals correspond directly with geological logging and sampling intervals. It is recommended that density measurements be obtained from all 1 m intervals through the mineralized zone in order to continue compiling a dataset with sufficient spatial distribution to validate and apply regression formulae for density calculation or geostatistical estimation, instead of assigning average density values.
- Following on from the increased geological understanding of the mineralization styles and likely run of mine feed grades of any operation, RPM recommends the Company undertakes processing test work on samples that are representative of the deposit which would cost approximately USD 60,000. This test work would identify the grinding requirements, as well as gold recoveries and processing requirements based on conventional flow sheets as well as the potential for recovering the metals into marketable products.
- At the successful completion of the recommended exploration work and metallurgical test work program RPM recommends the Company undertakes a Pre-Feasibility Study (“PFS”) which should consider the various opportunities for the Project’s development. The successful completion of a PFS showing positive economics would allow for the reporting of Mineral Reserves. The proposed PFS would take 6 to 12 months to complete inclusive of drilling with an approximate cost of USD 600,000.

## 27 References

- Hunan Province Xinshao county Baiyunpu Lead and Zinc mine general exploration report, 468 Team of Hunan Provincial Geological Bureau, 1977
- Hunan Province prospecting report, 418 Team of Geology and Mineral Bureau, 1992
- Hunan Province Xinshao county Baiyunpu Lead and Zinc mine FPS report (300t/d), Sanmenxia city gold design institute limited company, 2006
- Hunan Province Xinshao county Baiyunpu Lead and Zinc mine metallurgical test report, Hunan Non-ferrous Metals Research Institute (HNMRI), 2011
- Hunan Province Xinshao county Baiyunpu gold mine metallurgical test report, Hunan Non-ferrous Metals Research Institute (HNMRI), 2011
- Technical report for BYP Gold-Lead-Zinc Property, Hunan Province, China, AMC Mining Consultants Ltd, 2012
- Hunan Province Xinshao county Baiyunpu Au-Pb-Zn mine detailed exploration report, Yunxiang mining company, 2013
- Hunan Province Xinshao county Baiyunpu gold mine metallurgical test report, Hunan Non-ferrous Metals Research Institute (HNMRI), 2018
- Hunan Province Xinshao county Baiyunpu gold mine Industry Indexes recommendation letter, Hunan Lantian exploration design limited company, March, 2018
- Hunan Province Xinshao county Baiyunpu Au-Pb-Zn mine resource reconciliation report, 418 Team of Geology and Mineral Bureau, May, 2018
- Hunan Province Xinshao county Baiyunpu Au-Pb-Zn mine development and utilization plan, Hunan Province Lantian exploration design limited company, June, 2018
- A Deposit Model for Mississippi Valley-Type Lead-Zinc Ores in Mineral Deposit Models for Resource Assessment: USGS, Scientific Investigations Report, Leach D. L, Taylor R.D., Fey D.L., Diehl, S.F. and Saltus, R.W., 2010
- Characteristics and models for Carlin-type gold deposits. Reviews in Economic Geology, Vol. 13, p. 163-220. Hofstra, A.H., and Cline, J.S., 2000
- BYP Gold-Lead-Zinc Property, NI 43-101 Technical Report, Bob Dennis, Tony Cameron and Song Huang , RPMGlobal Asia Limited, April 2019
- Mining licence Inflection points' coordinates adjustment document for Baiyunpu Lead-Zinc-Gold Mine, Xinshao County, Hunan Province, Hunan Provincial Geological and Mineral Exploration and Development Bureau Team 407, March 2022

# Appendix A. Glossary



**The key terms used in this report include:**

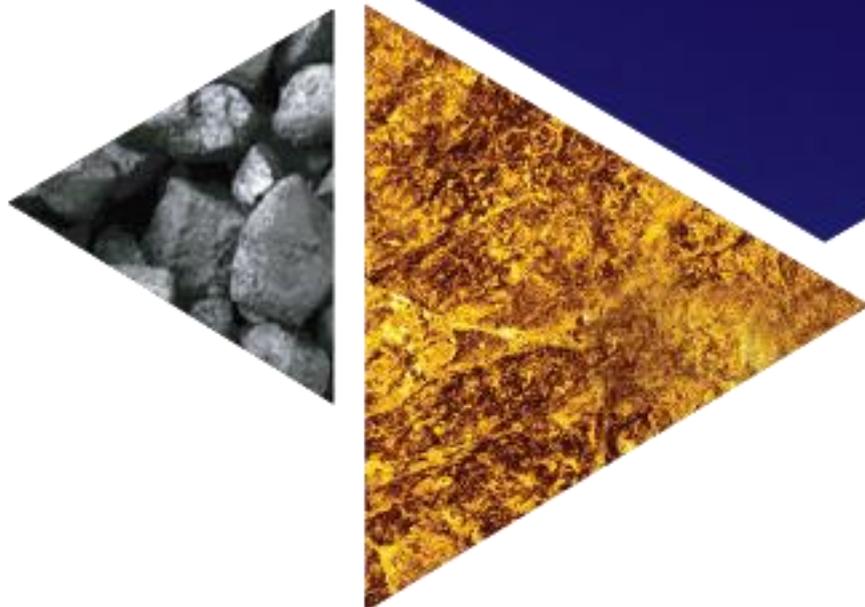
- **Client** means Silvercorp Metals Inc. “Silvercorp”.
- **Company** means Yunxiang Mining Co. Ltd “Yun Xiang”
- **concentrate** a powdery product containing higher concentrations of minerals resulting from initial processing of mined ore to remove some waste materials; a concentrate is a semi-finished product, which would still be subject to further processing, such as smelting, to effect recovery of metal
- **contained metal** refers to the amount of pure metal equivalent estimated to be contained in the material based on the metal grade of the material.
- **element** Chemical symbols used in this report  
Au – Gold; Ag – Silver; As – Arsenic; Cu – Copper; Pb – Lead; Zn – Zinc
- **exploration** activity to identify the location, volume and quality of a mineral occurrence
- **Exploration Target/Results** includes data and information generated by exploration programs that may be of use to investors. The reporting of such information is common in the **early** stages of exploration and is usually based on limited surface chip sampling, geochemical and geophysical surveys. Discussion of target size and type must be expressed so that it cannot be misrepresented as an estimate of Mineral Resources or Ore Reserves.
- **exploration right** the licensed right to identify the location, volume and quality of a mineral occurrence
- **flotation** is a separation method for to the recovery of minerals using reagents to create a froth that collects target minerals
- **gangue** is a mining term for waste rock
- **grade** any physical or chemical measurement of the concentration of the material of interest in samples or product. The units of measurement should be stated when figures are reported
- **grind** means to crush, pulverize, or reduce to powder by friction, especially by rubbing between two hard surfaces
- **In situ** means rock or mineralization in place in the ground
- **In Situ Quantities** estimates of total in ground tons and grade which meet the requirements of the PRC Code or other international codes for reserves but do not meet either NI 43-101 or Joint Ore Reserves Committee's recommendations
- **Indicated Mineral Resource** is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.
- **Inferred Mineral Resource** is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.
- **ITR** stands for Independent Technical Review
- **ITRR** stands for Independent Technical Review Report
- **Km** stands for kilometer

- **Kt** stands for thousand tonnes
- **Lb** stands for pound, a unit of weight equal to 453.592 grams
- **m** stands for meters
- **M** stands for million
- **Measured Mineral Resource** is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.
- **metallurgy** Physical and/or chemical separation of constituents of interest from a larger mass of material. Methods employed to prepare a final marketable product from material as mined. Examples include screening, flotation, magnetic separation, leaching, washing, roasting etc.
- **mine production** is the total raw production from any particular mine
- **Mineable Quantities** Estimates of in ground tonnes and grades which are recoverable by mining
- **Mineral Reserves** is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.
- **mineral right** for purposes of this Prospectus, mineral right includes exploration right, mining right, and leasehold exploration or mining right
- **mineralization** any single mineral or combination of minerals occurring in a mass, or deposit, of economic interest. The term is intended to cover all forms in which mineralization might occur, whether by class of deposit, mode of occurrence, genesis or composition
- **mining rights** means the rights to mine mineral resources and obtain mineral products in areas where mining activities are licensed
- **RPM** refers to RPMGlobal
- **mRL** means meters above sea level
- **Mt** stands for million tonnes
- **Mtpa** means million tonnes per annum
- **NI 43-101** National Instrument 43-101
- **OC** open cut mining which is mining from a pit open to surface and usually carried out by stripping of overburden materials
- **Ore** is the portion of a reserve from which a metal or valuable mineral can be extracted profitably under current or immediately foreseeable economic conditions
- **ore processing** is the process through which physical or chemical properties, such as density, surface reactivity, magnetism and color, are utilized to separate and capture the useful components of ore, which are then concentrated or purified by means of flotation, magnetic selection, electric selection, physical selection, chemical selection, reselection, and combined methods

- **ore selection** the process used during mining to separate valuable ore from waste material or barren rock residue
- **ore t** stands for ore tonne
- **preliminary feasibility study** is a comprehensive study of the viability of a mineral Project that has advanced to a stage where the mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, has been established and an effective method of mineral processing has been determined, and includes a financial analysis based on reasonable assumptions of technical, engineering, legal, operating, economic, social, and environmental factors and the evaluation of other relevant factors which are sufficient for a Qualified Person, acting reasonably, to determine if all or part of the Mineral Resource may be classified as a Mineral Reserve.
- **primary mineral deposits** are mineral deposits formed directly from magmas or hydrothermal processes
- **Probable Mineral Reserve** is the economically mineable part of an Indicated and, in some circumstances, a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.
- **Project** means a deposit which is in the pre-operating phase of development and, subject to capital investment, feasibility investigations, statutory and management approvals and business considerations, may be commissioned as a mine
- **Proven Mineral Reserve** is the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.
- **raw ore** is ore that has been mined and crushed in an in-pit crusher, but has not been processed further
- **recovery** The percentage of material of initial interest that is extracted during mining and/or processing. A measure of mining or processing efficiency
- **regolith** is a geological term for a cover of soil and rock fragments overlying bedrock
- **reserves** the [economically] mineable part of a Measured and/or Indicated Mineral Resource, including diluting materials and allowances for losses which may occur when the material is mined
- **resources** a concentration or occurrence of a material of intrinsic economic interest in or on the earth's crust in such form, quality and quantity such that there are reasonable prospects for eventual economic extraction
- **Resources** Resources which have been estimated in accordance with the recommendations of the guidelines provided in the JORC or NI 43-101 Standards of Disclosure for Mineral Projects.
- **RL** means Reduced Level, an elevation above sea level
- **RMB** stands for Chinese Ren Min Bi Currency Unit;
- **RMB/t** stands for Chinese Ren Min Bi per material tonne
- **ROM** stands for run-of-mine, being material as mined before beneficiation
- **saprolite** is a geological term for weathered bedrock
- **secondary mineral deposits** are mineral deposits formed or modified as a result of weathering or erosion of primary mineral deposits

- **shaft** a vertical excavation from the surface to provide access to the underground mine workings
- **sq.km** square Kilometer
- **t** stands for tonne
- **t/bcm** stands for tonnes per bank cubic meter (i.e. tonnes in situ) a unit of density
- **tonnage** An expression of the amount of material of interest irrespective of the units of measurement (which should be stated when figures are reported)
- **tonne** refers to metric tonne
- **tpa** stands for tonnes per annum
- **tpd** stands for tonnes per day
- **UG** underground mining which is an opening in the earth accessed via shafts, declines or adits below the land surface to extract minerals
- **upgrade ratio** is a processing factor meaning ROM Grade% / Product Grade %
- **USD** stands for United States dollars
- **\$** refers to United States dollar currency Unit

# Appendix B. RPM Team Experience



## **Tony Cameron, Principal Mining Engineer, (Beijing)**

Tony is a mining engineer with over 35 years of experience in the mining industry. In his recent consulting work, Tony has been involved with reserve estimation, due diligence investigations, studies ranging from scoping level to bankable feasibility, mine optimization, design and scheduling, operational and management audits, contract tenders, and general project management on a wide range of projects. Most of Tony's technical work whilst based in Beijing for 10 years was focused on assisting clients in accessing capital through either equity or debt finance and Tony has developed an understanding of the requirements of the various financial market globally having been directly involved with successful transactions on the Hong Kong Exchange and a number of ASX, TSX and AIM transactions. Commodity experience includes gold, copper, nickel, iron ore, manganese, coal, uranium, tin, mineral sands, molybdenum and diamond. Country experience includes Australia, South Africa, Zambia, Ghana, Namibia, Botswana, Malawi, DR Congo, Nigeria, Mauritania, Spain, Finland, Alaska, Canada, Panama, Peru, Argentina, China, Mongolia, Indonesia, Malaysia, and Bangladesh.

Tony has also worked remotely on projects from various other countries during his time as a consultant based in Perth and Beijing. Tony specializes in the development of ore reserve estimates that are based on robust optimizations, practical designs, and achievable schedules. Tony is an expert user of Gemcom software for mining applications (including Surpac, Whittle and Minesched). Tony also specializes in drafting contracts and managing contract tenders. This includes providing ongoing assistance in managing the contracts and dispute resolution. Tony has an in depth knowledge of the Asian reserve reporting systems and has gained significant experience in both reviewing projects based on these systems and in converting projects from this region to international standards of reporting such as JORC, NI 43-101 and SAMREC.

Tony meets the requirements for Qualified Person for SAMREC / NI 43-101 reporting, and Competent Person for JORC reporting for most metalliferous and non-metalliferous Ore Reserves and is a Fellow of the Australian Institute of Mining and Metallurgy (Membership No: 108264)

## **Song Huang, Senior Geology Consultant, (Beijing)**

With more than 14 years' experience in the mining industry, Dr. Huang has abundant experience in geology, mining, processing, metallurgical and environmental assessment procedures, and domestic and abroad regulations.

Dr. Huang's experience includes projects market research, kick-off, management, and related final release reports compilation. Based on previous work experience on Mineral Resource estimates, Dr. Huang is very familiar with project economic analysis as well as China Mining regulations. He has in-depth work experience in state-owned enterprise large-scale productive mines, and as such is qualified to undertake basic mine geology management works and database management works.

During Dr. Huang's employment with RPMGlobal, he has been involved in numerous exploration and mining projects which include coal, Iron, gold, copper, nickel, moly, lead, zinc, vanadium, uranium, marble, granite, graphite, and rare earth projects throughout the world. His experiences include but are not limited to field technical visits, geological data validation and collaboration, exploration advisory, 3D modelling, resource estimation, geostatistics theory research, and practical use, development and management of mineral projects, report compilation under JORC and NI 43-101 code for mining assets acquisitions or listing for HK, Singapore, Toronto Stock Exchange, etc.

Dr. Huang has acted as the key project management client liaison and played the critical coordination role to manage the communications between RPM's internal technical team and the Client and its advisors or in-house technical team. Dr. Huang has also worked as the main technical contact of many projects and has actively communicated with RPM's internal technical team to ensure that customers' opinions can be fed back in time and that RPM's technical work achievements can be accurately communicated to customers. Song has played a key role in the smooth and successful implementation and completion of various projects.

## **Rodney Graham – Geologist / Manager Mongolia – Ulaanbaatar**

Rod is an economic geologist with over forty years' international experience, half in Central Asia. He has held key positions in both public and private companies, including time as the Chief Geologist of a TSX-

listed gold mining company, the Chief Operating Officer of an AIM-listed oil and gas exploration and production company, and the Exploration Manager of a privately held minerals exploration company. His experience ranges from conceptual targeting and design and implementation of grassroots exploration programs through advanced drilling programs for resource definition for a variety of different mineral deposit styles.

Rod was responsible for the discovery of a major porphyry copper-molybdenum deposit which is currently at the feasibility stage, the doubling of a drilled resource leading to a positive production decision on a volcanogenic massive sulfide deposit, and the discovery of several mineral deposits which remain at the exploration stage. He is a Licensed Professional Geologist, a Fellow of the Society of Economic Geologists, a Member of the American Association of Petroleum Geologists, and a Registered Member of the Society for Mining, Metallurgy & Exploration (SME), and is a qualified person as defined by National Instrument 43-101.

## **Philippe Baudry – Executive General Manager – Advisory Consulting, (Sydney)**

Philippe is a geologist with over 25 years of experience in the mining industry. With a strong background in mine geology gained working in large and medium scale open cut and underground gold mines in Western Australia for 7 years, Phil gained a post graduate qualification in Geostatistics leading to a specialization in resource estimation and project evaluation. Over the last 17 years Philippe has worked as a consultant focused on the Asian and Russian regions. After 3 years living and working in Russia developing 2 porphyry copper projects and conducting due diligence in gold Projects, Philippe moved to Beijing where for the past 13 years he built up and managed RPM's business in north Asia including offices in China, Hong Kong, Mongolia and Russia before taking over executive responsibility for RPM's global consulting & advisory division which includes over 120 employees in 24 offices. Phil has been instrumental in development of RPM's ESG strategy and lead the acquisition and integration of two mining focused ESG businesses into RPM which now form a large part of RPM's ESG practice. In 2021 Philippe moved back to Australia permanently and continues in his role based out of RPM's Sydney office.

During his time at RPM, Phil has worked closely with leading financial institutions across Asia, America and Europe and large Chinese SOE's on transactions ranging from Due Diligences to IPO's and has gained detailed understanding of the requirements of both investors and banks in regards to public technical report requirements and listing processes on various financial exchanges. Phil is actively involved in a number of project financings in Turkey, Africa and Australia as lenders engineer for leading Australian and European banks and private financiers. Through this work Phil has gained a deep insight into debt financing processes and requirements including IFC PS and EP3 requirements. Phil's focus in these mandates is to ensure that RPM's teams work closely with the project owner to mitigate risks and help reduce technical and ESG lender credit and risk committee requirements ahead of financial close. Phil has an in depth knowledge of the Soviet and other Asian resource/reserve reporting systems and has gained significant experience in both reviewing projects based on these systems and in converting projects from this region to international standards of reporting such as JORC. During his time as a consultant Philippe has project managed and undertaken reviews of lithium spodumene projects in Australia, Canada, Mali and Zimbabwe as well as reviews of lithium brine projects in Argentina and China.

Phil holds operational experience in both open cut and underground mines and his commodity experience includes gold, nickel, copper, bauxite, iron ore a range of base metals, molybdenum and battery minerals. Country experience includes Australia, France, Russia, China, Mongolia, Indonesia, CIS, Turkey, West Africa, DRC, Tanzania, Chile, Peru, Brazil and Argentina. Phil has also worked remotely on projects from various other countries during his time based at RPM.

Philippe is a Member of AIG and is a Competent Person and Qualified person (JORC and NI 43-101) for both base and precious metals Mineral Resources.



– END OF REPORT –

**RPM**GLOBAL

[www.rpmglobal.com](http://www.rpmglobal.com)

AUSTRALIA | BRAZIL | CANADA | CHILE | CHINA | HONG KONG | INDIA | INDONESIA  
MONGOLIA | RUSSIA | SOUTH AFRICA | TURKEY | USA