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TECHNICAL REPORT FOR BYP GOLD-LEAD-ZINC PROPERTY, HUNAN PROVINCE, CHINA

for

SILVERCORP METALS INC

Prepared by AMC Mining Consultants (Canada) Ltd

In accordance with the requirements of National Instrument 43-101, "Standards of Disclosure for Mineral Project", of the Canada Securities Administrators

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1 SUMMARY

Introduction

AMC Mining Consultants (Canada) Ltd (AMC) was commissioned by Silvercorp Metals Inc. (Silvercorp) to prepare an updated Technical Report on the BYP gold-lead-zinc property (Property) in Hunan Province, China. The previous publicly released Technical Report was dated June 2011 (2011 Technical Report). Four AMC Qualified Persons visited the Property in February 2012, with one re-visiting in April 2012, and examined all aspects of the project. The BYP mine has been in production since 2006, and currently has a 500¹ tonne per day (tpd) flotation mill.

In January 2011, Silvercorp, through a wholly owned subsidiary, acquired a 70% equity interest in Xinshao Yunxiang Mining Co., Ltd, whose primary asset is the BYP mine. Yunxiang Mining is the legal owner of mining permit number 4300000810016 issued in January 2008. An exploration permit surrounding the mining permit has recently been granted. The mine is currently permitted for the extraction of lead and zinc and an application has been submitted to allow the extraction of gold. There is no known hindrance to granting of the gold extraction permit, and AMC understands that mining / processing gold mineralization prior to formal receipt of a permit is not unusual in China.

In fiscal year 2012 (April 2011 to March 2012), the operation reported mining of 91,128 tonnes of ore and processing of 83,760 tonnes, yielding 5,100 ounces of gold and 249,000 pounds of zinc. Reported total mining costs were US\$38.00 per tonne and reported total cost per ounce of gold was US\$843.60.

Location and History

The Property is located 23 km north-west of Shaoyang City, central Hunan Province. Shaoyang has a population of more than half a million and is connected to other major cities in Hunan Province and nationwide by rail and expressways. 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 S217 by a 3 km paved road.

The Property was explored for both lead-zinc and, separately for gold, in the 1970s and 1990s. A total of 105 holes were drilled for 36,154 m, and adit-sinking and underground sampling was also conducted. Most of the known mineralized zones were delineated by these programs. From 2006 to 2008, Yunxiang Mining mined 280,000 tonnes (t) of mineralized material from the No.2 Lead-Zinc zone on Levels 335 m, 310 m and 270 m. at estimated grades of about 0.2% Pb and about 2% Zn (or less). Historical resource estimates² were prepared and reported under the Chinese system in 1977 and 1992.

¹ The plant was designed to treat 400 tpd, but is capable of treating closer to 500 tpd

² A Qualified Person (QP) has not done sufficient work to classify the historical estimates as current mineral resources or mineral reserves. The historical estimates are not being treated as current mineral resources or mineral reserves as defined in sections 1.2 and 1.3 of NI 43-101, and the historical estimates should not be relied upon.

Geology

Tectonically, the Property is located in an uplift belt that is part 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 and Devonian clastics and carbonate rocks. Concealed intrusions have been detected in some areas. Parts of the Precambrian formations contain abundant volcanic material and are geochemically high in gold, antimony, tungsten and arsenic.

Three major types of deposits have been recognized in the Central Hunan Polymetallic Belt (Keng, R.H., 2002): gold-antimony deposits hosted by fractured and altered rocks, micro-grain disseminated gold deposits and carbonate-hosted lead-zinc deposits.

Mineralization on the Property consists of gold, lead-zinc and polymetallic mineralization. To date, five gold zones and 13 major lead-zinc zones, including one lead-zinc polymetallic zone and one copper zone, have been recognized.

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. Five gold zones have been delineated. Zones range from 200–300 m in length and from 2–22 m in thickness, with a maximum thickness of 41 m. The average grade of the zones is generally in the range of 2 g/t to 3 g/t Au. Zone 3 is the most important gold zone, containing more than 60% of the total previously estimated gold resource at BYP. It contains a high grade core with an average grade of around 7 g/t Au.

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 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 a dip angle from 0° to 30°. Characteristics of individual zones are variable and some zones overlap. Depth of oxidation varies from several metres to 20 m. In the oxidation zone, sulphides have been oxidized to limonite, which at surface accumulates as Fe gossans or Fe-Mn gossans. Major metallic minerals beneath the oxidation include pyrite, sphalerite, galena and boulangerite.

Exploration and Data Quality

In late 2010 / early 2011, Silvercorp carried out a sampling program along drifts and crosscuts for the dual purpose of verifying previous exploration data and collecting a reliable data set for a resource update. Later in 2011, Silvercorp undertook an extensive underground exploration program comprised of tunneling, geological logging of previous and current tunnels, and channel sampling on the 252 m Level, to further delineate the spatial distribution of the major mineralization zones and to verify, upgrade and expand known historic mineral resources. The 2011 program was mainly focused on Gold Zones 3 and 3-1 and Lead-Zinc Zones II, IV and XIII at the 252 m Level. Ten tunnels were developed for a total of 688 m, 1,099 channel samples were collected, and 2,685 m of geological mapping was completed.

Silvercorp began a surface and underground core drilling program in March, 2011. The program included 20 surface drillholes of 8,726 m and 23 underground drillholes of 3,021 m

for a total of 11,747 m on the Property. At the completion of the program, surface drilling was at 100x100 m and 100x50 m spacing in selected areas and underground drilling was spaced at 10 to 50 m within Gold Zone 3. NQ sized core was recovered from both the surface and underground drilling programs. Drill core recovery, including mineralized zones, was 85% or more.

As a result of this drill program, Silvercorp significantly upgraded the gold resource of Gold Zone 3, expanded Gold Zones 1 and 3-1 and discovered new Gold Zones 1-4 and 1-5. Drilling also re-evaluated and confirmed Zone XII as a lead-zinc-polymetallic zone and previously delineated Pb-Zn zones were further defined.

During the 2011 exploration program a total of 4950 geochemical samples, including 3,851 core samples and 1,099 channel samples, were collected on the Property. The bagged channel and core samples were kept in a secure room until they were shipped by a professional courier company to the ALS-Chemex (ALS) Laboratory in Guangzhou. The ALS Laboratory in Guangzhou is a certified laboratory. Sample preparation and assaying procedures followed standard practices.

Silvercorp adopted a comprehensive QA/QC program for its 2011 exploration program. Silvercorp's project geologists routinely inserted Certified Reference Material (CRM) and blanks in each batch of 40 samples to monitor sample preparation and assay procedures. External check assays were arranged by sending about 10% of the mineralized pulps and 5% of non-mineralized pulps to the Zhengzhou Laboratory of the Henan Nonferrous Metals Exploration Institute - an officially credited laboratory in China.

Silvercorp's QA/QC program comprised 772 QA/QC samples which were inserted into 4,950 core and channel samples. QA/QC samples included 33 reference material samples, 189 blank samples, and 550 external check samples. A total of 104 bulk density samples consisting of 30 samples from gold mineralization zones, and 74 samples from the lead and zinc mineralization zones were collected from exploration tunnels, mining stopes and drillcore.

In AMC's opinion, the sampling procedures and QA/QC measurements adopted by Silvercorp for its 2011 exploration programs meet accepted industry standards. The QA/QC program requires diligence to ensure that the total number of reference material samples assayed is at least 5% of the total number of samples assayed, external duplicates are of mineralized samples only and that bulk density measurements are completed for every hole.

An AMC consultant collected 16 random quarter-core samples representing underground exposures of mineralization for check assaying. The samples were prepared and assayed at ALS Chemex laboratory in Guanzhou. Not surprisingly, given the nature of the mineralization, the check results overall do not compare closely with the original results. However, higher original grades generally correlate with higher check grades and there does not appear to be a systematic bias.

Based on AMC's independent reviews and validations of information and data provided, AMC is satisfied that the data is acceptable for the purposes of this report.

Mineral Resources

The resource estimates for the BYP deposit were carried out by Yongwei Li, Senior Resource Geologist for Silvercorp. They were checked and verified, and the classification adjusted, by independent Qualified Person Ms D Nussipakynova, P.Geo of AMC, who takes responsibility for the estimates.

Table 1 Mineral Resources for Gold Zones as of December 2011

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

Table 2 Mineral Resources for Lead and Zinc Zones as of December 2011

Class	Cut Off Grade (%)	Tonnes (M)	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

Notes to both tables

1. CIM definitions apply
2. Mined tonnages deducted
3. Resources are rounded to nearest 10,000 tonnes
4. Figures may not compute due to rounding
5. Cut-off grades are based on mining, processing and G & A costs of \$38/t.

The database was locked as of 31 December 2011. It includes surface and underground drillholes, underground channel samples and surface trench samples, the latter not being used for grade estimation. Average bulk densities used were 2.81 t/m³ for gold mineralization and 3.03 t/m³ for lead-zinc mineralization. The interpretation of the mineralized domains was provided by Silvercorp and reviewed by AMC. Three gold zones and five lead-zinc zones were modelled. Samples were composited to 1 m, although AMC suggests that 1.5 m would be more appropriate based on an analysis of the data. Grade capping was only applied to the Gold Zone 3 and was set at 19 g/t. A block model utilized a parent block size of 5 m by 5 m by 2 m and Inverse Distance Squared (ID²) was used for grade interpolation.

In AMC's opinion, the mineral resources were appropriately estimated by Silvercorp, but the classification required moderate modification to remove some "spottiness". This increased the proportion of Indicated Resources and decreased the proportion of Inferred Resources.

AMC is not aware of any known environmental, permitting, legal, title, taxation, socio economic, marketing, political, or other similar factors which could materially affect the stated mineral resource estimates. As noted in Section 4 of this report, the BYP mine is currently only permitted for the extraction of lead and zinc and an application for gold extraction is being processed. In AMC's opinion, there is a reasonable expectation of the application being granted.

Additional drilling has been carried out since the previous published resource estimate contained in the June 2011 Technical Report. Tables 3 and 4 show a comparison between the December 2011 and June 2011 estimates. The decrease in average gold grades is

attributed mainly to the June 2011 estimate being based primarily on historical data, including limited data from Silvercorp's underground sampling from pre-2011 tunnels, which related mainly to the higher grade Gold Zone 3. Silvercorp's exploration program later in 2011 delineated additional low-grade gold zones, which reduced the average resource grade while increasing the tonnage.

The increase in the tonnage of Indicated lead-zinc resources in December 2011 from zero in June 2011 is due to the additional drilling undertaken in 2011. The decrease in total Indicated plus Inferred tonnage from June 2011 is due mainly to geological reinterpretation based on the additional drilling.

Table 3 Comparison of Gold Resources at 1 g/t Au Cut-off Grade

	December 2011		June 2011	
	Indicated	Inferred	Indicated	Inferred
Tonnes (M)	3.51	2.47	2.14	2.82
Au (g/t)	2.59	1.84	3.27	2.29
Oz (k)	292	146	225	208

Table 4 Comparison of Lead- Zinc Resources at 2% Pb+Zn Cut-off Grade

	December 2011		June 2011
	Indicated	Inferred	Inferred
Tonnes (M)	7.33	7.55	17.57
Pb (%)	1.16	0.85	0.95
Zn (%)	2.52	2.75	2.57
Pb Metal (M lb)	187	141	368
Zn Metal (M lb)	407	458	995

If mining costs increase to around \$60/t as discussed below, resource cut off grades would increase to approximately 1.25 g/t Au for gold mineralization and approximately 3.4% Pb+Zn for lead-zinc mineralization. Contained gold in resources would decrease by only around 6%, while contained lead plus zinc in resources would be substantially affected, decreasing by 40-45%.

Mineral Reserves and Production Plan

Silvercorp has yet to prepare a production plan and schedule and, consequently, there are currently no mineral reserves for the Property. Its intention is to mine approximately 70,000 tonnes of gold mineralization and 22,000 tonnes of lead-zinc mineralization in the 2013 fiscal year, yielding approximately 4,700 ounces of gold and approximately 1.3 million pounds of lead and zinc. Its anticipated cash and total production costs are approximately \$35 and \$60 per tonne of ore respectively. AMC notes that the anticipated production cost of \$60 per tonne of ore is significantly higher than the reported cost for fiscal year 2012 of \$38 per tonne, but is reasonably consistent with production costs at Silvercorp's Ying mine in Henan Province. It is reasonable to assume that the non-cash part of the total production costs will reduce as mine production ramps up to a target of around 165,000 tpa.

Mining

Over seven years of mining activity preceded Silvercorp's assumption of ownership of the BYP project. The underground operation has been developed using small, conventional tracked equipment. In October 2011, Silvercorp began sinking a 265 m deep shaft to 115 mRL. The shaft will be used to transport ore and materials, to provide ventilation and allow underground exploration and development access. Mine operations are scheduled for 365 days of the year, with production on a 330 days per year basis. The current production rate is approximately 500 tonnes per day (tpd). Completion of the shaft will provide the capability for a potential production increase to around 1,000 tpd.

The stope extraction sequence is bottom-up, with the inter-level extraction sequence generally being top-down. Variations of shrinkage stoping are the main extraction methods. Stope production drilling is by jackleg and in-stope rock movement is by gravity to draw points. Production mucking is mostly via hand shovels to rail cars pulled by battery locomotive. Ore transport to surface in up to 4-car trains is via hoist in the decline ore pass and then via electric or battery loco in the adit. From adjacent to the #2 Adit, cars are pulled to the crusher site by a surface hoist installed at 380 m elevation.

AMC understands that geotechnical considerations around mineralized areas have played a significant role in limiting anticipated production rates. There is currently no quantitative geotechnical information on the BYP deposit. AMC noted a variety of ground conditions during its site visit, and the use of timber, shotcrete, mesh and bolts in areas of ground instability. Rib pillars of 4 m width have been left between stopes. The use of cemented tailings as backfill is being investigated by Silvercorp in conjunction with the Tiantai Design Institute of Sinosteel Corporation, and the construction of a surface fill plant is planned for the latter part of 2012.

Mine dilution and mining recovery factors are 5% and 95% respectively, which are towards the upper limit of what is reasonably achievable. They should be reviewed in the light of physical extraction constraints and actual reconciliation of mining plan against measured recovery. Recently projected advance rates for shaft and decline development are 60 m/month and 80 m/month, respectively, which are above normal advance rates assumed for development and production activities. These should also be reviewed.

Wenzhou Yunfeng Construction Ltd is the main BYP mining contractor. Silvercorp provides all mining equipment, explosives and ground support equipment, while the contractor is responsible for maintenance, repairs and replacement. The mining contractor is responsible for underground mining and related consumables.

Most mine waste rock can be recycled for other purposes. Waste rock not recycled is stockpiled on the permanent waste dump south of Zhu Mountain. This waste dump has a capacity of 25,000 m³. Based on preliminary design for the BYP mine, approximately 20,000 m³ of waste rock will be generated over the life-of-mine, of which about 15,000 m³ will be used for backfill.

Primary ventilation is a pull system. On the west side of the mine, #1 Main and auxiliary adits, and #2 Main Adit are used for fresh air intake. The return air exits the mine via raises and declines on the east side of the mine. The main ventilation fan is installed at the mouth of the exhaust air portal. Once the skip shaft is completed, it will also be used for fresh air intake.

BYP Mine safety is practiced as set out by Chinese health and safety laws and regulations. A six-member safety committee is maintained at the mine, although it currently does not include a representative of the main contractor. The mine supplies personnel protective equipment (PPE) to each person employed at the mine. In 2011, there were five lost time injuries at BYP to contract workers and one to a Silvercorp employee. All were either foot or hand injuries.

AMC notes that Silvercorp has gone beyond Chinese statutory requirements in certain areas of safety but also recognizes that some operating practices and procedures fall short of common international standards. AMC recommends that Silvercorp continue with a focus of improving mine and site safety that would include implementation of a policy where the more stringent of either Chinese or Canadian safety standards are employed.

Processing

In 2010, the two types of BYP mineralization, gold and lead-zinc, were tested by Hunan Non-ferrous Metals Research Institute (HNMRI).

For the gold mineralization, locked-cycle flotation tests with one-stage rougher / 2-stage scavenger / 2-stage cleaner operation, proved up a suitable flowsheet for gold processing, and high gold recovery (91.65%) to a 41.6 g/t Au concentrate was achieved at a grind size of 70% - 100 µm.

For the lead-zinc mineralization, three sequential flowsheet options were tested, with various regrind configurations. The preferred option with regrinding of rougher concentrates achieved high metal recoveries (Pb 85.9%, Zn 92.7%, Ag 41.1%) to commercially acceptable concentrate grades (56.0% Pb, 52.4% Zn).

The existing 500 tpd plant is used to process both lead-zinc sulphide mineralization and gold mineralization, each treated separately in campaigns. Lead-zinc flotation uses both the lead and zinc flotation circuits to produce separate concentrates, while gold flotation uses the lead flotation circuit to produce a gold-bearing pyrite concentrate.

The flowsheet comprises two-stage crushing (jaw and cone), screening, milling (two ball mills), classification, flotation, and concentrate dewatering using settling bays. The overflow from the classifier flows, via a conditioning tank, to lead rougher flotation cells. Lead scavenger tails flow to zinc flotation. Tailings from the zinc scavenger flotation circuit and/or gold flotation are discharged to the tailings pond.

To check the mass balance results, a set of five samples is usually taken every eight-hour shift. The samples include flotation feed from the classifier overflow, lead and zinc concentrates from the third-stage cleaners, and lead and zinc tailings from the last scavengers. There is no centralized automation station or control room for the entire plant, and operation control is done locally. The planned level of process control and automation is basic but adequate, recognizing that the process separation is complex and that operating labour to monitor process variables is low-cost and plentiful.

An on-site laboratory processes up to 100 samples per day of ores and concentrates and also undertakes water quality and other environmental testing. QA/QC check procedures include inserting standards in the sample batches submitted to the labs on a regular basis and submitting duplicate pulps to an independent external lab on an intermittent basis.

Mill power (10 kV power line) is drawn from the Hunan Province power authority grid at the town of Baiyunpu, 4 km from the mine. Net water usage (fresh water) is approximately 1 m³/t of ore and the use of recycled water from the tailings dam helps to maintain a zero-discharge water balance for most of the year.

Infrastructure

The Yaposhan tailings management facility (TMF) is located in a valley approximately 1 km southwest of the processing plant and 400 m northeast of Yaposhan Village, and started operations in August 2011. A number of clay / gravel-filled faults cut through the area. Jikoupu County is classified as Grade 6 in terms of seismicity, and a seismic acceleration of 0.05 g was therefore taken into consideration in the TMF design. It has a working volume of 245,000 m³ and a currently expected life to late 2013. The life will be extended once the paste backfill plant is operational. Depending on future production plans and the efficiency of the paste backfill plant, it may be necessary to consider other options for tailings disposal. Based on the volume and height of the dam wall (24 m), the TMF is classified as a Grade V facility under the Chinese system.

Geochemical properties of the tailings were assessed by a single-element analysis (gold). No leaching tests have been carried out to determine the potential for metal leaching. Water used for mineral processing is treated before being discharged to the TMF. About 75% to 85% of the process water is recycled back to the mill plant for reuse.

Immediately downstream of the dam embankment is a surface water cut-off trench. There are cut-off trenches at both sides to prevent scour of the abutments by rainwater run-off. Seepage control is effected by impervious membranes together with a drain and collector system discharging into a downstream water storage pond for settling and recycling. Construction is projected to begin in September 2012 on a back-up settling pond to be located 20 m from the existing settling pond.

Flood calculations have been undertaken in accordance with the Grade V classification of the TMF, which requires flood control measures to meet a 1-in-100 year recurrence interval with a 1-in-100 year probable maximum flood criterion. A safety and reliability analysis for the TMF has been carried out in accordance with relevant Chinese regulations and requirements, although AMC notes that the calculation method is now considered outdated and normal industry practice would be to conduct finite element numerical modeling.

A permanent mine waste dump is located in the eastern part of the mine site. Based on Silvercorp's current development intentions, including the construction of a paste backfill plant, approximately 5,000 m³ of waste rock is expected to be moved to surface during the remaining mine life.

Mine power is sourced from the Xintianpu 35/10 kV substation via a 10 kV high voltage line. There are two back-up generators at site to provide power for underground ventilation, dewatering and accommodations in case of an unexpected power failure.

A paved provincial highway runs across the south margin of the Property. The processing plant, underground portal areas and tailings storage areas are connected to the provincial highway by a 3 km paved road. A network of gravel roads links the mine camp to the underground adits, process plant, waste dump, water supply areas and TMF.

Domestic water is sourced from springs and is stored in a pond in the southeast part of the mine site. Silvercorp conducts routine tests and monitors for water quality to ensure the water meets safety and sanitary requirements. Water for drilling and dust suppression underground is sourced from an underground sump.

Other infrastructure includes a camp, contractor housing, surface maintenance workshop, explosives magazine, fuel farm, administration building, warehouse, concentrate storage facility and assay laboratory. An underground harmful-gas monitoring system is under construction.

Environment and Social

The existing mining permits for the BYP project, in conjunction with safety and environmental certificates, cover all the active mining areas and provide for the right to carry out full mining and mineral processing operations. There are no cultural minority groups within the general project area and the surrounding land is used predominantly for agriculture.

Waste rock produced has, to date, been deposited in stockpiles adjacent to mine portals and has also being utilized for construction purposes. It is non-acid generating. The stockpiles will be covered with soil and re-vegetated once the stockpile is full. Tailings generated from the 500 tpd processing plant have to date been discharged into a purpose-built TSF.

Monitoring plans have been developed, including include air/dust emission, noise and wastewater monitoring, and implemented by qualified persons and licensed institutes. A review to May 2012 indicated that results for surface water, sanitary / process wastewater, and mining water were in compliance with relevant standards.

An environmental protection department consisting of two full-time BYP staff has been created and is responsible for the environmental and rehabilitation management work in the mining area.

Water for the project is derived mainly from mountain springs near the mine.

Surface water discharge is monitored and controlled through collection and sedimentation treatment of mine water, a containment system, and the installation of a stormwater drainage bypass system. Both mine and processing plant wastewater is pumped to surface sedimentation ponds, allowed to settle, then reused for processing. Tailings water from the TSF is also pumped back to the processing plant for reuse and no tailings water is discharged to the environment. Sewage from the operation is collected in sedimentation tanks; the resulting treated water meets regulatory criteria for its reuse.

There is a groundwater monitoring program in place for the processing plant area, but not for mining areas. The latter is not required under the Chinese environmental approval regime.

Residents in the project area reportedly have a positive attitude to the development of the BYP project and no public complaints in relation to the project were noted by the AMC team. The nearest significant community is the Jukoupu Township, approximately 3 km to the south-west of the processing plant. Yunxiang Mining has made a number of cash donations and contributions to local capital projects and community support programs within the Xinshao County. To date, the company has spent 1,985,000 RMB to support these programs.

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 for breach of environmental conditions in regard to the BYP project.

Yunxiang Mining has spent approximately \$1.5 million on environmental protection measures, including dust control, wastewater treatment, solid waste disposal, an under-drainage tunnel, soil conservation, water conservation, noise control, ecosystem rehabilitation, and an emergency response plan. To date, a total of 9,600 m² has been replanted with trees and grasses.

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.

Marketing

AMC understands that the concentrates will be marketed to existing smelter customers in Hunan province, and that the smelter contract terms for the lead and zinc concentrates are similar to those pertaining to Silvercorp's other operations in China. For these contracts, typical deductibles calculate out to the equivalent of 85-90% payable for the lead concentrate and approximately 70% for zinc, at long-term prices (assumed to be 1.00\$/lb for each of lead and silver). AMC considers these to be favourable terms relative to global smelter industry norms. With respect to the gold concentrates, AMC understands that percent payables are typically in the range 85-90%, also in accordance with industry norms.

Recommendations (with estimated cost where relevant)

- Undertake an additional drilling program of approximately 4,400 m focused on the gold zones. \$170,000.
- Undertake additional bulk density determinations on a broader suite of samples. \$20,000.
- Review and account for the slight difference in lead values between the Zhengzhou and ALS laboratories.
- Review and resolve a number of relatively minor issues in the next resource estimate. \$25,000.
- Prepare a production plan and schedule and estimate mineral reserves. \$75,000.
- Place a proactive emphasis on ground control and appropriate support in all mining activities. \$25,000.
- Review the factors applied for mining dilution and mining recovery of 5% and 95%, respectively.
- Continue with a focus of improving mine and site safety, including implementation of a policy where the more stringent of either Chinese or Canadian safety standards are employed.
- Include a contractor representative on the mine safety committee.

QUALITY CONTROL

The signing of this statement confirms this report has been prepared and checked in accordance with the AMC Peer Review Process. AMC's Peer Review Policy can be viewed at www.amcconsultants.ca.

Project Manager

P R Stephenson

The signatory has given permission to use their signature in this AMC document

9 August 2012

Peer Reviewer

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The signatory has given permission to use their signature in this AMC document

9 August 2012

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2 INTRODUCTION

AMC Mining Consultants (Canada) Ltd (AMC) was commissioned by Silvercorp Metals Inc. (Silvercorp) to prepare an updated Technical Report on the BYP gold-lead-zinc property (Property), in Hunan Province, China. The previous publicly released Technical Report was prepared by Mr R Cullen, P.Geo., and was dated 24 June 2011 (2011 Technical Report).

Table 2.1 Persons who Prepared or Contributed to this Technical Report

Qualified Persons Responsible for the Preparation of this Technical Report						
Qualified Person	Position	Employer	Independent of Silvercorp?	Date of Last Site Visit	Professional Designation	Sections of Report
Mr P R Stephenson	General Manager	AMC Mining Consultants (Canada) Ltd	Yes	No visit	P.Geo., BSc (Hons), FAusIMM (CP), MAIG, MCIM	1 to 12, 14, 20, 23 to 26
Mr H A Smith	Principal Mining Engineer	AMC Mining Consultants (Canada) Ltd	Yes	16-19 February 2012	P.Eng., (BC), P.Eng. (Ontario), P.Eng. (Alberta), MSc, BSc	15, 16, 21, 22
Mr A Riles	Principal Metallurgical Consultant	Riles Integrated Resource Management Ltd	Yes	16-19 February 2012	BSc (Hons) Grad Dipl Business Management, MAIG	13, 17, 19, 21, 22, part of 18
Mr M Molavi	Principal Mining Engineer	AMC Mining Consultants (Canada) Ltd	Yes	16-19 February 2012	P.Eng., M.Eng., B.Eng.	Parts of 18, 21, 22
Ms D. Nussipakynova	Senior Geologist	AMC Mining Consultants (Canada) Ltd	Yes	No visit	P.Geo., MSc, BSc MCIM	14
Ms A Ross	Senior Geologist	AMC Mining Consultants (Canada) Ltd	Yes	No visit	P.Geo., P.Geol., BSc (Hons) Ph.D.	8,10,11,12
Other Experts who assisted the Qualified Persons						
Expert	Position	Employer	Independent of Silvercorp?	Visited Site	Sections of Report	
Mr B O'Connor (left AMC, May 2012)	Principal Geologist	AMC Mining Consultants (Canada) Ltd	Yes	16-21 February and 14-20 April 2012	2 to 12	
Ms A Ross	Senior Geologist	AMC Mining Consultants (Canada) Ltd	Yes	No	14	
Mr J Zhang, P.Eng.	Metallurgical Consultant	Self employed	Yes	May 2011	Parts of 13, 17 and 18	
Mr L Wu, EIT	Mining Engineer	Silvercorp Metals Inc.	No	No	Parts of 16 and 18	
Dr. Y Zhang	Deputy General Manager, Yunxiang Mining	Silvercorp Metals Inc.	No	Since May 2011	Part of 20	

Mr M Gao, P.Geo.	President and Chief Operating Officer	Silvercorp Metals Inc	No	Since October 2011	General
Mr R Jiang, P. Geo.	Vice- President, Exploration	Silvercorp Metals Inc	No	16-17 January 2011 and since January 2012	5 to 11, 14

H A Smith, B O'Connor, A Riles and M Molavi visited the Property in February 2012. All aspects of the project were examined by the Qualified Persons, including drill core, exploration sites, underground workings, processing plant and surface infrastructure.

In preparing this report, AMC relied on various geological maps, reports and other technical information provided by Silvercorp. AMC reviewed and analyzed the data provided and drew its own conclusions augmented by its direct field observations. The key information used in this report is listed in the References chapter at the end of this report.

Much of the geological information in this report was in Chinese. Translations of key technical documents and data into English were provided by Silvercorp. The Qualified Persons have no reason to believe that the translations are not credible and believe they are generally reliable but cannot attest to their absolute accuracy.

All currency amounts and commodity prices are stated in US dollars. Quantities are stated in metric (SI) units. Commodity weights of measure are in grams (g) or percent (%) unless otherwise stated.

This report includes the tabulation of numerical data which involves a degree of rounding for the purpose of resource estimation. AMC does not consider any rounding of the numerical data to be material to the project.

This report has been produced in accordance with the Standards of Disclosure for Mineral Projects as contained in NI 43-101 and accompanying policies and documents. NI 43-101 utilises the definitions and categories of mineral resources and mineral reserves as set out in the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Standards on Mineral Resources and Mineral Reserves Definitions and Guidelines (CIM Standards).

A draft of the report was provided to Silvercorp for checking for factual accuracy. The report is effective at 30 June 2012.

3 RELIANCE ON OTHER EXPERTS

The Qualified Persons have relied, in respect of legal aspects, upon the work of an Expert listed below. To the extent permitted under NI 43-101, the Qualified Persons disclaim responsibility for the relevant section of the Report.

The following disclosure is made in respect of this Expert:

Audrey Chen, Partner, Jun He Law Offices, Beijing.

Report, opinion or statement relied upon: information on mineral tenure and status, title issues, royalty obligations, etc.

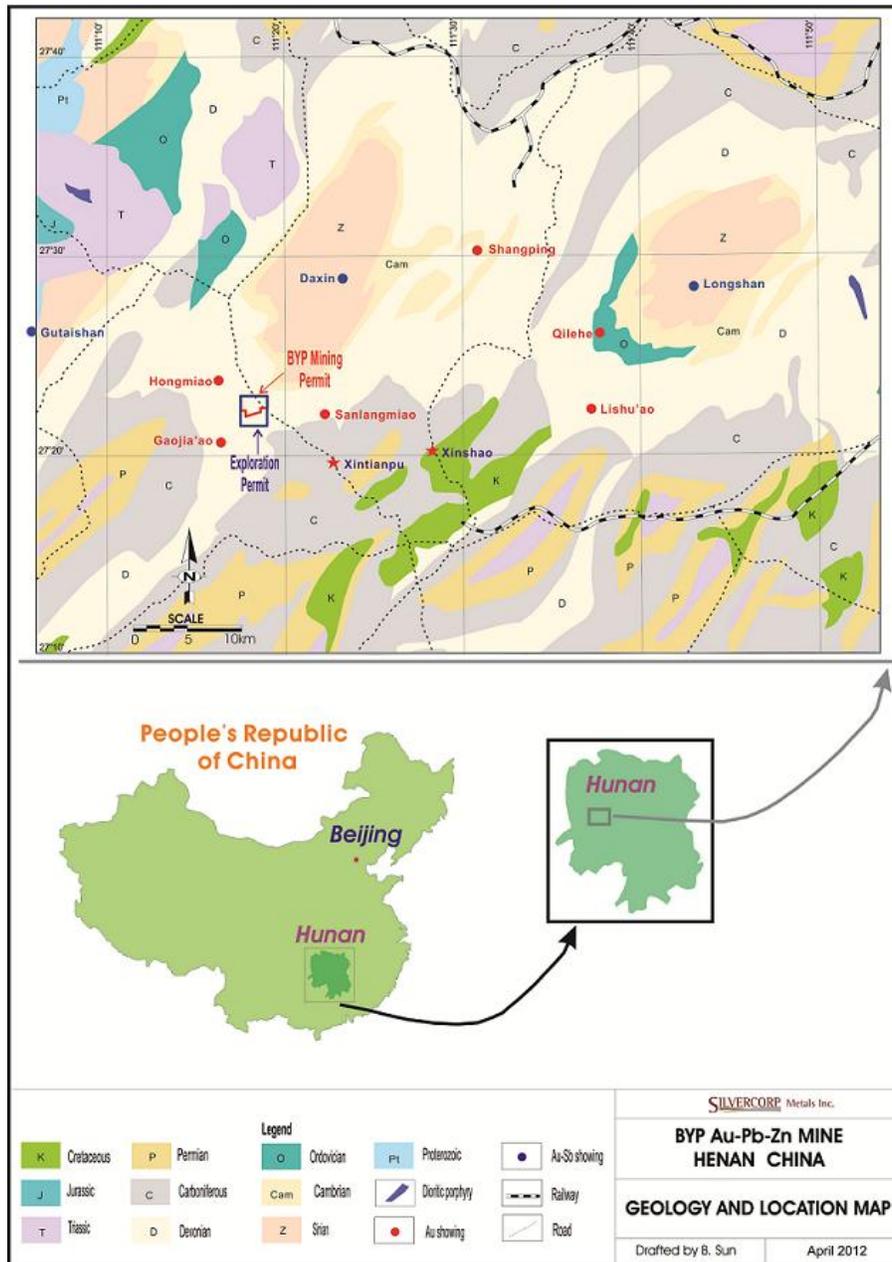
Extent of reliance: full reliance following a review by the Qualified Person(s).

Portion of Technical Report to which disclaimer applies: Section 4.

4 PROPERTY DESCRIPTION AND LOCATION

The Property is located at 23 km northwest of Shaoyang city, central Hunan Province, People's Republic of China. Administratively the Property belongs to Baiyunpu Village, Jukoupu Township, Xinshao County, Shaoyang City (Figure 4.1). The Property is located in the central section of the east-west-trending Longshan – Baimashan regional metallogenic zone in central Hunan province. The center of the Property is located at approximately latitude 27°22'33"N and longitude 111°18'21"E.

Figure 4.1 BYP Regional Geology and Property Location

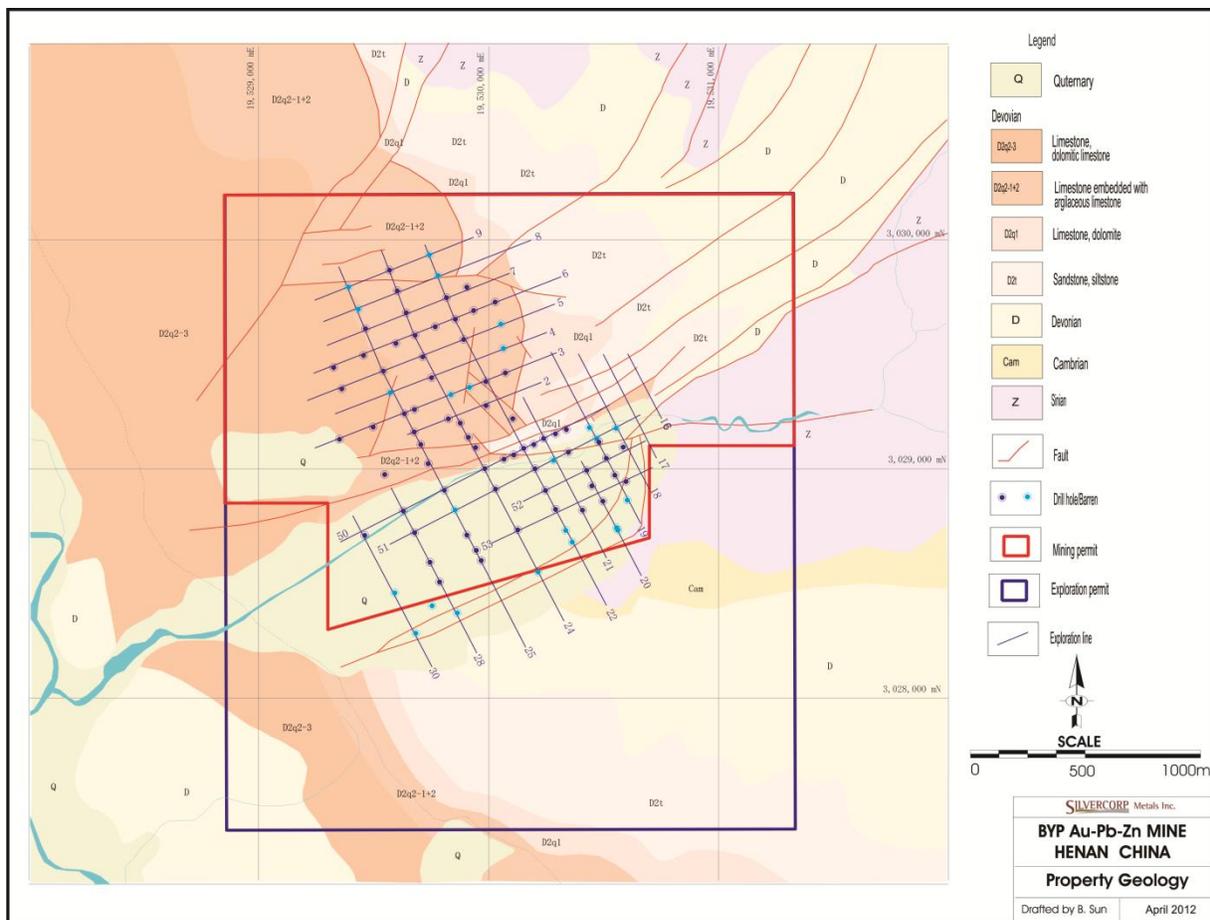


4.1 Exploration and Mining Permits

On January 13, 2011, the Silvercorp, through a wholly owned subsidiary Wonder Success Ltd, acquired a 70% equity interest in Xinshao Yunxiang Mining Co., Ltd. (Yunxiang Mining), a private mining company in Hunan Province, China, with the BYP gold-lead-zinc mine as it's primary asset.

The Property consists of a 3.67 km² mining permit and a 3.2 km² exploration permit both owned by Yunxiang Mining (Figure 4.2). The mining permit covers the known mineralization area of the Property and the exploration permit covers the adjacent area directly south of the mining permit. Prior to January 2008, Yunxiang Mining owned an exploration permit covering the whole area of Property.

Figure 4.2 Location of BYP Mining and Exploration Permits



The boundaries of the BYP mining permit area are as follows:

Table 4.1 Coordinates of BYP Mining Permit

Points	Gauss-Krüger Grid (Xian 80 Zone 37)		UTM Grid (WGS84 Zone 49R)	
	Northing	Easting	Y	X
1	3030193.80	37528851.00	3028956.94	528855.03
2	3030199.80	37531324.00	3028962.95	531327.11
3	3029100.00	37531328.00	3027863.57	531331.11
4	3029100.00	37530700.00	3027863.57	530703.34
5	3028700.00	37530700.00	3027463.72	530703.34
6	3028300.00	37529300.00	3027063.86	529303.87
7	3028850.00	37529300.00	3027613.66	529303.87
8	3028850.00	37528854.00	3027613.66	528858.04

Yunxiang Mining is the legal owner of the mining permit issued by the Department of Land and Resources of Hunan Province in January 2008 and renewed in June 2012. Key Information on the in the mining permit is as follows:

Table 4.2 BYP Mining Permit

License No.	4300002012063210125603
Owner	Xinshao Yunxiang Mining Co., Ltd.
Address	Baiyunpu Village, Jukoupu Town, Xinshao County
Name of the Mine	Hunan Province Xinshao County Baiyunpu Lead-zinc Mine
Type of Business:	Limited Liability Company
Term	Seven months from June 12 2012 to January 28 2013
Minerals to Be Mined	Lead, Zinc
Mode of Mining	Underground Mining
Production Scale	90,000 Tonnes/Year
Mining Area	3.6649 Square Kilometers
Depth of Mining	From 490 metres to -220 metres of Coordinate Level; Determined by 8 Turning Points

The Licensee is subject to the charge of:

1. Mining-right usage fees, a fixed annual charge,
2. Mineral-resource compensation fee (2% of sales), and
3. Applicable mineral resource taxes.

The mine is currently permitted for the extraction of lead and zinc. An application has been submitted to change the "Minerals to be Mined" to Polymetallic Minerals including Gold. There is no known encumbrance in applying for approval to develop the gold resource within the current valid mining permit as all required approvals for the current mining permit are already in place.

The exploration permit was issued on 30 May 2012 and is valid until 30 May 2013.

No environmental bond is required. There are no royalties, back-in rights, payments or other agreements of this nature in respect of the Property.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The Property is located at the south-west margin of the north-east trending Dachengshan mountain range. The south-west 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 Property an armchair-like landform.

Elevation ranges from 241 m in the south-west to 862 m in the north-east. The north-east, east and south-east parts of the Property consist of mountains formed from the erosion of clastic rocks. The north-west, west and south-west parts are a combination of low mountains and hills that formed from erosion of carbonate rocks.

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 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 21 km south-east 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 Changsha, where an airport with both domestic and international flights is located.

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 and provide sufficient water for local daily living and industry use. Coal can readily be supplied by local mines. The current 10kv 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. A skilled labour force is available for all levels of mining and related activities.

6 HISTORY

6.1 Summary of Work Previously Conducted on the Property

Details of exploration programs conducted on the Property and its direct adjacent areas since 1971 are summarized in Table 6.1.

Table 6.1 Exploration Work Completed in Previous Programs

Program	Unit	Period of Exploration				Total
		1971-1977	1987-1989	1990-1992	2002-2006	
1/2000 topography survey	km ²		8.88			8.88
1/5000 geological mapping	km ²		19.00			19.00
1/2000 geological mapping	km ²		2.90	5.44		8.34
1/5000 hydrogeol. mapping	km ²		9.00			9.00
1/10,000 IP Surveying	km ²		1.30			1.30
Aditing	m	217.4			890	1107.4
Decline	m				400	400
Exploration pit	m	210.35				210.35
Trenching	m ³	2700		6200		8900
Core drilling	m/hole	31032.58/84		5121.62/21		36153.2/105
Pumping test	Hole	1				1
Hydrological observation	Piece	84		6		90
Long-term observation on spring water	Piece	7				7
Long-term hydrological observation holes	Piece	3				3
Chemical Analysis	Piece	4611		562		5173
Emission spectrometry	Piece			2706		2706
Mineralogical identification	Piece	172		181		353
Heavy concentrate samples	Piece	213				213
Specific gravity samples	Piece	59				59
Metallurgical test sample	Piece	1				1
Water analysis	Piece	21				21
Isotope analysis	Piece	30				30
Engineering surveying	Site	83		211		294
Geological surveying	Site	76				76

6.2 Historical Exploration Programs

Between 1971 and 1977, exploration for lead-zinc mineralization at BYP was carried out by the 468 Geological Exploration Team of the Hunan Provincial Geological Bureau. Detailed mapping, IP surveying, topographic surveying, hydrogeological mapping, trenching and metallurgical testwork were included in the comprehensive program. The Property was covered with a drilling grid of 50-100 m by 50-100 m. Eighty-four holes were drilled for a total

of 31,033 m. Twelve mineralization zones were delineated within the middle Devonian limestone units.

In 1990 and 1991, a comprehensive gold exploration program consisting of geological mapping, trenching, adit-sinking and drilling was carried out by the 418 Geological Exploration Team (previously the 468 Geological Exploration Team). A total of 5,121 m was drilled in 21 holes. Six gold mineralization zones with four of particular economic interest were delineated, three of which were blind zones hosted in the Devonian fractured sandstone and siltstone units. The lead-zinc mineralization zones were re-delineated and high grade Pb-Zn zones were defined.

See Section 7 for an explanation of the zone numbering system.

6.3 Historical Quality Assurance and Quality Control

During the historical exploration programs in 1970s and 1990s, a simple quality control program was employed in accordance with the official technical standard promulgated by the National General Bureau of Geology. The quality control program consisted of internal and external checks.

During the lead / zinc exploration program in the 1970s, 174 internal check samples, comprising 3.5% of the total samples, were selected from coarse rejects by project geologists and resubmitted to the original lab for lead, zinc and copper analysis. Eighty external check samples, comprising 1.5% of the total samples, were selected from pulp samples and sent to the central lab of the Hunan Provincial Geological Bureau lead, zinc and copper analysis.

During the gold exploration program in the 1990s, 1,216 internal pulp check samples (from coarse rejects) for gold were re-analyzed at the lab of the 418 Geological Exploration Team. One hundred and fourteen internal checks for lead and 108 internal checks for zinc were undertaken. Twenty-four external checks for gold and 12 external checks for lead and zinc were submitted to the Hunan Mineral Analysis and Utilization Lab.

The assay quality was measured by the relative error between the original assay data and data from internal and external checks. It was reported that analytical quality measured with internal and external checks met with the official technical standards promulgated by the National General Bureau of Geology.

Further details are included in the 2011 Technical Report.

AMC 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 1970s and 1990s is of acceptable quality for resource estimation purposes.

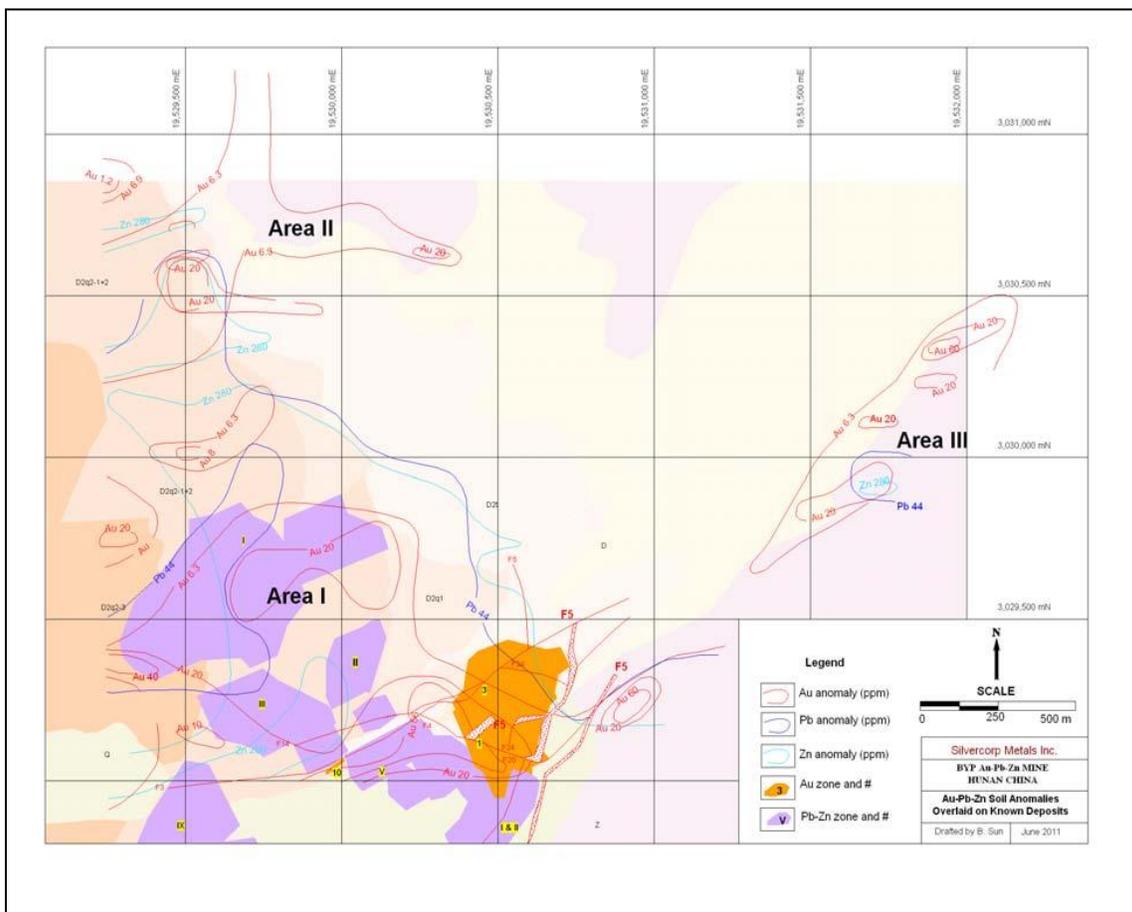
6.4 Regional Geological Mapping, Geophysical and Geochemical Exploration

1:50,000 scale regional geological mapping was conducted by the Regional Geological Survey Team of the Hunan Provincial Geological Bureau from 1980 to 1982. Gold anomalies were detected in rock samples. Four gold mineralization zones were delineated in the Devonian sandstone and siltstone rocks which stratigraphically underlie the Pb-Zn-host Devonian limestone.

As part of a nation-wide geochemical program, the exploration team of the Hunan Provincial Geological Bureau carried out a 200,000 scale stream sediment sampling program at 4-8 samples per square kilometre from 1987 to 1989. A composite geochemical gold, arsenic and antimony regional anomaly over 20 km² was delineated with peak values of 19 ppb Au on the Property and its adjacent areas.

In 1990, a follow-up survey at 25,000 scale comprising stream sediment sampling was carried out by the 418 geological team over an area of 40 km² covering the Property and its adjacent areas. Three major composite gold and indicator element anomalies were delineated and the Property was covered by Area 1, one of the major composite anomalies (Figure 6.1).

Figure 6.1 Geochemical Gold Anomalies in Soil at BYP and its Adjacent Areas



Follow-up 10,000 scale soil sampling was implemented by the 418 team over an area of 5.5 km². Three major geochemical soil anomalies with peak gold values of 54, 210 and 515 ppb Au respectively were delineated at the northern, central and southern portions of the Property.

6.5 History of Mining

From 2006 to 2008, Yunxiang Mining mined 280,000 tonnes of mineralized material from the No.2 Lead Zinc zone on Levels 335 m, 310 m and 270 m. About 50,000 tonnes of mineralized material remain between Levels 310 and 270. The estimated grade of the mined material is about 0.2% Pb and about 2% Zn (or less). Most of the mined material was recovered during underground exploration and development.

6.6 Historical Resource Estimates

6.6.1 Introduction

A Qualified Person (QP) has not done sufficient work to classify the historical estimates presented below as current mineral resources or mineral reserves. Silvercorp is not treating the historical estimates as current mineral resources or mineral reserves as defined in sections 1.2 and 1.3 of NI 43-101, and the historical estimates should not be relied upon.

Although the estimates are presented primarily for historical completeness and are of unknown reliability, they are considered relevant as they were generated in a prescribed manner with clearly-defined methodologies and assumptions.

China has its own classifications of mineral resources / reserves which are different from the JORC or CIM standards. Prior to 1999, a letter system, such as A, B, C, D and E was used to classify categories of mineral resources / reserves. A three digit system is now applied.

The Chinese government publishes regulations on exploration of various mineral types, in which each category of resources and reserves requires a particular geological certainty. The spacing of exploration samples which defines geological certainty for each category is determined by the complexity of the type of deposit and variations in geological parameters, such as thickness and grades. Economic parameters for estimates of mineral resources and reserves are defined and issued by authorities. A qualified geological unit, usually a geological exploration team, has to be retained to conduct exploration work, compile geological reports, and estimate mineral resources / reserves.

6.6.2 Historical Resource Estimates

In 1977, the 468 Geological Exploration Team estimated a C category resource (Chinese standard, non NI43-101 compliant) as shown in Table 6.2.

Table 6.2 Chinese “Resource” Estimate for Lead and Zinc, 1977

Zone	Tonnage (mt)	Metal Contained (000t)					Average Grade (%)			Remarks
		C1		C2			Pb	Zn	Cu	
		Pb	Zn	Pb	Zn	Cu				
I	5.117		69.3		30.2		0.27	1.94		Zinc zone
II	0.328	1.5	9.5				0.46	2.93		Zinc zone
III	2.036			9.6	48.3		0.47	2.37		Zinc zone
IV	0.290			4.3			1.48	0.28		Lead zone
V	0.325			2.7	8.2		0.83	2.52		Lead-zinc zone

Zone	Tonnage (mt)	Metal Contained (000t)					Average Grade (%)			Remarks
		C1		C2			Pb	Zn	Cu	
		Pb	Zn	Pb	Zn	Cu				
VI	3.642			37.9	52.9		1.04	1.45		Lead-zinc zone
VII	0.051			1.2	0.7		2.35	1.37		Lead-zinc zone
VIII	0.035					0.5			1.43	Copper zone
IX	2.343			23.1	50.2		0.99	2.14		Lead-zinc zone
X	2.169			33.4	107.6		1.54	4.96		Lead-zinc zone
XI	0.297			3.9			1.31	0.18		Lead zone
XII	0.801			15.4	34.5		1.92	4.31		Lead-zinc zone
Total	17.434	1.5	78.8	131.5	332.6	0.5	0.75	2.3	<0.01	

In 1992, the 418 Geological Exploration Team estimated a D+E category gold resource (Chinese standard, non NI43-101 compliant) as shown in Table 6.3.

Table 6.3 Chinese “Resource” Estimate for Gold, 1992

# Zone	Block #	Economic Category	Thickness (m)	Grade (g/t)	Tonnage (Mt)	Contained Gold (t)		Type
						D	E	
1	II	Economic	11.38	4.56	0.4941		2.25	Sulphide
		Sub-econ.	8.15	1.62	0.7167		1.15	
2		Sub-econ.	8.03	2.51	0.8438		2.11	
3	II	Economic	22.14	3.22	2.5090	8.08		Sulphide
		Sub-econ.	3.82	1.41	0.1424		0.20	
		Sub-econ.	5.09	1.74	0.5562		0.97	Oxidized
5		Sub-econ.	6.36	1.33	0.1719		0.23	Sulphide
Total / Average				2.76	5.4400	14.99		

In 1992, the 418 Geological Exploration Team also estimated a C+D category lead-zinc resource (Chinese standard, non NI43-101 compliant) as shown in Table 6.4.

Table 6.4 Chinese “Resource” Estimate for Lead and Zinc, 1992

Sub-area	Zone Number	Category	Tonnage (Mt)	Metal Contained (kt)		Average Grade (%)	
				Pb	Zn	Pb	Zn
Haitangling	I	C	3.58		69.3		
		D	1.54		30.2		
	II	C	0.33	1.50	9.5		
		Total	C	3.9	1.50	78.8	
	D		1.54		30.2		
Baiyunchong	III	D	2.04	9.60	48.3		
	XI	D	0.30	3.90			
	IV	D	1.94	12.2	22.9	0.63	1.18

Sub-area	Zone Number	Category	Tonnage (Mt)	Metal Contained (kt)		Average Grade (%)	
				Pb	Zn	Pb	Zn
		Including	0.06	1.50	1.8	2.71	3.32
	V	D	1.70	21.9	34.4	1.29	2.03
		Including	0.36	7.60	13.1	2.13	3.63
	VI	D	3.32	31.1	52.3	0.94	1.58
		Including	0.26	6.00	11.1	2.32	4.29
	VII	D	0.68	11.4	12.3	1.69	1.82
		Including	0.19	6.6	7.1	3.36	3.66
	IX	D	2.24	31.3	71.7	1.40	3.00
		Including	0.47	13.4	10.4	2.84	2.21
	X	D	1.30	13.5	52.9	1.04	4.08
		Including	0.79	10.0	41.5	1.27	5.26
	XII	D	2.29	39.9	65.5	1.74	2.85
		Including	1.00	31.4	50.8	3.15	5.09
	Total	D	15.81	174.8	360.3		
		Including	3.12	76.5	164.2	2.45	5.26
GRAND TOTAL		C	3.90	1.50	78.8		
		D	17.35	174.8	390.5		
		C+D	21.25	176.3	469.3		
		Including	3.12	76.5	164.2	2.45	5.26

Note: Information for the blank cells is not available

6.7 Discussion and Comment

The distribution of major gold mineralization zones and lead-zinc mineralization zones have been reasonably delineated by grid drilling. The presence of mineralized zones has been subsequently confirmed by underground development and mining in one of the major lead-zinc zones and in the major gold zone.

The host rock for the gold mineralization stratigraphically underlies the host rock for lead and zinc mineralization. Most of the 1970s drillholes ended at the bottom of the carbonate rock unit or at the top of the gold-hosting clastic rock unit. A later gold exploration program was restricted to the south-east portion of the Property where outcrops of gold mineralization were delineated by geological mapping and geochemical sampling at surface.

It is considered by the authors that the potential for gold mineralization over the entire Property area has not yet been thoroughly investigated.

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

Tectonically, the Property is located at the central section of the east-west-trending Baimashan-Longshan uplift belt in central Hunan province, which is part of the subduction zone between the Yangtze and South China Plates. Dominant deep structures are 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 aulacogen³ environment and can be divided into three sub-sequences:

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

Precambrian lightly-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 Paleozoic 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 high in gold, antimony, tungsten and arsenic.

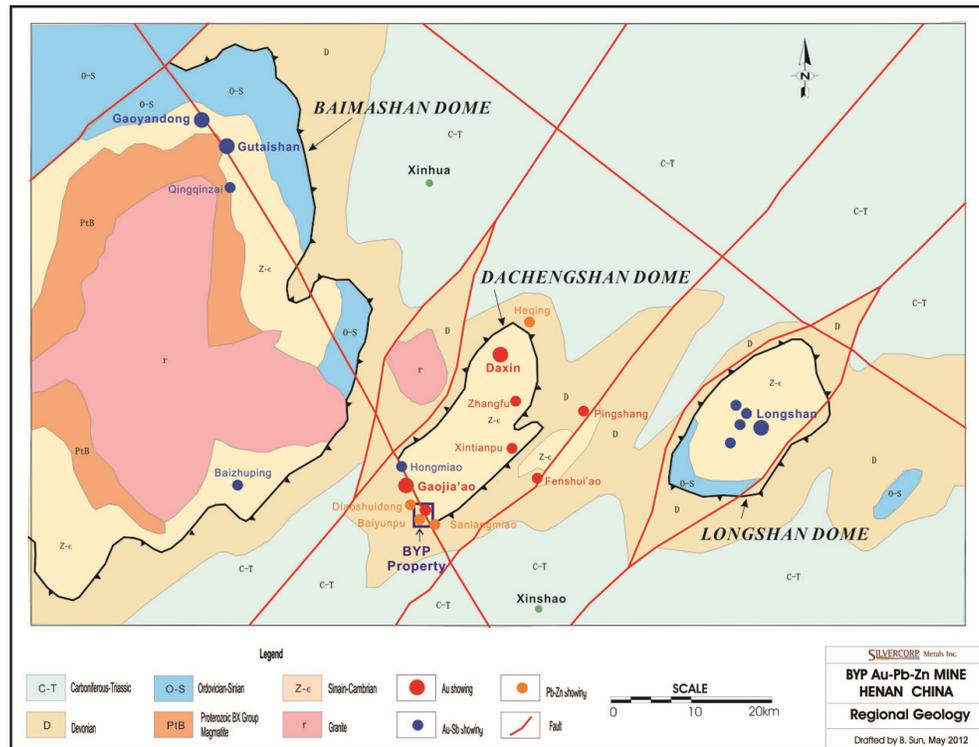
Three major types of deposits have been recognized in the Central Hunan Polymetallic Belt (Keng, R.H., 2002):

Gold-antimony Deposits Hosted by Fractured and Altered Rocks

Deposits of this type occur in the Precambrian metamorphosed rocks within the core areas of the dome structures. NE, NS, and NW-trending faults controlled the distribution of deposits. Gold mineralization is hosted in quartz veins and veinlets. Individual mineralized zones vary from 1 m to 20 m in thickness and extend for 200 m to 500 m along strike with a maximum dip extension of 500 m. Typical alteration includes silicification and pyritization. Major deposits of this type include Longshan at the Longshan dome, Daxin at the Dachengshan dome and Gutaishan at the Baimashan dome (Figure 7.1).

³ An aulacogen is a failed arm of a triple junction of a plate tectonics rift system

Figure 7.1 Regional Geology of Central Hunan Polymetallic Belt



(Adopted and revised from Gong G.L. et al, 2007)

Micro-grain Disseminated Gold Deposits

Deposits of this type are hosted in Lower Devonian sandstone and siltstone on the flanks of the dome structures. Gold mineralization is hosted within fracture zones on the Devonian side of the unconformity between Devonian clastic rocks and Precambrian metamorphic rocks. Mineralization is contained within silicified, fractured, and altered rock. Typical deposits of this type include Gaojiaao, BYP and Hongmiao.

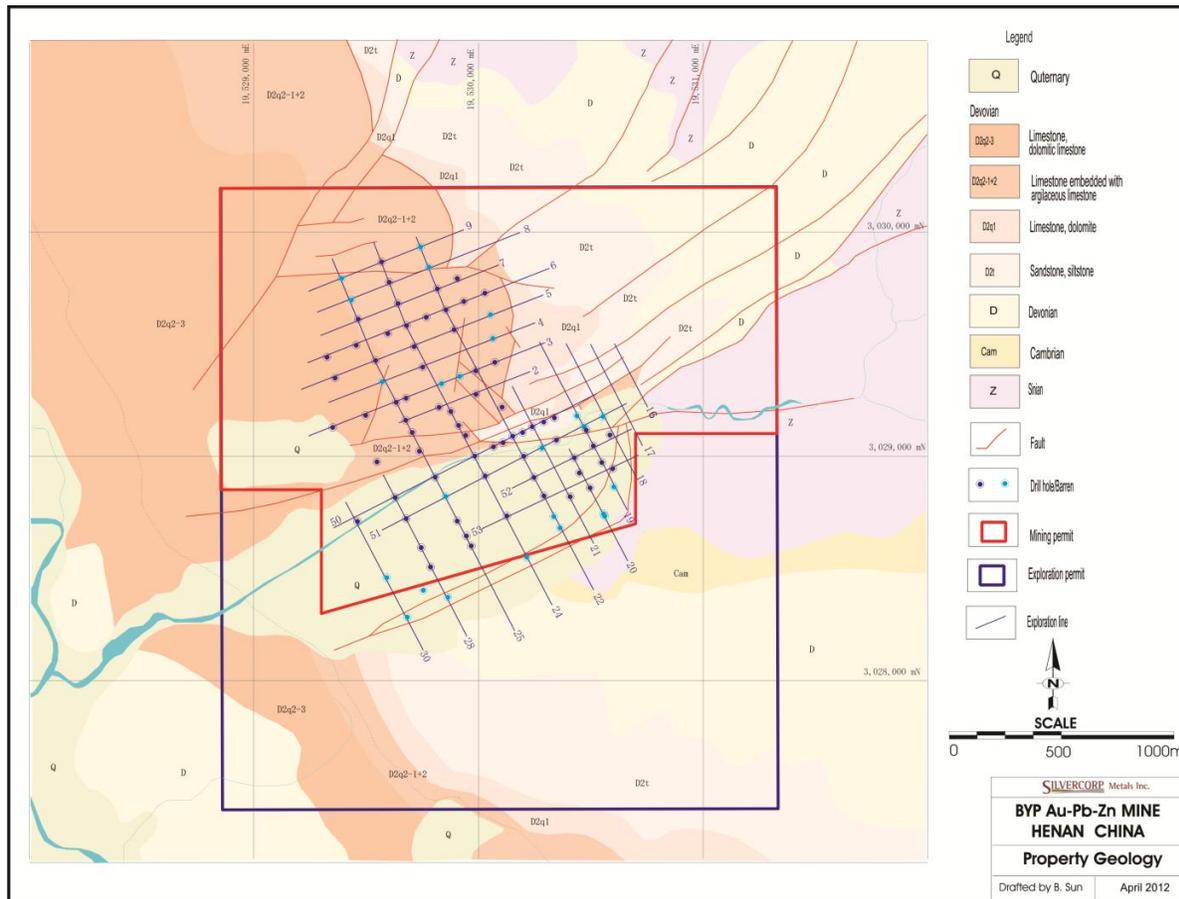
Carbonate Rock Hosted Lead-Zinc Deposits

Deposits of this type mainly occur in Devonian limestone at the south-west and north-east plunge ends of the Dachengshan dome structure. Veinlets and disseminated mineralization is typical of these lead-zinc deposits. Major known deposits include BYP at the south-west plunge end and Heqingyan at the north-east plunge end of the Dachengshan dome structure.

7.2 Property Geology

The Property is located on the south-west plunging end of Dachengshan anticlinorium (dome structure). The Dachengshan anticlinorium is about 8.5 km wide and 30 km long with an axial trending to NE30°. The lead-zinc-polymetallic mineralization mostly presents at the south and north flanks of Dachengshan anticlinorium, where occurs the intersection zone of the Baimashan-Longshan uplift belt and the Chengbu-Taojiang fault system.

Figure 7.2 Property Geology



Bedrock in the Property area is dominantly comprised 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 and lead / zinc mineralization. No surface outcrop of intrusive rocks is observed in the Dachengshan dome structure area, however, regional gravity and magnetic data indicate the presence of a concealed intrusion at depth. Precambrian and Cambrian rocks show low-grade metamorphism.

7.2.1 Stratigraphy

Bedrock outcropping in the Property includes Precambrian (Sinian), Lower Cambrian, Middle Devonian, and Quaternary metamorphic and sedimentary rocks.

The Precambrian Sinian comprises slightly metamorphosed sedimentary rocks distributed in the northeast part of the Property, and is subdivided into the Lower and Upper Sinian. Total thickness is up to 1,850 m.

The Lower Cambrian consists of dark grey carbonaceous shale, siliceous shale, carbonaceous slate and siliceous rock with a thickness of around 250 m, conformably overlying the Sinian rocks.

Middle Devonian rocks are subdivided into three formations:

Banshan Formation (D2b), composed of sandstone, conglomerate and quartz siltstone cemented with purple-red ferrous clay and with a total thickness of around 363 m.

Tiaomajian Formation (D2t), a fine-grained clastic sedimentary sequence including quartz sandstone, siltstone, and mudstone with a total thickness of around 215 m. This sequence forms the major host rock for gold mineralization on the Property.

Qiziqiao Formation (D2q), composed of lower, dark-gray marl, calcareous shale and biolithite and upper, thick-bedded massive biolithite, dolomite, and limestone with a total thickness of around 990 m. Lead-zinc mineralization in the Property mainly occurs in the middle section of this sequence.

Quaternary rocks consist of diluvium and alluvium with a thickness ranging from 0 m to 163 m.

7.2.2 Structure

Folds and faults of different attitudes are well developed in the Property. Folds trend to the northwest and southeast. The overlap areas of the two sets of folds are favorable loci for mineralization. Northeast-trending faults are dominant.

7.2.3 Magmatic Activity

No intrusive rocks have been observed at surface within the Property. However, regional gravity and magnetic data show that there are concealed intrusions at depth beneath the Dachengshan dome structure.

7.2.4 Metamorphism

Precambrian and Cambrian rocks experienced low-grade regional metamorphism. Schistosity and recrystallization are common features in the lightly metamorphosed rocks, related to post depositional deformational events.

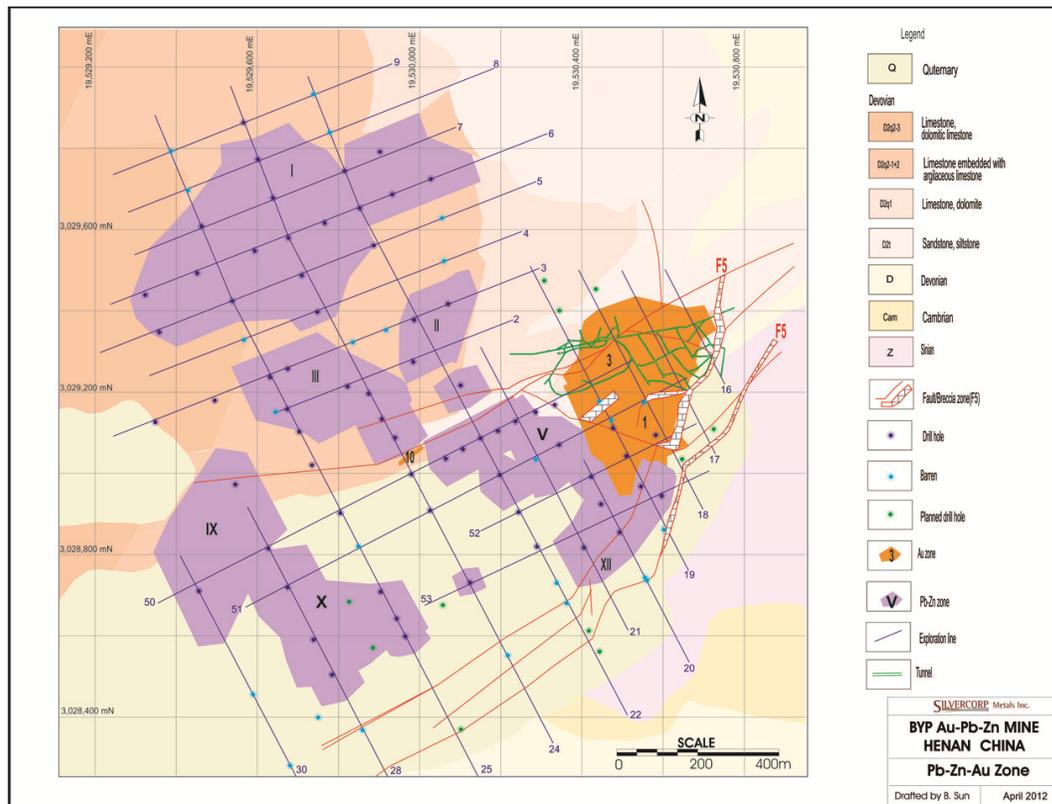
7.3 Mineralization

Mineralization consists of gold, lead-zinc, and polymetallic mineralization types. A total of 13 major individual lead-zinc mineralized zones, including one lead-zinc polymetallic zone and one copper zone, together with five gold zones have been recognized to date. They occur in two subareas:

Haitangling (HTL), on the northwest portion of the Property, where lead-zinc zones I, II, III and XIII are located.

Baiyunchong (BYC), on the south portion of the Property, where all the gold zones and the lead-zinc and polymetallic zones IV, V, VI, VII, IX, X and XII are located (Figure 7.3). The major mineralization zones are also shown in Figures in Sections 9 and 10 of this report.

Figure 7.3 Mineralization Zones on the Property



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 Middle Devonian (D2q), which overlies the gold-host sequence. However, the form, occurrence and size of individual zones are controlled and affected by pre-mineralization and post-mineralization fault and folds. Lead and zinc mineralization is closely associated with second-order fractures and fractured zones at 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 (Figure 7.4).

Depth of oxidation varies from several metres to 20 m. Oxidation of mineralized zones is closely related to the distribution and intensity of karst development. Sulphides have been oxidized to limonite which at surface accumulated as Fe gossans or Fe-Mn gossans.

Twelve of the zones occur as stratiform and lenticular bodies in Devonian limestone, dolomite and marlite. One zone occurs in Cambrian carbonaceous slate. Mineralization zones IV, V, VI, VII and XI overlap vertically (Figure 7.6), and zones IX and X also show an overlap relationship. The general trend of mineralized zones is conformable with the host rock, with a dip angle from 0° to 30°. Characteristics of individual zones are summarized in Table 7.1 and two example cross sections are shown in Figures 7.5 and 7.6.

Table 7.1 Characteristics of Lead-Zinc Zones

Zones	Range of Exploration Lines	Occurrences		Form	Layers of Deposits	Thickness			Average Grade				Elevations Defined (m)
		Dip	Angle			Max.	Min.	Au g/t	Ag g/t	Pb%	Zn%	Cu%	
I	7,6,5,24-1	SW	25-40°	Stratiform	1	25.4	1.1		11.6		1.9		478-194
II	3,2	NW	18°	Stratiform	2	14.9	3.1		9.3	0.5	2.7		367-291
III	24,26	NW	18°	Stratiform	2	22.0	8.4		14.4	0.5	2.4		106- -97
IV	20-21	SE	20°	Lenticular	2	14.7	0.9		8.1	1.5			236-225
V	19-22	NW	0-30°	Lenticular	1	16.6	0.8		3.9	0.8	2.5		195-112
VI	19-23	SE	20-30°	Lenticular	2 – 10	53.5	1.4		14.8	1.0	1.5		121-7.4
VII	20-22	NW	0-10°	Lenticular	1 – 3	3.9	0.9		2.1	2.4	1.4		55-23
IX	24-28	NW	10°	Lenticular	1 – 2	19.2	2.7		11.5	1.0	2.4		59-215
X	22-26	NW	12°	Lenticular	1 – 2	25.8	0.9		8.5	1.5	5.00		41.4-116
XII	19-22	NW	30-50°	Lenticular	1	24.7	6.4		28.2	1.9	4.3	0.6	260-189
XIII	18-22	NW	30-65°	Lenticular	1						2.5		

Figure 7.4 Mineralized Limestone. Sulphide Veinlets and Silicification

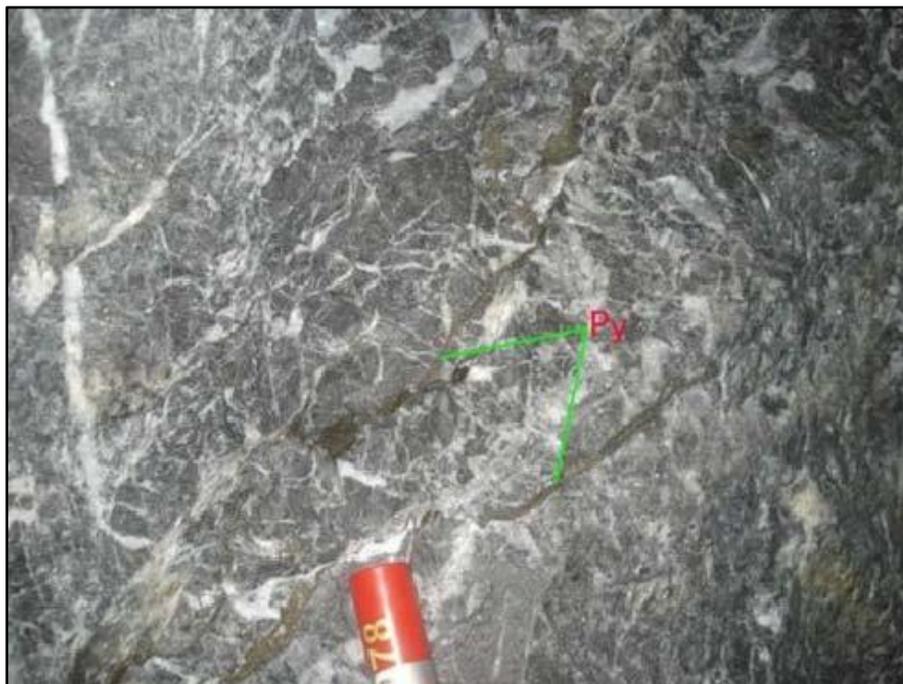


Figure 7.5 Cross Section Exploration Line 21

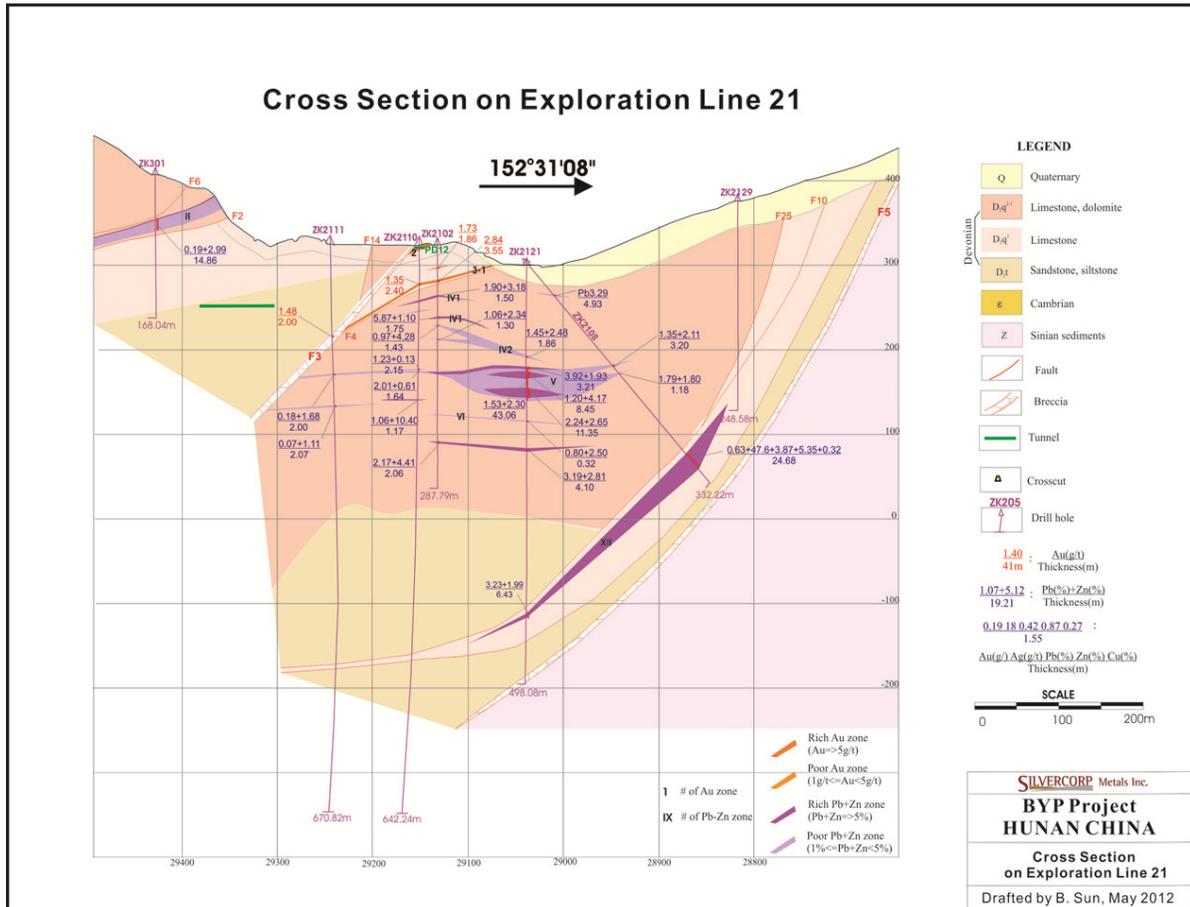
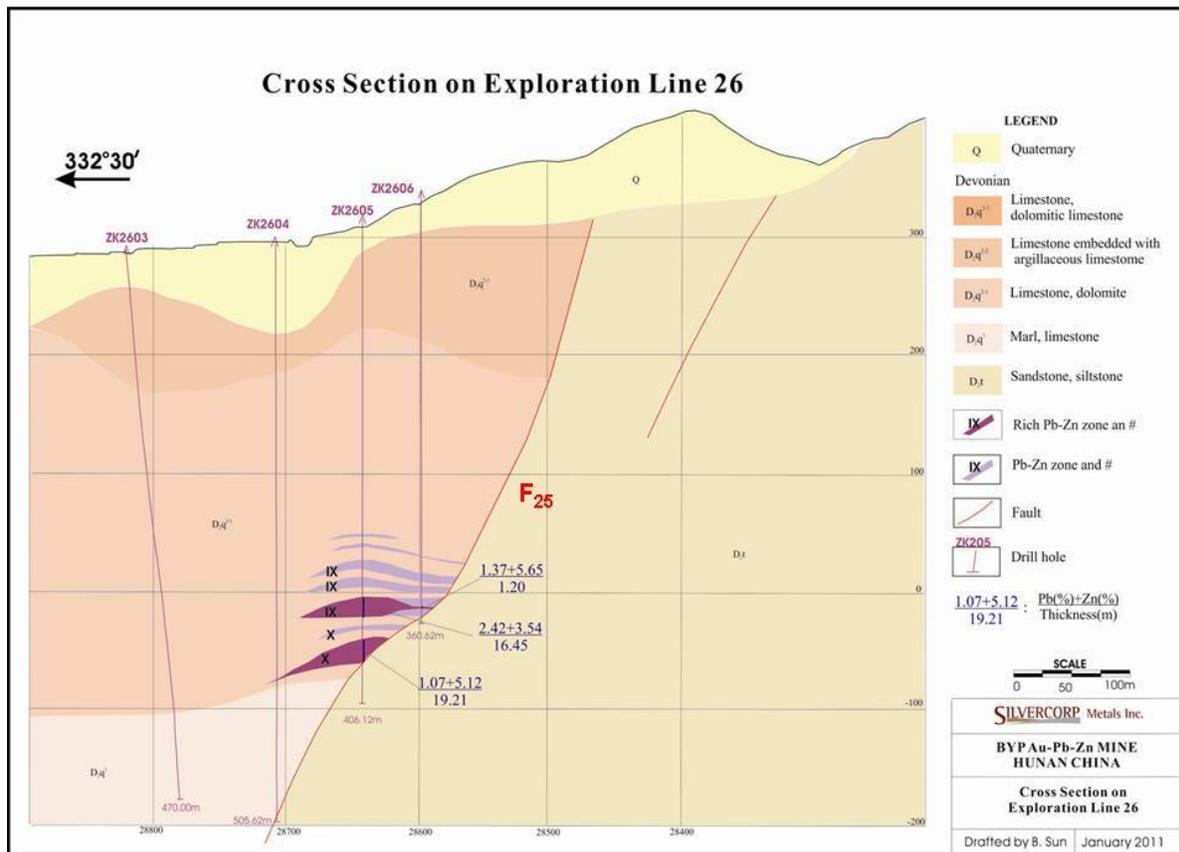


Figure 7.6 Cross Section Exploration Line 26



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.

Hydrothermal alteration is well developed in mineralization zones and adjacent wall rocks. Major alteration types associated with gold mineralization include bleaching, silicification and pyritization (Figure 7.7). Minor alteration types are arsenopyrite, sericite, carbonate and barite. Silicification mainly occurs in the gold zones, pyrite, arsenopyrite and bleaching occur in wall rocks, and barite, calcite and sericite occur in zones distal to mineralization.

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.

Figure 7.7 Gold Mineralized and Silicified Siltstone



Five gold zones have been delineated and four of them are buried zones, with only one outcropping. The zones occur at elevations from 50 m to 300 m ASL. Individual zones range from 200 m to 300 m in length and from 2 m to 22 m in thickness, with a maximum thickness of 41 m. The average grade of the zones is generally in the range of 2 g/t to 3 g/t Au. Silvercorp's 2011 exploration program further defined Zones 1 and 3 and discovered Zones 1-4 and 1-5. Characteristics of the currently known gold mineralization zones are summarized in Table 7.2.

Table 7.2 Characteristics of Gold Zones

Zones	Range of Exploration Lines	Occurrences		Deposit Form	subzones	Thickness		Average Grade Au g/t	Elevations Defined
		Dip	Angle			Max.	Min.		
1	18-20	NW	10-30°	Lenticular	1-5	17.1	1.7	2.6	52-246
1-4	18-19	NW	5-20°	Lenticular	1	19.1	3.4	2.1	212-240
1-5	18-20	NW	10-20°	Stratiform	1-4	6.0	2.00	2.1	220--194
3	15-18	NW	30-55°	Sphenoidal	1	41.0	1.9	5.4	220-270
3-1	18-22	NW	10-50°	Stratiform	3	7.7	3.0	2.5	40-280

Zone 3 is the most important gold zone, containing more than 60% of the total previously 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

main portion of Gold Zone 3 is located between lines 17 and 18. It becomes thinner westwards and pinches out between lines 22 and 24. A high grade core with an average grade of around 7 g/t Au is present in the central part of the zone.

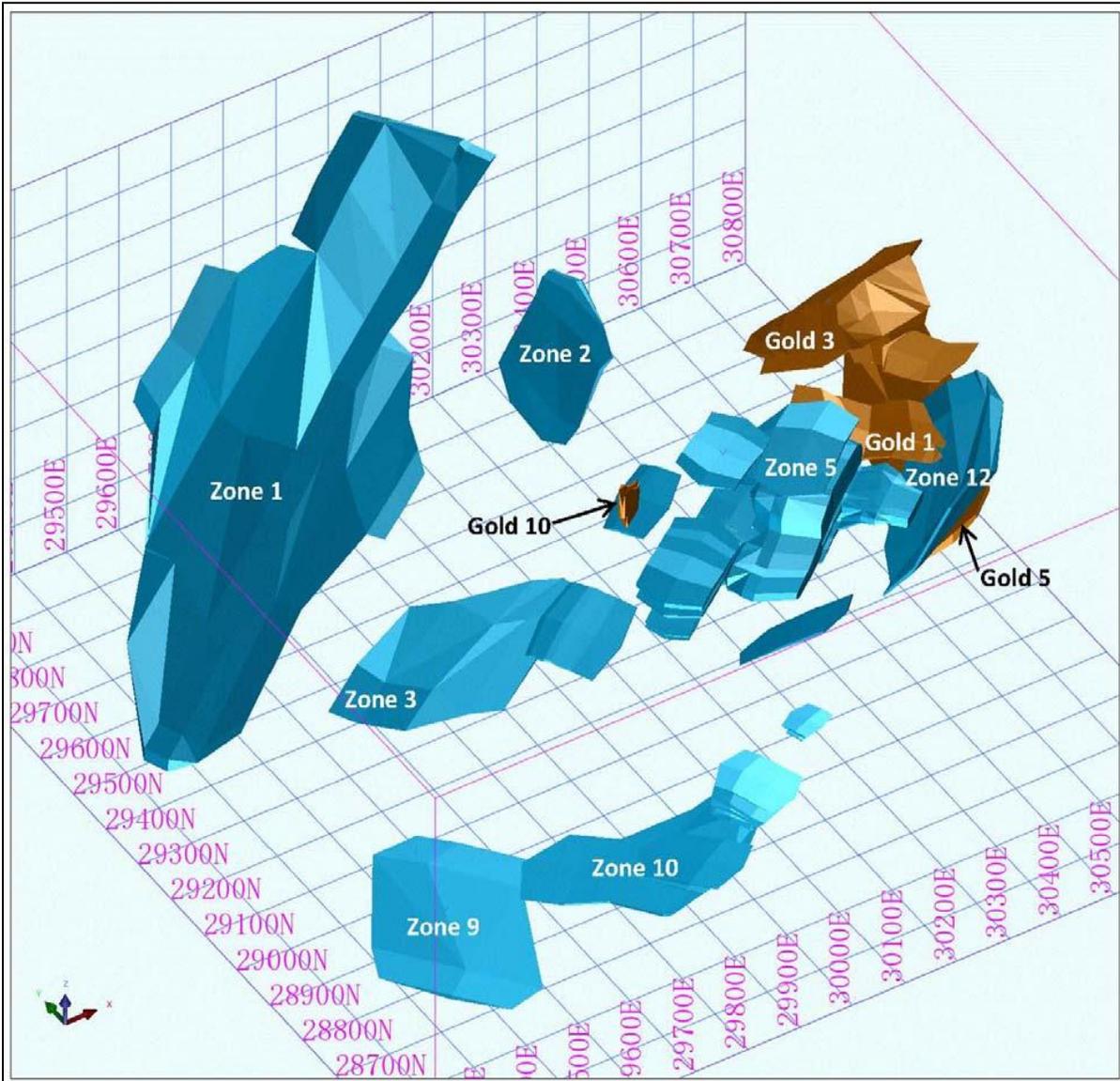
Zone 3-1 is the western extension of the Zone 3. Zone 1 is a concealed zone, and Zones 1-1, 1-2, 1-3, 1-4 and 1-5 are interpreted as splays off Zone 1.

At the beginning of the 2011 exploration program, Silvercorp created a solid model based on the then-available exploration data, (Figure 7.8). The solid model was numbered to the extent possible in conformance with the original numbering system, to avoid confusion when referring back to the historical data, which still comprises the bulk of the data available on the Property. The solid model has been further improved with the exploration data as of December 31, 2011. Table 7.3 shows how these mineralization zones have been numbered and how the solid model numbering will fit with the previous system and geological interpretation.

Table 7.3 Mineralized Zones Numbering Scheme for Resources Reporting

1971 -1977 Zone Number	1990 - 1992 Block Number	Silvercorp's Geological Number	May, 2011 Solid Model Number for Resource Estimation	December, 2011
Lead-Zinc and Polymetallic Zones				
Pb-Zn Zone 1		Zone 1	Zone 1-2	Zone 1-2
Zone 2		Zone 2	Zone 1-2	
Zone 3		Zone 3	Zone 3-5	Zone 3-5
Zones 5, 6, 7, 8	Block 1	Zones 5, 6, 7, 8	Zone 3-5	
Zone 9	Block 2	Zone 9	Zone 9-10	Zone 9-10
Zone 10		Zone 10	Zone 9-10	
Zone 11	Block 3	Zone 12	Zone 12	Zone 12
Gold Zones				
	Zone 3	Zones 3, 3-1, 3-2	Gold 3	Gold Zone 3
	Zone 1	Zones 1, 1-4	Gold 1	Gold Zone 1
		Zones 1-1, 1-2, 1-3	Gold 5	Gold Zone 5

Figure 7.8 Solid Model of Mineralized Zones at BYP



8 DEPOSIT TYPES

The genesis of the mineralization is unknown. It was postulated by Jiang and Mosher (2011) in an unpublished report that the origin of both the gold and the lead-zinc mineralization was epithermal. In this scenario, mineralization was deposited in the distal portion of a major hydrothermal system that originated from intrusions at depth. Emplacement of mineralization was controlled by fractures and host rock chemistry.

Cullen (in the 2011 Technical Report) postulated that the gold and lead-zinc zones represented two juxtaposed deposit types. In this scenario, the lead-zinc mineralization is carbonate-hosted of the Mississippi Valley Type where mineralizing fluids infiltrated carbonate beds along tectonically passive margins. Cullen further postulated that the gold mineralization, while also epigenetic, was younger and represented deposition from hydrothermal fluids permeating through thrust zones. Given the fine-grained nature of the gold he considered the mineralization to be Carlin-style.

Debate on the varying hypotheses is continuing.

9 EXPLORATION

In late 2010 / early 2011, Silvercorp carried out a sampling program along drifts and crosscuts following the advance of underground development on the 252 m Level, with the dual purpose of verifying previous exploration data and collecting a reliable data set for a resource update (2011 Technical Report). The 2011 program was mainly focused on Gold Zones 3 and 3-1 and Lead-Zinc Zones II, IV and XIII at the 252 m Level. Ten tunnels were developed for a total of 688 m, 1,099 channel samples were collected and 2,685 m of geological mapping was completed. The underground tunnels were cut as either drift tunnels along strike of the mineralization zones or crosscut tunnels across the mineralization zones. Details are summarized in Table 9.1.

Table 9.1 Tunnelling Work Completed in 2011 at the Property

Tunneling	Total Metres	Orientation	Dimension	Channel Samples (pcs)	Targeted Mineralized Zones
XJ1-252-CM50	227.25	258°	2.4x2.5	103	IV
XJ1-252-3-2-EYM	76.5	70°	2x2	15	Gold Zone 3
XJ1-252-CM19-1A	52.4	332°	2x2	38	Gold Zone 3
XJ1-252-CM18-1-NCM-WYM	89	252°	2x2	33	Gold Zone 3
XJ1-II-336-WCM	10.1	270°	2x2	4	II
XJ1-II-336-WYM	28.5	270°	2x2	6	II
XJ1-II-310-EYM	25.5	90°	2x2	13	II
IV-Deposit-252-NYM	47.9	332°	2.4x2.5	18	IV
IV-Deposit-252-SYM	123.5	152°	2.4x2.5	28	IV
XIII-252-NEYM	7.5	238°	2.4x2.5	3	XIII
Total	688.15			261 ¹	

1. 261 samples were collected from tunnels completed in 2011 and 838 were collected from tunnels completed prior to 2011

In addition to systematic geological mapping, the heading faces were logged and sampled every 5 m along the drift tunnels, and zones with visible alteration were sampled along the crosscut tunnels. See Section 11 for a description of the sampling process. The 2011 tunneling program further defined mineralization in Gold Zone 3 and enabled an upgrade of the mineral resource. Gold Zone 3-1 has been well delineated with underground tunneling between exploration lines 18-1 and 22 (Figures 9.1 and 9.2).

Figure 9.1 Locations of Tunnels and Mineralized Zones, 252 m Level

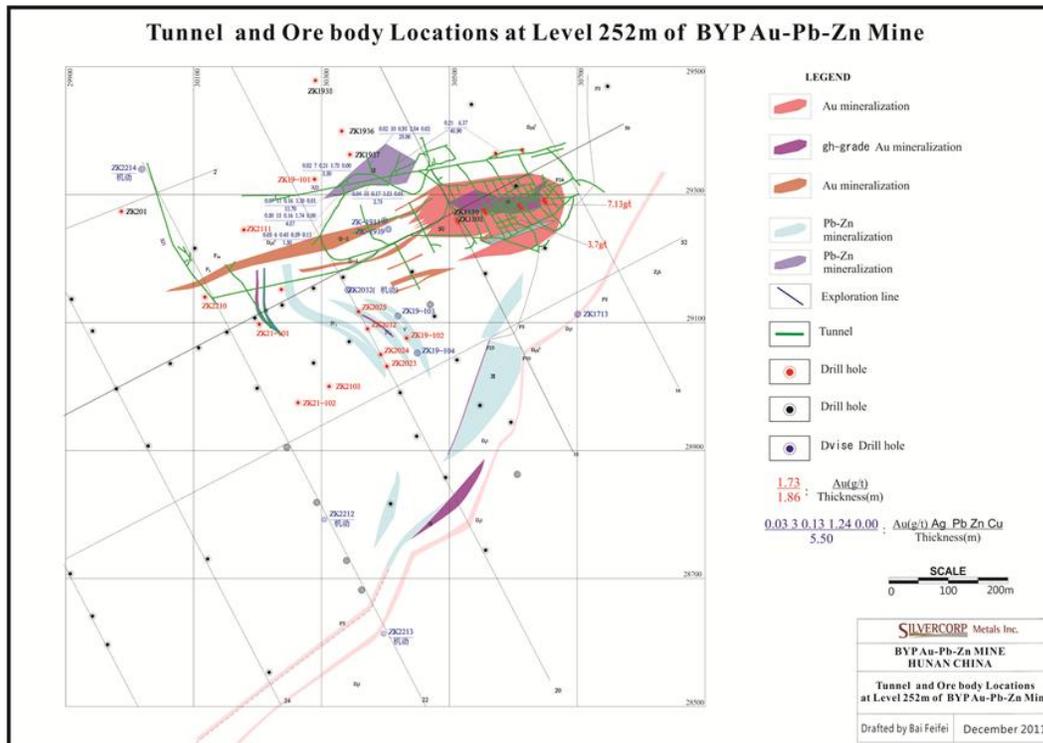
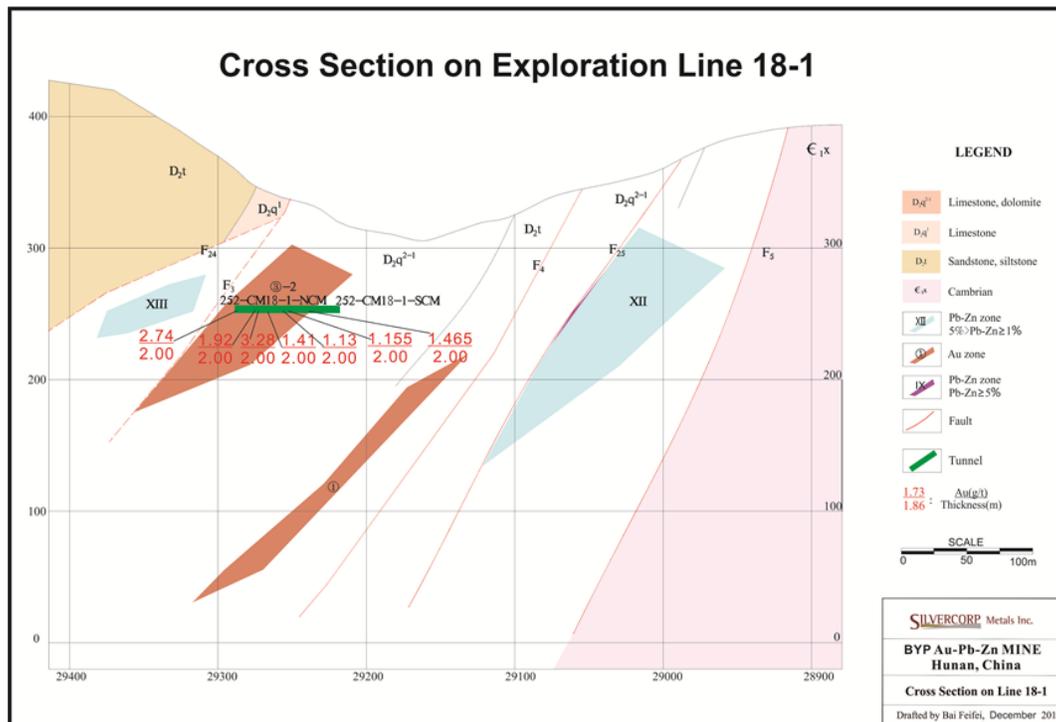


Figure 9.2 Cross Section, Exploration Line 18-1



Significant results from the 2011 underground tunneling program are summarized in Table 9.2.

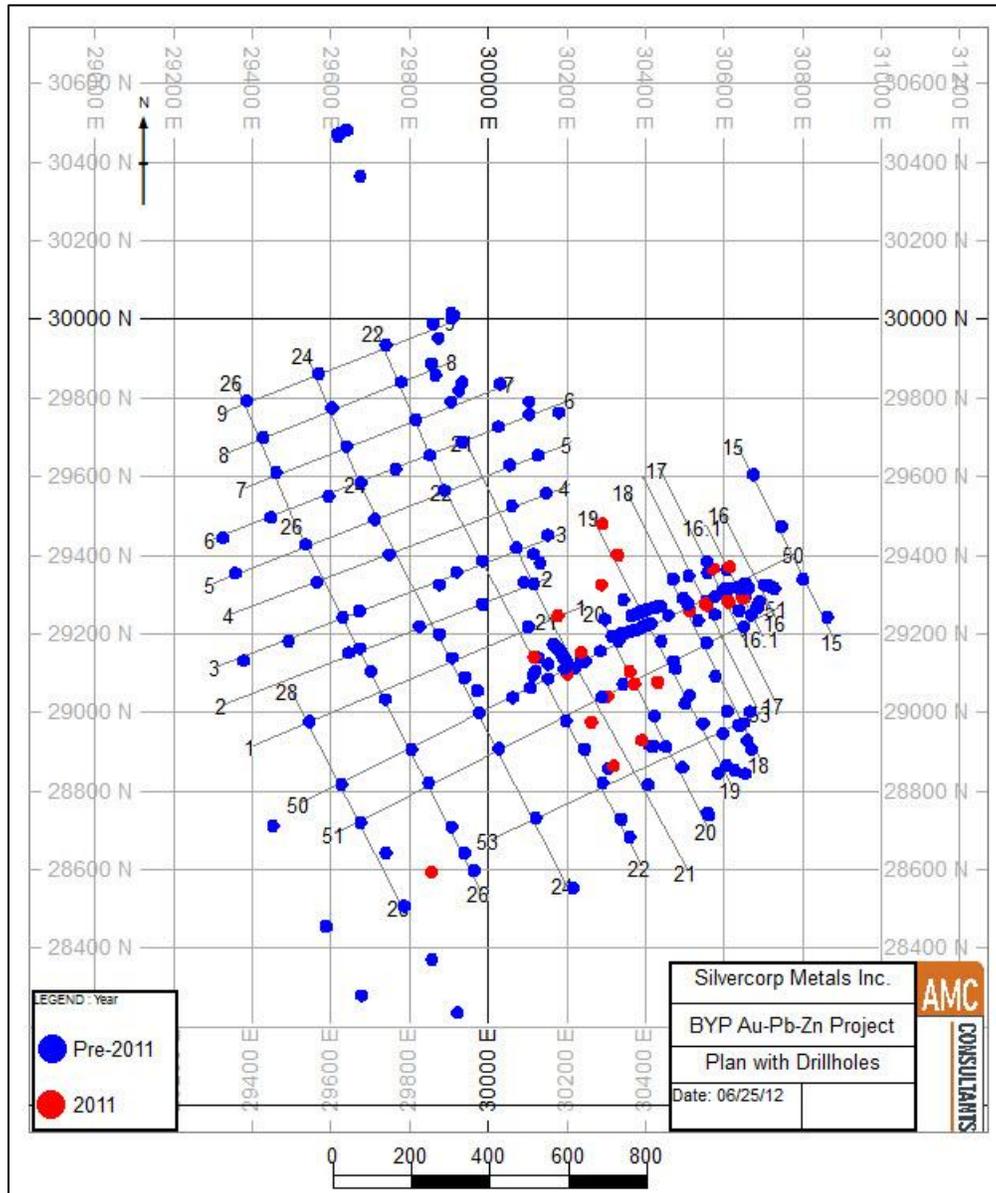
Table 9.2 Significant Intersections from Underground Tunnelling

Tunnel ID	Zone ID	Intersection m	Elevation m ASL	Weighted Average Au (g/t)
252-3-CM 20	Gold 3-1	52.0	252	1.29
CM 18	Gold 3	99.0	252	2.39
CM 17	Gold 3	124.3	252	4.46
CM 17-1	Gold 3	87.0	252	5.00
CM 16-1	Gold 3	53.4	252	2.60
CM 16-1-EYM	Gold 3	22.7	252	2.44
252-CM 16-2	Gold 3	63.3	252	3.33
252-CM 17-2	Gold 3	50.5	252	5.02
252-CM 18-WYM	Gold 3	90.0	252	2.66
3-1-EYM-SCM	Gold 3-1	7.5	252	2.81
3-1-EYM	Gold 3-1	5.0	252	2.16
253-CM 18-EYM	Gold 3	118.0	252	4.92

10 DRILLING

Silvercorp began a surface and underground core drilling program in March, 2011. The program included 20 surface drillholes totalling 8,726.18 m and 23 underground drillholes totalling 3,021.23 m for a total of 11,747.41 m on the Property. Figure 10.1 is a plan map of the 2011 drilling relative to previous holes.

Figure 10.1 Plan Map Showing 2011 Collar Locations



Three surface and four underground drill rigs were active during the 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 testing for new mineralized zones along strike and down dip. Underground drilling was designed to provide

detailed understanding of the 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 and underground drilling was spaced at 10 m to 50 m within Gold Zone 3. Table 10.1 summarizes significant intercepts of gold, lead, zinc and polymetallic mineralization in the 2011 drilling program.

Table 10.1 Significant Interceptions of the 2011 Drilling Program

Drillhole		From (m)	To (m)	Length (m)	Weighted Grade Average							Mineralized Zone	
					Au (g/t)	Ag (g/t)	Pb %	Zn %	Pb+Zn %	Cu %	Sb %		
ZK16-106	and	0.00	24.80	24.80	3.49								③
		31.90	35.15	3.25	1.70								③
ZK16-107	including	0.00	69.50	69.50	5.00								③
		29.63	57.24	27.61	6.43								③
ZK16-110	including	41.65	57.80	16.15	2.44								③
		41.65	46.05	4.40	5.53								③
ZK1701	including	0.00	30.94	30.94	3.30								③
		0.00	17.67	17.67	5.33								③
ZK1702	including		24.58	24.58	5.55								③
		0.00	16.95	16.95	6.53								③
ZK1703	including	0.00	38.28	38.28	4.34								③
		0.00	14.83	14.83	7.19								③
ZK1704	including	0.00	29.33	29.33	4.07								③
		0.00	8.49	8.49	6.98								③
ZK1706	and	0.00	22.25	22.25	7.39								③
		26.92	31.42	4.50	4.44								③
ZK17-101	including	0.00	47.29	47.29	4.50								③
		0.00	12.19	12.19	6.23								③
	including	20.34	34.34	6.00	7.05								③
ZK17-105	including	0.00	46.67	46.67	4.61								③
		0.00	23.35	23.35	7.32								③
ZK17-111	including	0.00	30.48	30.48	5.20								③
		0.00	17.03	17.03	7.33								③
ZK17-113	including	0.00	75.05	75.05	4.68								③
		66.20	75.05	8.85	8.35								③
	and	89.70	102.50	12.80	1.98								③
ZK1825		75.75	120.51	44.76	2.33								③
ZK1801		184.50	198.39	13.89	4.56								①
ZK1921	and	101.80	112.05	10.41			1.89	1.83					XII
		157.20	158.75	1.55	1.86								①
	and	185.43	190.31	4.88	2.45								①-3

					Weighted Grade Average							Mineralized Zone
Drillhole		From (m)	To (m)	Length (m)	Au (g/t)	Ag (g/t)	Pb %	Zn %	Pb+Zn %	Cu %	Sb %	
	and	205.53	210.28	4.75	2.40							①-2
	and	217.25	218.80	1.55	1.78							①-1
ZK1927		160.32	179.58	17.05	2.14							①
ZK19-103		85.94	93.32	8.58	2.00							①-4
	and	160.76	162.68	1.92	2.79							①
ZK2023		88.77	90.77	2.00			0.06	1.18	1.24			IV-1
	and	98.77	100.77	2.00		22	0.39	2.30	2.69			New
	and	128.08	136.34	7.36		17	0.90	2.90	3.80			IV-2
	and	140.54	144.54	4.00		45	1.15	9.57	10.72			V
	and	188.62	200.10	11.48			0.22	1.72	1.94			VI
	including	192.62	194.62	2.00			0.40	3.51	3.91			VII
	and	219.34	244.03	24.69		12	0.27	1.48	1.75			XII
	and	255.80	284.65	28.85	0.71	57	1.49	1.62	3.11	1.00		XII
	including	269.81	276.81	7.00	0.55	66	4.69	4.51	9.20	0.25		
ZK20-101		166.81	169.71	2.90			0.00	2.24	2.24			IV-2
	and	203.64	208.94	5.30			0.00	1.13	1.13			V
	and	214.34	222.35	8.01			0.38	2.73	3.11			VI
	including	216.97	222.35	5.38			0.55	3.43	3.98			VI
	and	263.16	267.16	4.00	0.43	7,5	0.44	1.13	1.57			VII
	and	297.74	306.37	8.63	0.33	164	9.51	4.96	14.47	1.50	0.72	XII
	and	311.08	312.60	1.59			1.2	0.03	1.22			New

Two models of drill rigs, XY-42T and YDX-3L, were used in surface drilling. Figure 10.2 shows the XY-42T drill rig at hole ZK2011. Each surface hole was started with a 110 mm bit and then a 75 mm bit was used when bedrock was reached. Underground holes were drilled with an underground rig XY-4 equipped with 75 mm bit (Figure 10.3). NQ sized core was recovered from both the surface and underground drilling programs.

Figure 10.2 Drill Rig of XY-42T at Hole ZK2110



Figure 10.3 Drill Rig of XY-4 at Underground Level 252 m



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

Silvercorp'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 metre core samples were routinely collected across continuous zones.

Drill core from Silvercorp's 2011 drilling program was carefully piled, temporarily, on open ground while the core storage facility is under construction. An example of carefully stacked core and a labelled core box is shown in Figure 10.4.

Figure 10.4 Temporary Core Storage, Core Box and Label



As a result of this drill program, Silvercorp significantly upgraded the gold resource of Gold Zone 3 with underground drilling, expanded Gold Zones 1 and 3-1 and discovered new Gold Zones 1-4 and 1-5 with surface drilling. Drilling also re-evaluated and confirmed the Zone XII as a lead-zinc-polymetallic zone. Twelve surface holes also tested the major Pb-Zn zones IV, V, VI, VII, IX, X and XII on the Property and the previously delineated Pb-Zn zones were further defined with the 2011 drilling program.

Figure 10.5 shows the results of the 2011 underground drilling in Gold Zone 3 and Figure 10.6 shows the surface stepout drilling on line 19.

Figure 10.5 Underground and Surface Infill Drilling Within Gold Zone 3

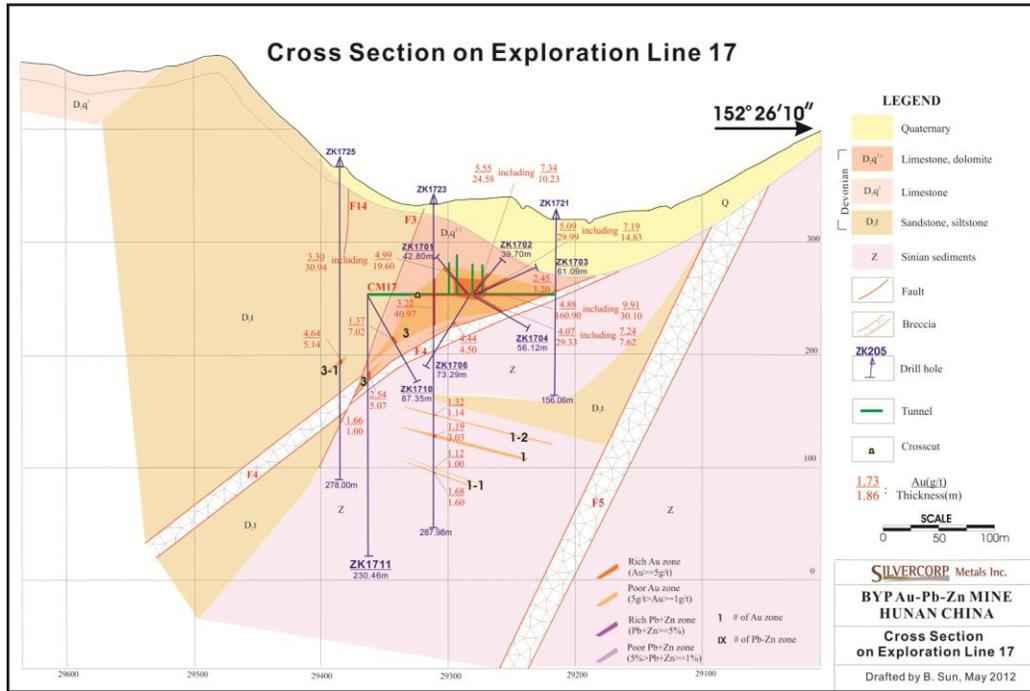
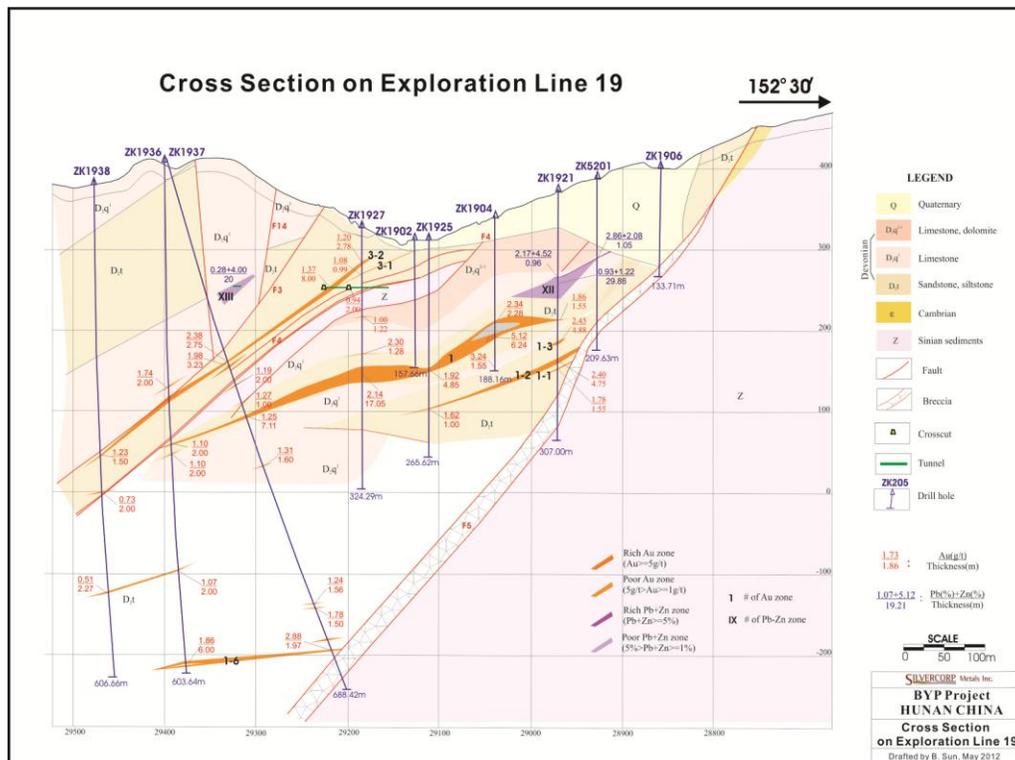


Figure 10.6 Surface Stepout Drilling On Line 19



11 SAMPLE PREPARATION, ANALYZES AND SECURITY

11.1 Sample Collection

11.1.1 Channel Samples

Locations of channel samples are selected and marked by the geologist across the exposed mineralization zone along the drift and crosscut tunnels. Under the supervision of Silvercorp's project geologist, sampling helpers cut a 5 cm wide and 3 cm deep channel across the mineralization zone with an electric cutter, and then excavate material within the channel with a hammer and chisel. Excavated chip material is collected in a cloth bag and the sample number is written on the wall and on the bag upon completion of each individual sample. Length of individual samples will depend on the continuity and intensity of mineralization. Most of the channel samples are 2 m in length and weigh between 8 to 10 kg.

11.1.2 Core Samples

After zones of interest have been logged and marked for sampling by a geologist, the core is cut into two halves with a diamond rock saw. One half is marked with the sample number and goes back into the core box for long term storage and future reference. The other half is broken up and bagged for analysis. The sample location is 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 is enclosed in a transparent plastic bag and stapled to the core box. The weight of a 2m core sample is around 5 kg.

11.2 Sample Shipment

The bagged channel and core samples are kept in a security room which can only be accessed by the designated person until shipment arrangement for analysis is made. A professional courier company is hired for the shipment of samples from the Property to the ALS-Chemex (ALS) Laboratory in Guangzhou. Upon receiving the samples, the laboratory reports sample conditions to Silvercorp's project geologist. Remediation measures are taken immediately if there is any damage or possible contamination reported from the laboratory.

11.3 Sample Preparation and Analysis

The samples collected by Silvercorp in its 2011 exploration program were sent to the ALS Laboratory in Guangzhou, which has ISO and Chinese government accreditation.

The sample preparation procedure follows:

1. All samples were dried for 12 to 24 hours at 65°C.
2. Whole samples were crushed with a jaw crusher until 70% of the crushed sample passed 10 mesh sieves (2 mm).
3. Crushed samples were multi-split to 300 g for pulverizing, and remains were kept at the lab.
4. 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-AAS finish procedure to analyze lower grade samples from 0.005 to 10 ppm Au, and fire assay fusion-electronic analytical balance method to analyze high grade samples from 0.05 to 1000 ppm 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 procedure 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 Assurance and Quality Control

For its 2011 exploration program, Silvercorp routinely inserted Certified Reference Materials (CRM) and blanks into each batch of 40 samples to monitor sample preparation and assay procedures. External check assays were arranged by sending about 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. Silvercorp's program comprised 772 QA/QC samples which were inserted into 4,950 core and channel samples. QA/QC samples included 33 CRMs, 189 blanks, and 550 external check samples.

11.4.1 Assay Results of Certified Reference Materials

Five CRMs, sourced from the Institute of Geophysical and Geochemical Exploration (IGGE), were used in the 2011 QA/QC program. They are GAu-18a, GAu-22, GSO-1, GSO-2 and GSO-4. All five CRMs are China's national standards approved by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China. Recommended values are listed in Table 11.1.

Table 11.1 Recommended Values of Certified Reference Materials

CRM	Recommended Values				No. of Assays/ element
	Au g/t	Ag g/t	Pb %	Zn %	
GAu-18a	10.6±0.4				3
GAu-22	5.72±0.22				2
GSO-1		18.3±1.3	0.43±0.02	0.83±0.04	10
GSO-2		220±10	2.17±0.07	4.26±0.15	14
GSO-4		148±6	5.13±0.08	13.9±0.2	4

Three gold assays of GAu-18a and two gold assays of GAu-22 were reported in the 2011 exploration program. Assay data within ±2 SD of the recommended value is considered acceptable. Assay data outside ±2 SD but within ±3 SD is considered a warning. Assay data outside ±3 SD is considered a fail. As shown in Table 11.2, assay results for four of the five samples are within acceptable limits and one result is ambiguous.

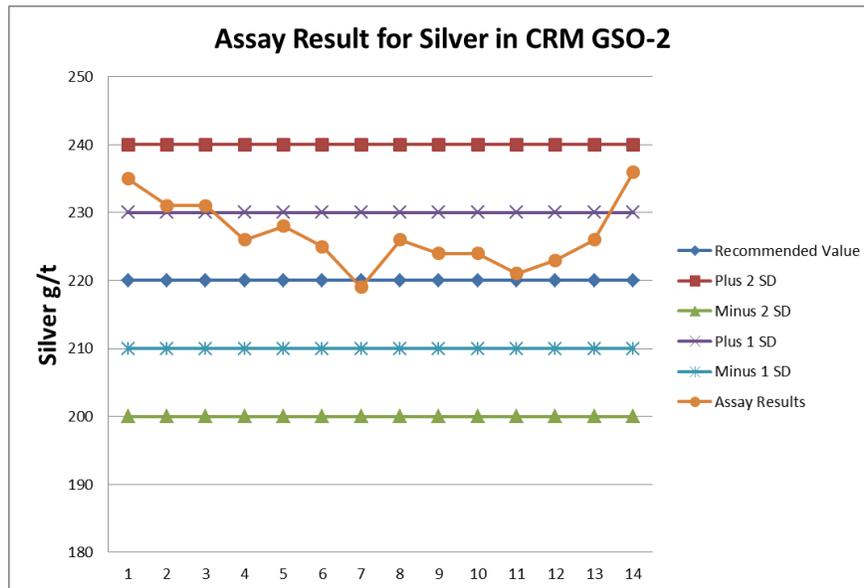
Table 11.2 Assay Results of Certified Reference Material for Gold

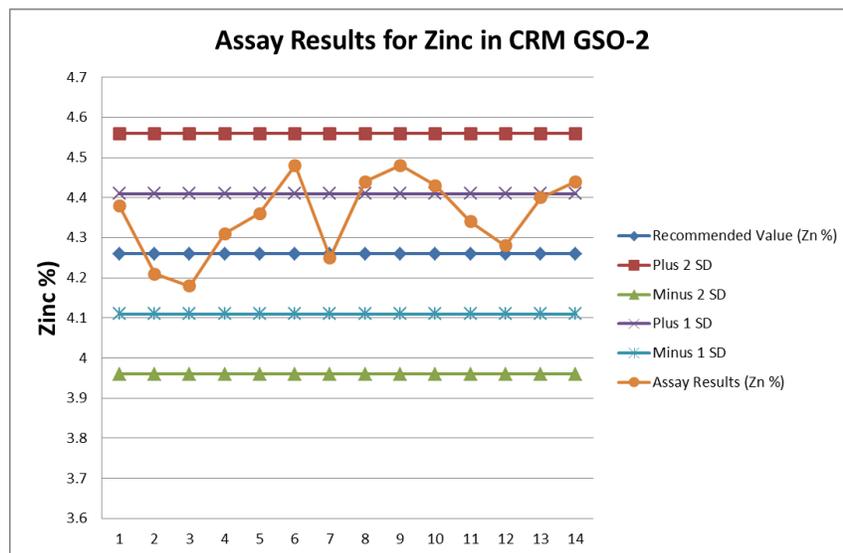
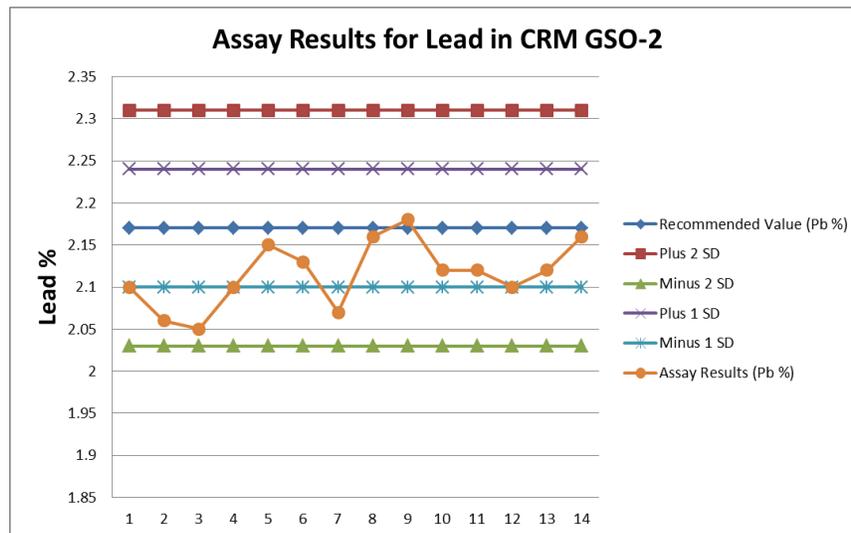
CRM	Recommended Value (Au g/t)	Assay Results (Au g/t)
GAu-18a	10.6±0.4	9.79
GAu-18a	10.6±0.4	9.80
GAu-18a	10.6±0.4	>10
GAu-22	5.72±0.22	5.99
GAu-22	5.72±0.22	6.07

A total of 28 assays were conducted on polymetallic CRMs GSO-1, GSO-2 and GSO-4. In total, one silver assay was a fail and one zinc assay was a warning.

Taking GSO-2 as an example, results of 14 assays on the CRM are shown in Figure 11.1. It can be seen that all the assay results of silver, lead and zinc for GSO-2 fall into the acceptable range although averaging somewhat higher than the SRM for silver and zinc and averaging somewhat lower than the SRM for lead. Zinc was also biased high in GSO-1 and GSO-4.

Figure 11.1 Results of 14 Assays on CRM GSO-2





Except for a few samples, relative errors between the recommended values and assay results of the CRMs are less than 10% which AMC considers acceptable. For future drill programs, AMC recommends that at least 5% of the total number of gold assays be CRMs, one near the average resource grade and one near the resource cut off grade.

11.4.2 Assay Results of Blank Samples

Blank material was made from barren limestone and siltstone within the Property. The blank samples were randomly inserted into each batch of samples and then sent to ALS Laboratory for assay. 189 blank samples were inserted into the sample batches in 2011 to monitor possible contamination problems in sample preparation procedures. Two blank samples were detected with anomalous values of gold and two blank samples were detected with anomalous value of silver. Overall the assay results of the blank materials are considered acceptable.

11.4.3 Results of External Check Assays

A total of 550 pulps of mineralized and non-mineralized core and channel samples were re-assayed at the Zhengzhou Laboratory of the Nonferrous Metals Exploration Institute as an external check. Among the 550 samples, 159 were from gold mineralization zones and 46 were from Pb-Zn and polymetallic mineralization zones. Figure 11.2 presents check assay results of the 159 samples with gold mineralization, and Figures 11.3 and 11.4 show results of the 46 samples with lead and zinc mineralization. The remaining 345 samples were randomly collected from non-mineralized core associated with different alteration zones. It is a Chinese requirement that at least 5% of total samples are checked at another laboratory regardless of whether or not the samples are mineralized. Silvercorp has advised that it will increase the proportion of mineralized check samples in future programs.

Except for a few outliers, results of external check assays show a reasonable reproducibility for gold and zinc between the original ALS assay data by the Zhengzhou Laboratory of the Nonferrous Metals Exploration Institute. Results of the gold assays for mineralized core samples reported from the ALS Laboratory are slightly higher than those reported from the Zhengzhou Laboratory, which is in accordance with the fact that fire assay is used at the ALS laboratory while a wet method is employed at the Zhengzhou Laboratory. In general, lead assayed higher at the ALS Laboratory than the Zhengzhou Laboratory. It is recommended that the laboratory methods for lead be compared to ensure consistency.

Figure 11.2 Results of External Check Assays for Gold in Mineralized Samples

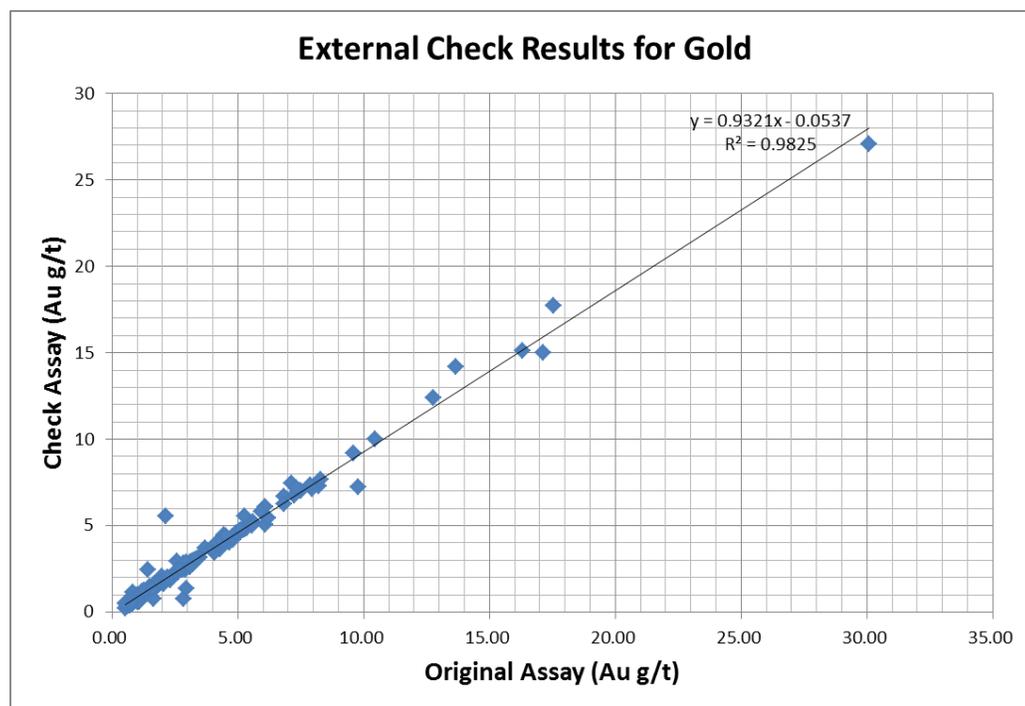


Figure 11.3 Results of External Check Assay for Zinc in Mineralized Samples

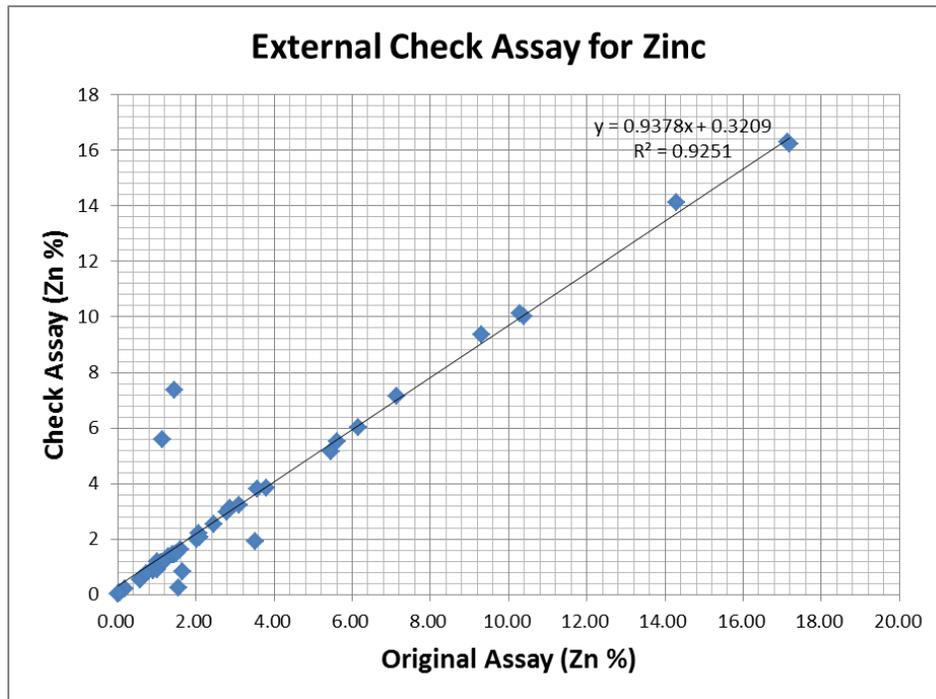
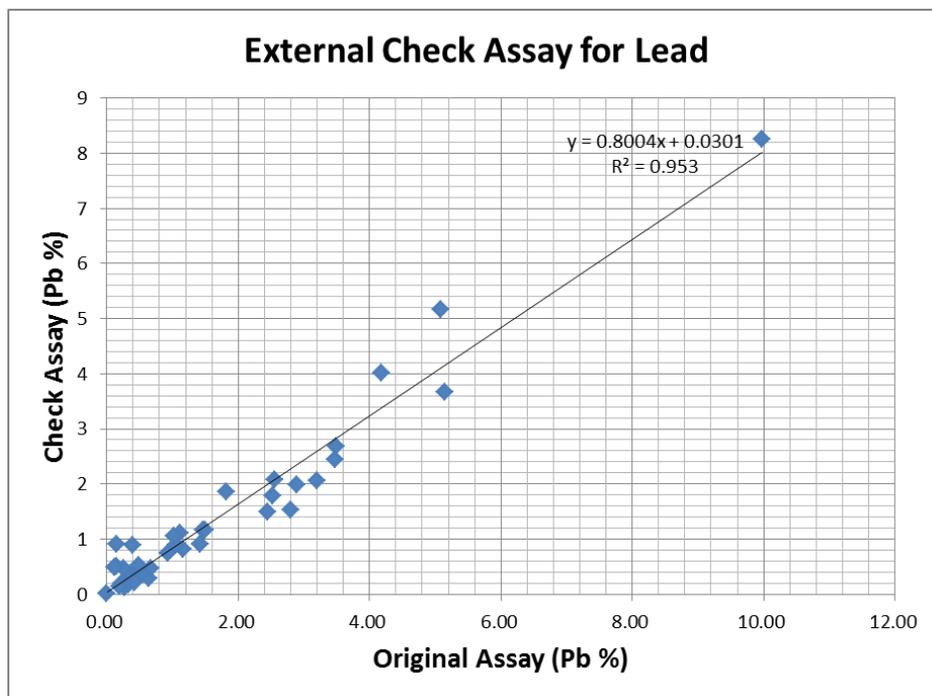


Figure 11.4 Results of External Check Assay for Lead in Mineralized Samples



11.5 Bulk Density Measurements and Results

Samples for bulk density measurement, consisting of 30 samples from gold mineralization Zones 3 and 3-1, and 74 samples from the lead and zinc mineralization zones, have been collected from exploration tunnels, mining stopes and drill core. Noncore samples are cut as individual blocks of about 1 kg weight. A small amount of wall rock samples are also collected for comparison purposes.

Bulk density is measured using the wax-coated, water-immersion method of the Inner Mongolia Mineral Experiment Research Institute located in Hohhot, Inner Mongolia. Tables 11.3 and 11.4 show results of bulk density measurements in 2011. Six wallrock samples from the gold mineralization zones and 22 wallrock samples from the lead and zinc mineralization zones have been excluded from the bulk density calculations.

Table 11.3 Average Bulk Density for Gold Zones

Mineralization Type	Number of Samples	Average Grade (g/t Au)	Bulk Density (t/m ³)
>5 g/t Au	7	9.12	2.88
2-5 g/t Au	9	3.44	2.82
<2 g/t Au	8	1.08	2.76
Total/Average	24	4.31	2.81

Table 11.4 Average Bulk Density for Lead-Zinc Zones

Mineralization Type	Number of Samples	Average Grade (%)		Bulk Density (t/m ³)
		Pb	Zn	
>10% (Pb+Zn)	12	3.04	12.24	3.29
3.6-10% (Pb+Zn)	12	0.64	5.50	3.01
<3.6 (Pb+Zn)	28	0.34	1.43	2.93
Total/Average	52	1.04	4.87	3.03

11.6 Summary

In AMC's opinion, the sampling, sample preparation, security, analytical procedures and QA/QC results adopted by Silvercorp for its 2011 exploration programs meet accepted industry standards, and the assay results may be relied upon for mineral resource / mineral reserve estimation purposes.

The QA/QC program requires diligence to ensure that the total number of CRMs assayed for exploration holes is 5% of the total number of samples assayed (rather than 2.5% as in 2011), external duplicates are of mineralized samples only and that bulk density measurements are completed for every hole.

12 DATA VERIFICATION

During AMC's site visit in February 2012 all aspects of the project were examined and verified including drill core, exploration sites, resource and reserve estimates, data collection and verification procedures, data storage, underground workings, processing plant and surface infrastructure. Discussions were held with Silvercorp personnel, using an interpreter as required.

B O'Connor conducted a detailed inspection of core intersections chosen by Silvercorp to represent the major mineralized zones from the mine. He was satisfied that the observed mineralization was generally consistent with the assays reported.

During a second site visit in April 2012, B O'Connor collected at random 16 quarter core samples representing underground exposures of mineralization for check assaying. The samples were prepared and assayed at ALS Chemex laboratory in Guanzhou and the relevant Certificate authenticating the sample preparation and assaying procedures has been sighted by AMC. The results are listed in Table 12.1 and 12.2.

Table 12.1 Independent Sample Verification – Gold Assays

Vein ID	Hole ID	Sample Number		Length	From	To	Original Assay	Check Assay	Difference (Original v Check)
		Original#	Check#				Au g/t	Au g/t	%
③	ZK16-107	A00592	A01	1.87	31.48	33.35	7.94	6.65	+16.2
③	ZK16-107	A00596	A02	2.00	39.37	41.37	5.06	5.92	-17.0
③	ZK16-107	A00634	A03	2.04	55.20	57.24	30.1	10.45	+65.3
③	ZK1701	A00484	A04	2.00	5.97	7.97	10.45	8.63	+17.4
③	ZK1701	A00489	A05	1.65	14.57	16.22	3.26	3.26	0.0
③	ZK17-105	A00536	A06	1.40	2.34	3.74	5.43	8.83	-62.6
③	ZK17-105	A00547	A07	1.33	16.05	17.38	13.25	13.95	-5.3
③	ZK17-105	A00551	A08	1.55	21.80	23.35	10.35	8.89	+14.1
③	ZK17-115	A00670	A09	1.55	2.00	3.55	25.8	17.65	+31.6
③	ZK17-115	A00678	A10	1.90	14.84	16.74	6.71	4.77	+28.9

Table 12.2 Independent Sample Verification – Silver, Lead, Zinc Assays

Vein ID	Sample Number			From	To	Original Assay			Check Assay			Difference (Original v Check) (%)		
	Original#	Check#	Length			Ag g/t	Pb %	Zn %	Ag g/t	Pb %	Zn %	Ag	Pb	Zn
V	A02624	Z01	1.25	136.42	137.67	48	2.52	10.30	59	3.05	14.70	-22.9	-21.0	-42.7
V	A02626	Z02	1.25	139	140.25	69	3.20	17.20	60	2.76	16.25	+13.0	+13.8	+5.5
VI	A04735	Z03	2.05	178.52	180.57	-	2.38	4.58	59	1.80	2.31	-	+24.4	+49.6
VI	A04736	Z04	2.07	180.57	182.64	-	1.08	2.80	60	1.57	3.29	-	-45.4	-17.5
XII	A04697	Z05	2.62	296.09	298.71	13	0.71	5.53	13	0.72	0.97	0.0	-1.4	+82.5
XII	A04701	Z06	1.80	306.79	308.59	32	2.75	11.55	45	3.40	13.80	-40.6	-23.6	-19.5

Not surprisingly given the nature of the mineralization, the check results overall do not compare closely with the original results. However, higher original grades generally correlate with higher check grades and there does not appear to be a systematic bias.

Based on AMC's independent reviews and validations of information and data provided, AMC is satisfied that the data is acceptable for the purposes of this report.

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 writing, Silvercorp had not prepared an estimate of mineral reserves.

Introduction

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 on the gold and lead-zinc test results were issued to Silvercorp in Jan.02, 2011.

13.1 Test Samples

13.1.1 Gold Mineralization

In September 2010, Silvercorp collected 102 pieces of drill core samples (BY24 to BY125) from Gold Zone 3 (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 13.1.

Table 13.1 Gold Samples Used for Gold Metallurgical Testing (2010)

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

Other elements of interest on an overall composite are shown in Table 13.2.

Table 13.2 Gold Sample Composition

Component	Content (%)	Component	Content (%)
SiO ₂	69.61	Au	3.3 g/t
S	3.30	Ag	<5g/t
As	0.44	Cu	0.018
Sb	0.15	Pb	0.075
Fe	4.4	Zn	0.019

13.1.2 Pb-Zn Mineralization

In 2010, Silvercorp Metals collected Pb-Zn mineralized samples from three different locations. The samples were analyzed for the main payable elements, i.e., lead, zinc, silver and sulphur (Table 13.3).

Table 13.3 Summary of Samples Used for Metallurgical Testing

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
Average			3.21	0.99	0.37	

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 testwork to produce lead and zinc concentrates and recover silver.

13.2 Mineralogy and Occurrences of the Payable Elements

13.2.1 Gold Mineralization

The mineralogical analysis results for the gold composite samples are summarized in Table 13.4. The major non-sulphide 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 13.4 Summary of Mineralogy of the Samples

Mineral	Content (%)	Mineral	Content(%)	Mineral	Content(%)
Quartz	50.36	Chlorite	2.42	Native gold	Trace
Mica	14.91	Talc	1.15	Chalcopryrite	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

Characterization of gold and other minerals presence are summarized below:

- 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 (Table 13.5), which is favourable for flotation.
- Other sulphides – trace amounts of other sulphides, such as sphalerite, galena and chalcopryrite (in the size range of <0.03mm), were seen around the edge of pyrite grains or locked within pyrite grains.
- Limonite and other oxides – mainly as limonite (<0.1mm) in granular column form, disperse in the ore.

Other gangue minerals - the main gangue minerals are quartz (50.36%), kaolinite, sericite, chlorite, amphibole and feldspar.

Table 13.5 Summary of Pyrite Grain Size and Size Distribution (Gold Mineralization)

Size Range (mm)	Distribution (%)	Accumulation (%)
+0.5	1.2	1.2
-0.5+0.1	12.5	13.7
-0.1+0.074	20.6	34.3
-0.074+0.037	38.5	72.8
-0.037+0.019	10.6	83.4
-0.019+0.010	8.1	91.5
-0.010+0.005	4.1	95.6
-0.005+0.001	3.6	99.2
-0.001	0.8	100

Gold mineralogical analysis (Table 13.6) on ground samples (100%-200 mesh) indicated that gold is mainly associated with the following minerals:

- About 18.89% of the gold is in native, free-milling and/or exposed form.
- About 5.88% of the gold is enclosed by oxide minerals, mainly within calcite (dolomite), some occasionally within hematite, magnetite, limonite and other iron oxide minerals.
- About 73.37% of the gold is disseminated and locked mainly in pyrite, and some in pyrrhotite.
- The rest (1.86%) of the gold was encapsulated in quartz and silicate minerals (such as sericite, chlorite, kaolinite, feldspar, hornblende).

Table 13.6 Summary of Gold Mineralogical Analysis

Gold Form	Assay (g/t)	Distribution (%)	Observation
Native Gold	0.61	18.89	Native, free-milling and exposed gold
Inclusion within Oxides	0.19	5.88	Gold included or locked within calcite or dolomite
Inclusions within Pyrite	2.37	73.37	Gold included or locked in fine-grained pyrite etc
Inclusions within Silicate	0.06	1.86	Gold included or locked in quartz or other silicates
Total	3.23	100.00	

Note: sample grinding size: 100% – 200 mesh

13.2.2 Pb-Zn Mineralization

The mineralogy of the composite samples is summarized in Table 13.7. The major components are gangue minerals (62% calcite) and sulphide minerals (sphalerite 5.8%, pyrite 4.7%, galena 1.2%).

Table 13.7 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	62.0
Hematite	1.5	Calamine	Trace
Chalcopyrite	Trace		
Anglesite	0.11	Others	0.31
Stibnite	0.42	Total	100

Occurrence of Lead as PbS (Table 13.8). The average lead grade in the bulk sample is about 1.24%. Lead mainly occurs in galena, accounting for 82.3% of the total lead, and secondarily in carbonate (7.69%, cerussite), sulphate (6.92%, anglesite) and other (3.08%, stibnite) minerals. Galena usually inter-grows with sphalerite and pyrite.

Table 13.8 Summary of Lead Mineralogy

Occurrence	Pb Content (%)	Distribution (%)	Comment
Sulphide	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	

Occurrence of Zinc as ZnS (Table 13.9). Average zinc grade in the bulk sample is about 3.67%. Zinc mainly occurs in sphalerite, accounting for 95.37% of the total zinc, and secondarily in zinc silicate minerals (3.54%), zinc carbonate minerals (0.82%), and other minerals. Sphalerite usually occurs intergrow with galena and pyrite.

Table 13.9 Summary of Zinc Mineralogy

Occurrence	Zn Content (%)	Distribution (%)	Comment
Sulphide	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	

Occurrence of Sulphur (Pyrite). Sulphur grades in the samples average about 5.12%. Sulphur mainly occurs in pyrite, sphalerite and galena. There are two types of iron sulphide minerals: one type occurs as subhedral crystals and the other type occurs as fine grained anhedral crystals. Pyrite crystal grain size is in the range of 0.1 to 10mm.

Figures 13.1 to 13.3 show the photomicrographs (reflected light) of mineralized sample specimens for mineralogical study purposes.

Figure 13.1 Colloidal Structure of Pyrite (magnification 10×100)



Figure 13.2 Galena Inclusions of Pyrite (magnification 10×50)

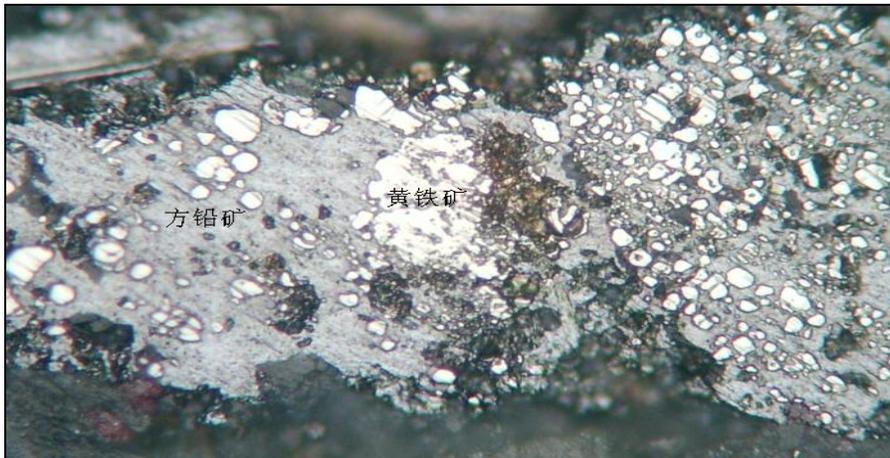
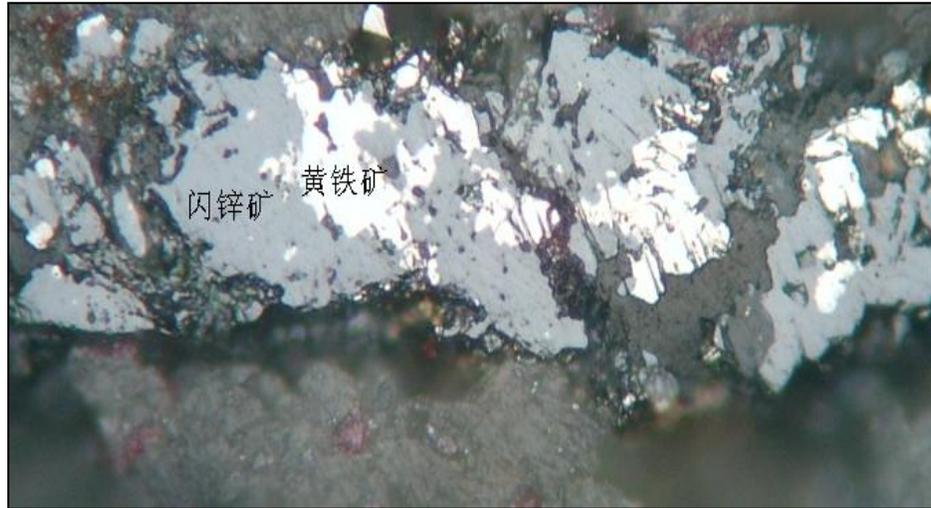


Figure 13.3 Sphalerite with Pyrite Inclusions Account (magnification 10×50)



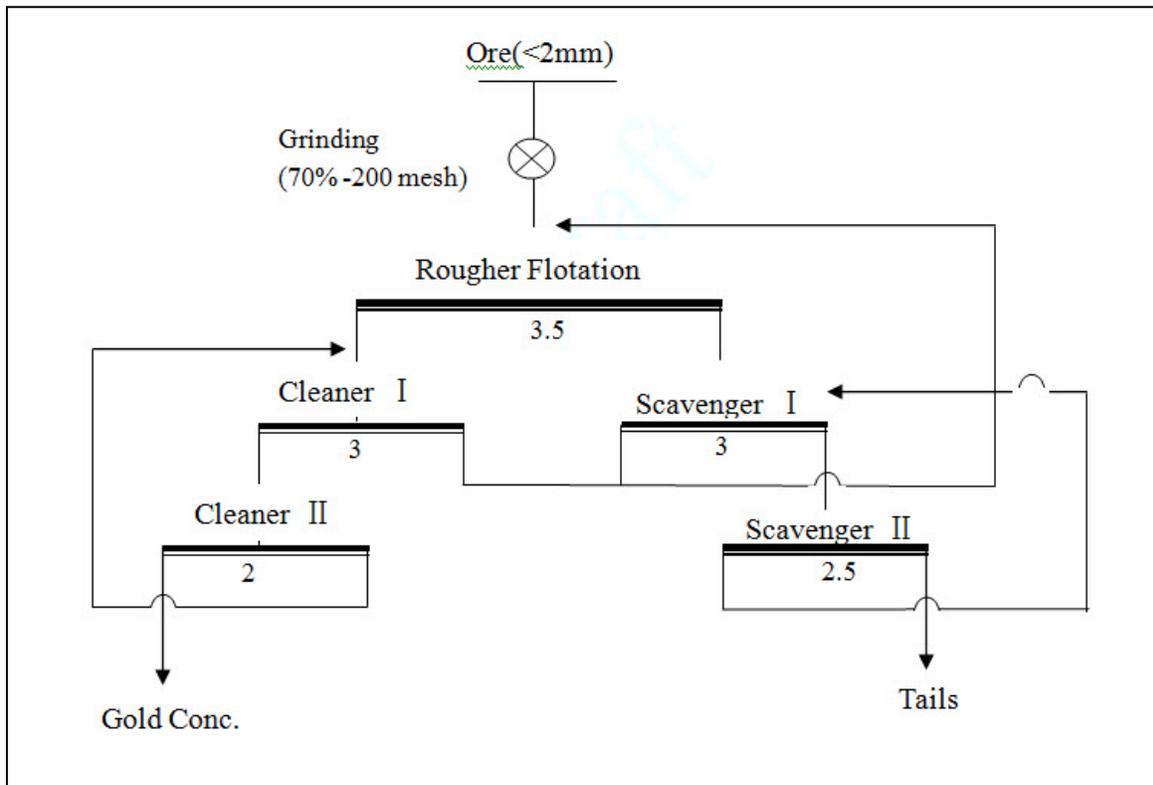
13.3 Summary of the Metallurgical Test Results

13.3.1 Gold Mineralization

In 1992, the Brigade 418 of the Hunan Bureau of Geology and Minerals conducted a preliminary cyanidation study using run-of-mine gold oxide samples (1.5g/t Au₂O₃) from Gold Zone 3. The cyanidation leaching recovery was about 85% with moderate cyanide consumption (1 kg/t).

In 2010, Silvercorp retained HNMRI to conduct a flotation study, using a locked-cycle flowsheet (Figure 13.4) with one-stage rougher/2-stage scavenger/2-stage cleaner operation.

Figure 13.4 Locked Cycle Flow Sheet



The test results show that a gold concentrate product (Au 41.59g/t) was produced with a gold flotation recovery of 91.65%. The results are summarized in Table 13.10.

Table 13.10 Mass Balance of BYP Gold Mineralization Flotation Tests

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

Flotation Recycle Water Treatment

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

13.3.2 Pb-Zn Mineralization

Historical Metallurgical Studies

Between years 1971 and 1977, Yunxiang Mining Co retained Hunan Geological Lab to conduct a preliminary bulk flotation test using 501.7 kg of drill core material. The tests were

done using a flowsheet 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 13.11.

Table 13.11 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		
Sulphur Con.	0.99	0.55	35.92	N/A			64.6	

Current Metallurgical Flowsheet Development Study

In order to develop a processing flowsheet to produce commercial grades of lead and zinc concentrate products, Silvercorp contracted Hunan Non-ferrous Metals Research Institute (HNMRI) to perform mineral processing and metallurgical tests in September through December, 2010.

The head sample for lab flotation test was a mixture of 3:2 (BYP2:BYP3) (refer to section 13.1.2) bulk composite material. Head sample assay results are listed in Table 13.12.

Table 13.12 Head Grade of the Blended Test Sample

Element	Cu	Pb	Zn	S	As	TFe	Cd	Mn
Content	0.032	1.24	4.08	5.12	0.12	2.30	0.022	0.47
Element	SiO ₂	CaO	MgO	Al ₂ O ₃	Au(g/t)	Ag(g/t)	Sb	
Content	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 flowsheet options were examined:

- Option 1 – Locked cycle without regrinding of cleaned Pb and Zn concentrates;
- Option 2 – Locked cycle with regrinding of Pb scavenger conc and Zn rougher concentrates; and
- Option 3 – Locked cycle with regrinding of Pb rougher conc and Zn rougher concentrates

Tables 13.13 and 13.14 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 13.13 Comparison of Locked Cycle Test Results (Grade)

Option	Lead Conc Grades				Zn Conc 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	52.40	0.83	53.6

Table 13.14 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

*Ag recovery: within PbS Conc only

Figure 13.5 shows the flotation flowsheet 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 13.15 summarizes the mass balance for Option 3 tests.

Table 13.15 Mass Balances of Pb-Zn Flotation Tests (Option 3) (%)

Stream	Yield (%)	Grade			Recovery (%)		
		Pb	Zn	Ag (g/t)	Pb	Zn	Ag
Pb Conc	1.72	55.97	5.06	170.14	85.87	2.20	41.03
Zn Conc	6.99	0.83	52.40	53.65	5.17	92.71	52.57
Tails	91.29	0.11	0.22	0.50	8.96	5.08	6.40
Primary Mineralization	100.00	1.12	3.95	7.13	100.00	100.00	100.00

The compositions for the lead concentrate and zinc concentrate are summarized in tables 13.16 and 13.17 respectively. The results show that lead and zinc concentrate products, although by no means of premium grade, nevertheless meet commercially acceptable standards.

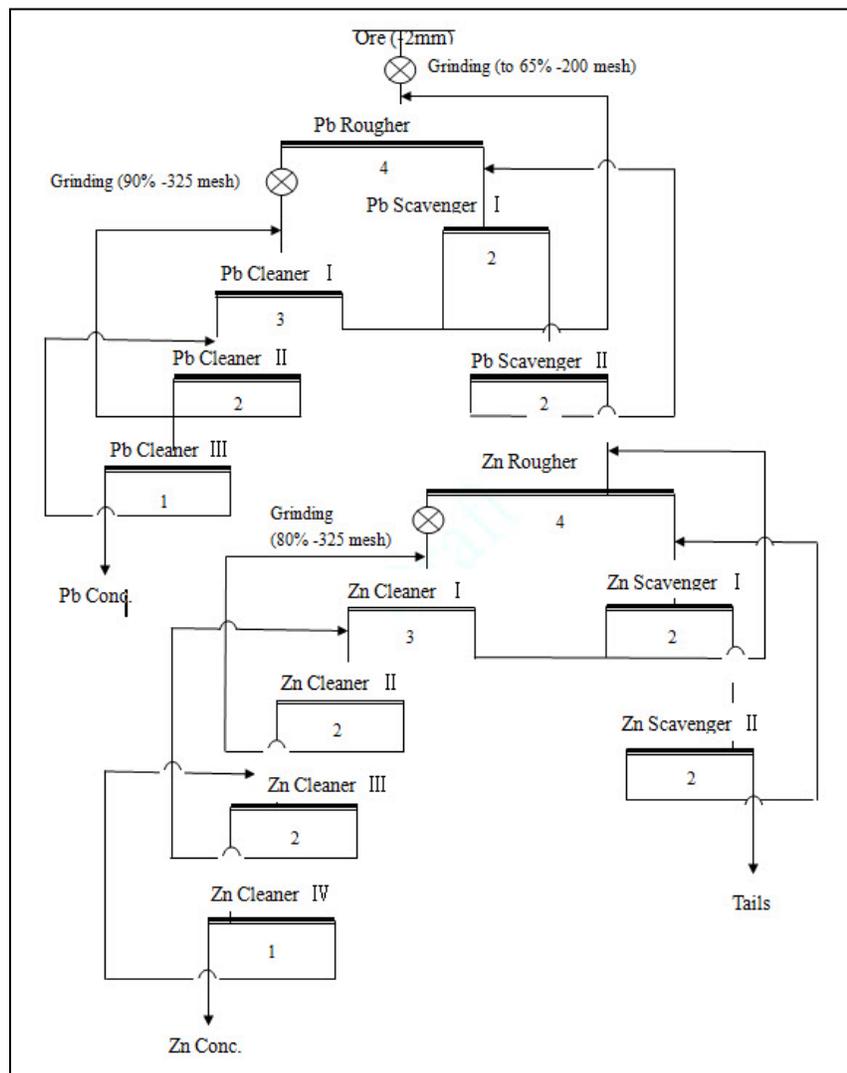
Table 13.16 PbS Conc Composition (%) (Option 3)

Element	Pb	Zn	Cu	S	As	TFe	Mn
Comp(%)	55.97	5.06	0.41	18.17	0.62	8.07	0.044
Element	SiO2	CaO	MgO	Al2O3	Au(g/t)	Ag(g/t)	Sb
Comp(%)	0.38	2.47	0.20	0.34	0.1	170.14	3.89

Table 13.17 ZnS Conc Composition (%) (Option 3)

Element	Zn	Pb	Cu	S	As	TFe	Mn
Comp(%)	52.40	0.83	0.10	33.00	0.13	1.63	0.092
Element	SiO2	CaO	MgO	Al2O3	Au(g/t)	Ag(g/t)	Sb
Comp(%)	0.42	4.22	0.22	0.96	0.2	53.65	0.22

Figure 13.5 Locked Cycle Flowsheet for Pb-Zn Flotation (Option 3)



Flotation performance with recycled water (Using Flowsheet Option 3).

To examine the impact of water reuse on flotation mass balance, flotation tests using combined water (4 recycle: 1 fresh make-up water) were done. Table 13.18 summarizes the mass balance, the recovery differences between Table 13.15 and Table 13.18 are quite small. That is, the impact of applying reuse water on flotation recovery is very small.

Table 13.18 Mass Balances of Pb-Zn Flotation Tests Using Recycled Water (Option 3) (%)

Material	Yield	Grade			Recovery		
		Pb	Zn	Ag(g/t)	Pb	Zn	Ag
PbS Conc	1.94	52.86	7.49	182.63	86.74	3.59	48.37
ZnS Conc	6.99	0.81	52.63	47.59	4.79	91.00	45.41
Tails	91.07	0.11	0.24	0.5	8.47	5.41	6.22
Ore Feed	100.00	1.18	4.04	7.32	100.00	100.00	100.00

Water Treatment

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 regulations.

13.4 Bulk Density

13.4.1 Pb-Zn Mineralization

The true and bulk density for the bulk composite samples (-2mm, mineralized) were measured by HNMRI using conventional techniques. The true density and bulk density are 2.61 and 2.03 g/cm³, respectively.

AMC recommends that additional bulk density determinations be done on a broader suite of samples with checks from different independent laboratories.

13.5 Summary of Testwork Outcomes

The lab test work included the mineralogical analysis, mineralization compositions, optimization of grinding size, flotation circuit development and flowsheet optimization, reagent optimization, water reuse and water treatment studies etc.

The test results for the gold mineralization show that:

- Average grade tested is about 3.43 g/t Au.
- Most of the gold (73.4%) is associated with pyrite, but gave 85% recovery by cyanidation.
- A locked-cycle flotation test with one-stage rougher/2-stage scavenger/2-stage cleaner operation has proven up a suitable flowsheet for gold processing.

- High gold recovery (91.65%) to a 41.6 g/t Au concentrate has been achieved at a grind size of 70% – 100 µm.

The flotation test results for the Pb/Zn mineralization show that:

- Average grades tested are about 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 flowsheet options have been tested, with various regrind configurations. The preferred option with regrinding of rougher concentrates achieved high metal 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.

14 MINERAL RESOURCE ESTIMATES

14.1 Introduction

The resource estimates for the BYP deposit have been carried out by Yongwei Li, Resource Geologist for Silvercorp using Surpac software. The modeling has been checked and verified, and the classification adjusted, by independent Qualified Person Ms D Nussipakynova, P.Geo. of AMC using Datamine software, who takes responsibility for the estimates. Table 14.1 shows the mineral resources and metal content for the gold mineralization as of September 2011 at a 1 g/t gold cut off grade. Table 14.2 shows the mineral resources and metal content for the lead-zinc mineralization at a 2% lead plus zinc cut off grade. Cut-off grades are based on mining, processing and G & A costs provided by Silvercorp and reviewed by AMC.

Table 14.1 Mineral Resources and Metal Content for Gold as of December 2011

Class	Tonnes (M)	Au (g/t)	Au Metal (K oz)
Indicated	3.51	2.59	292
Inferred	2.47	1.84	146

- Notes: 1. CIM definitions were used for mineral resources
 2. The cut off grade is 1 g/t for both classes
 3. The reported resources are rounded to nearest 10,000 tonnes
 4. Figures may not compute due to rounding
 5. Cut-off grades are based on mining, processing and G & A costs of \$38/t.

Table 14.2 Mineral Resources and Metal Content for Lead and Zinc as of December 2011

Class	Tonnes (M)	Pb (%)	Zn (%)	Pb Metal (M lb)	Zn Metal (M lb)
Indicated	7.33	1.16	2.52	187	408
Inferred	7.55	0.85	2.75	141	457

- Notes: 1. CIM definitions were used for mineral resources
 2. The Pb+Zn cut off is 2% for both classes
 3. The reported resources are rounded to nearest 10,000 tonnes
 4. Mined tonnages deducted.
 5. Figures may not compute due to rounding
 6. Cut-off grades are based on mining, processing and G & A costs of \$38/t.

14.2 Data Used

14.2.1 Drillholes, Trenches and Channel Samples

The data was provided in an Access database, the file being locked as of 31 December 2011. The database contains collars coordinates, surveys, assays, lithological logging and RQD data and was imported and verified in Datamine Studio software. Table 14.3 is a summary of the data used in the resource estimation. Underground channel samples and surface trench samples were treated as drillholes, although the latter were not used for grade estimation.

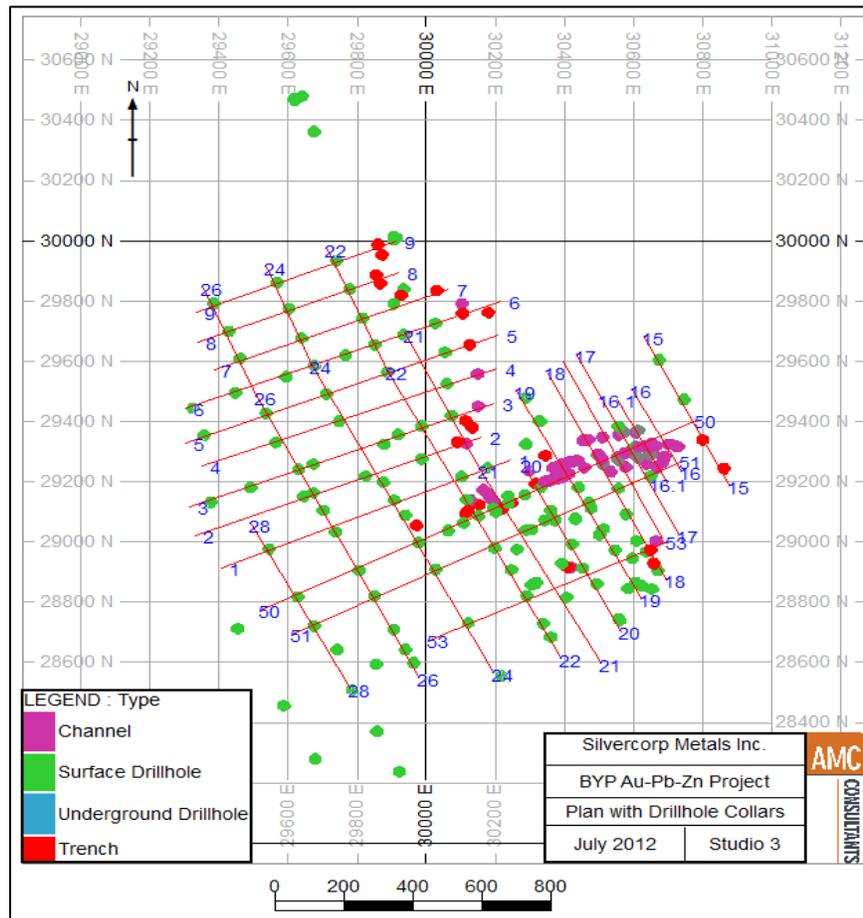
Table 14.3 Summary of Data Used

Drillhole Type	Item	Collars	Surveys	Assays	Litho Logs	Geotech
Surface Drillhole	# drillholes	137	137	108	109	18
	# samples	137	293	6813	1790	3116
Surface Trench	# trenches	26	26	11	13	0
	# samples	26	40	262	35	0
Underground Drillhole	# drillholes	23	23	23	21	23
	# samples	23	36	1160	345	2342
Underground Channel	# channels	94	94	91	4	0
	# samples	94	316	1011	13	0
Total	# drillholes	280	280	233	147	41
Total	# samples	280	685	9246	2183	5458

Note: The surface trenches were only used to aid the interpretation and were not used in the estimate.

Figure 14.1 shows the collar location of surface and underground drillholes, section lines, collar locations of underground channel samples and surface trench samples in plan view.

Figure 14.1 Location Plan of Drillholes, Channel Samples and Trenches



14.2.2 Bulk Density

An average bulk density value of 2.81 t/m³ was used for gold mineralization and an average bulk density of 3.03 t/m³ was used for lead-zinc mineralization based on direct bulk density measurements taken from a variety of sample types as discussed in Section 11.5.

14.3 Geological Interpretation

The interpretation of the mineralized domains was provided by Silvercorp. It is based on the understanding that both gold and lead-zinc mineralization occurs at and near the intersection of converging limbs of a southwest-plunging syncline. Gold mineralization is contained within sandstones and the overlying lead-zinc mineralization is contained within limestone, both of Middle Devonian age. The lead-zinc mineralization and a portion of the gold mineralization appear to be generally stratiform. However both gold and lead-zinc are also closely spatially related to several intersecting, west and northwest-dipping faults and the genesis and emplacement of both types of mineralization appears to be closely related to those faults.

Five lead-zinc zones and three gold zones were modelled as show in Figures 14.2 and 14.3. Silvercorp provided the wireframed models of the mineralized zones, which were verified by AMC. A total 25 separate solids were grouped into eight zones: three for gold mineralization and five for lead- zinc mineralization. The gold domains overlap the lead-zinc zones locally. Tables 14.4 and 14.5 summarize the mineralized zones.

Figure 14.2 3D View of Gold Mineralized Zones

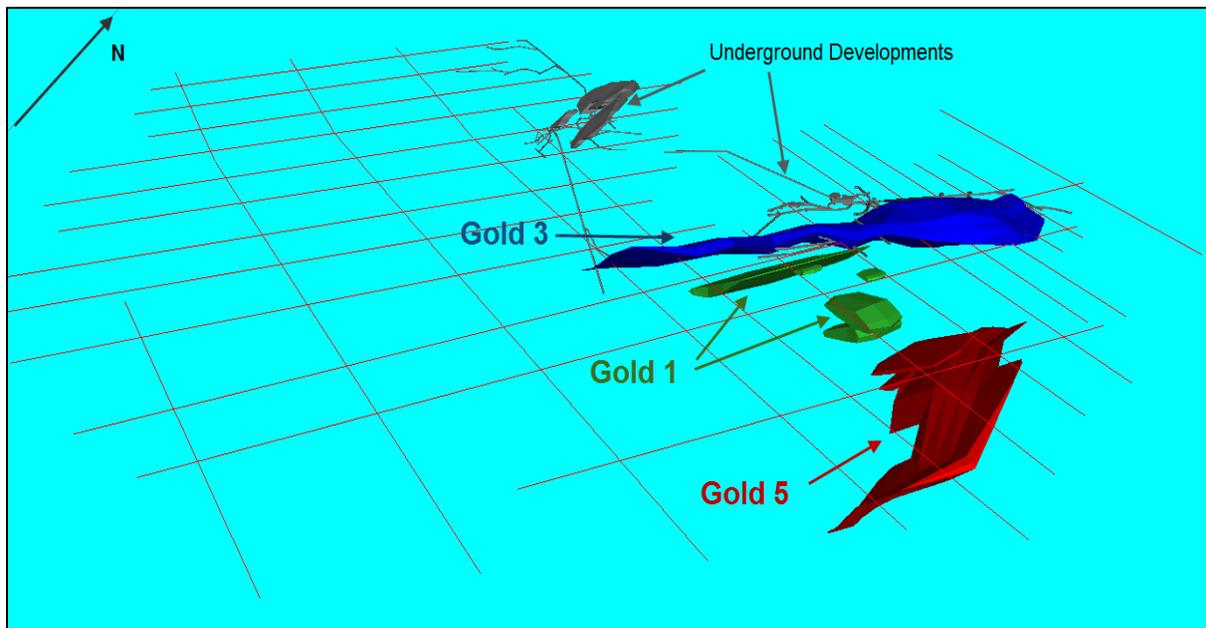


Figure 14.3 3D View of Lead-Zinc Mineralized Zones

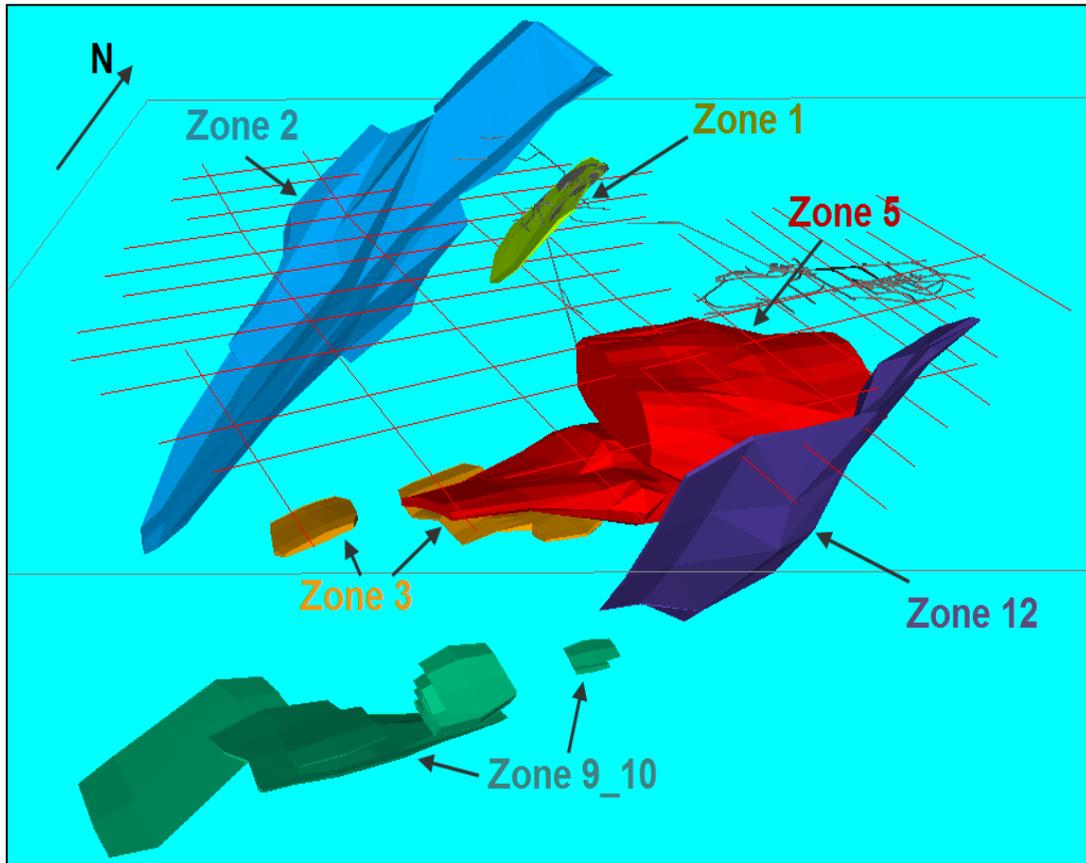


Table 14.4 Gold Mineralized Zones

#	Zone	Solids
1	Gold1	5
2	Gold3	1
3	Gold5	3
Total	3	9

Table 14.5 Lead-Zinc Mineralized Zones

#	Zone	Solids
1	Zone1_2	2
2	Zone3	2
3	Zone5	1
4	Zone9_10	10
5	Zone12	1
Total	5	16

A unique code was assigned to each zone so that grade would be interpolated only into blocks within the boundaries of the solid and so that the tonnage and grade of each zone could be

estimated individually. Visual checks were carried out to ensure that the grades respected the raw data and also lay within the constraining wireframes.

14.4 Statistics and Compositing

14.4.1 Statistics of Raw Data

Table 14.6 shows the statistics of the raw data.

Table 14.6 Univariate Statistics of Raw Data

Field	Au (g/t)	Pb (%)	Zn (%)
No of Samples	5438	4915	4904
Minimum	0	0	0
Maximum	30.1	19.8	34.26
Mean	0.93	0.29	0.58
Variance	4.88	0.70	2.04
Standard deviation	2.21	0.84	1.43
Standard error	0.02	0.01	0.02

Figures 14.4 through to 14.6 show the log histograms for gold, lead and zinc.

Figure 14.4 Log Histogram for Gold in Raw Data

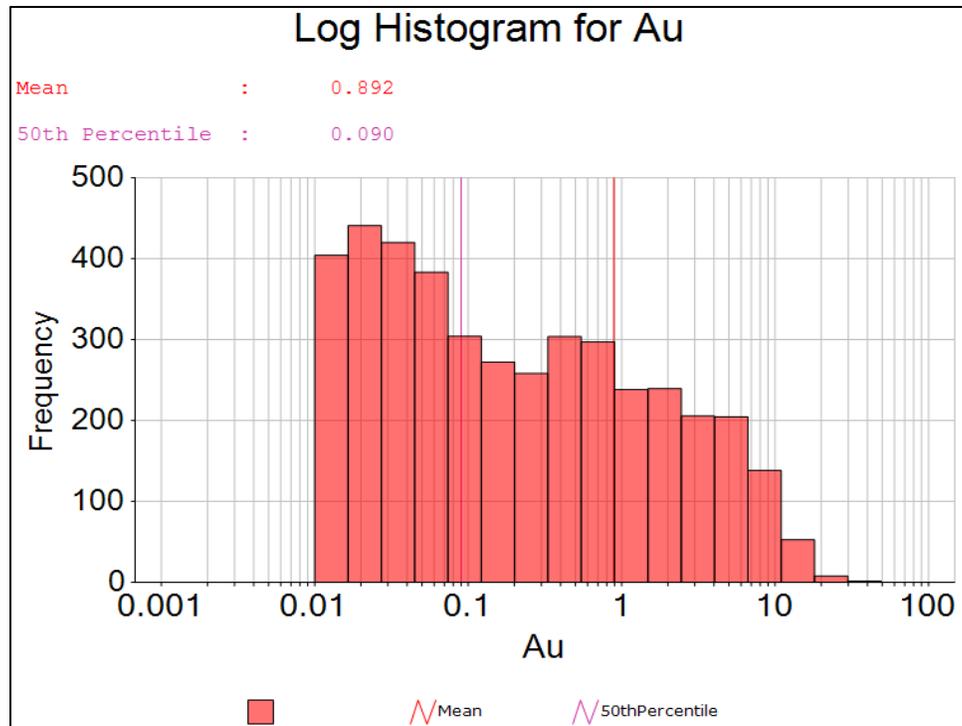


Figure 14.5 Log Histogram for Zinc in Raw Data

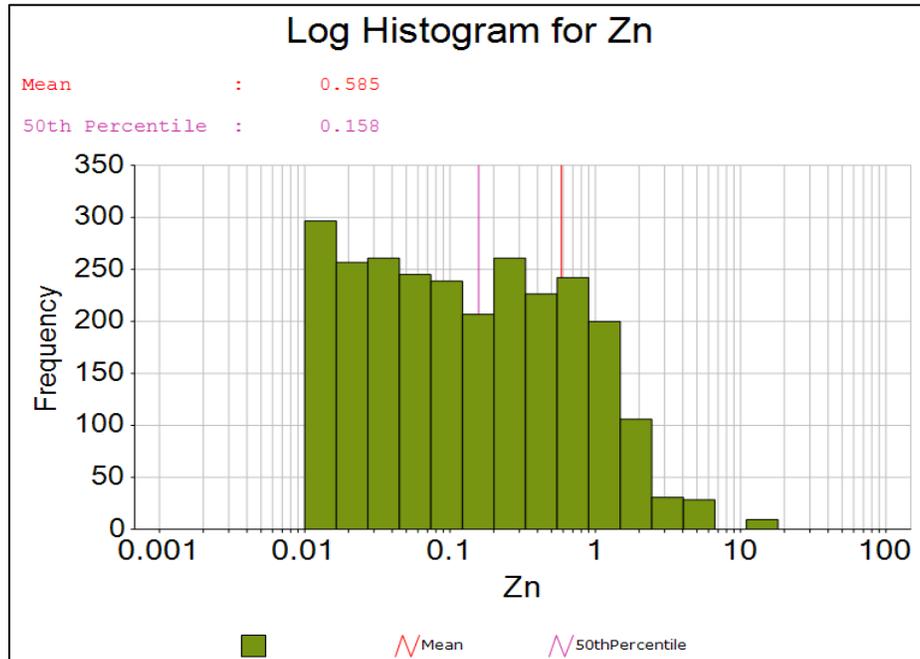
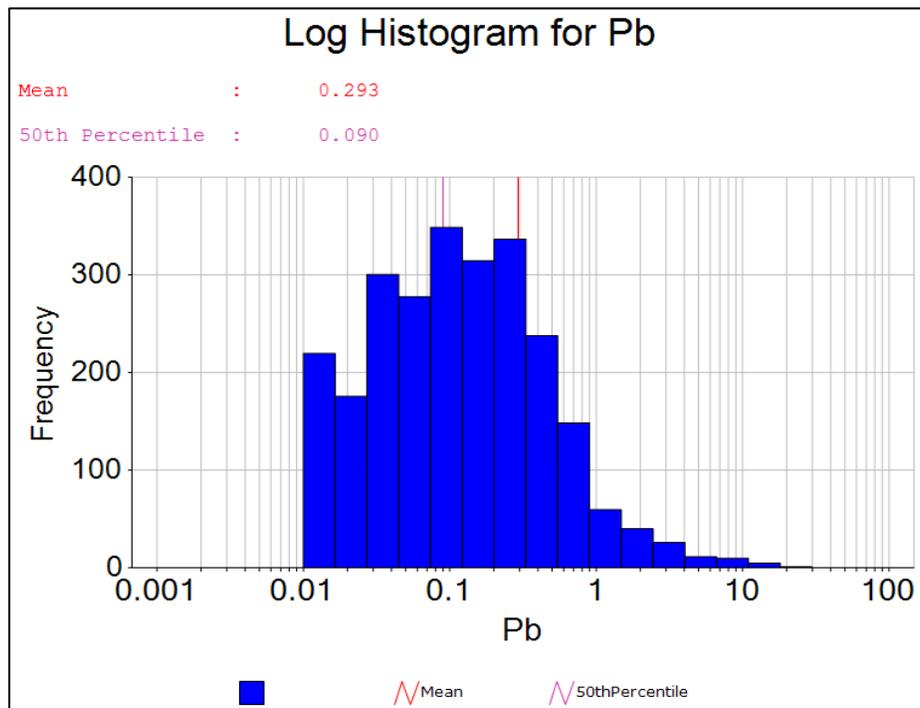


Figure 14.6 Log Histogram for Lead in Raw Data



14.4.2 Compositing

A review of sample lengths showed that 50% of the samples have a length 1.6 m. Table 14.7 shows the statistics of sample lengths for all four types of sampling. The median of the interval length of sampling varies from 0.74 to 2.0 m. As can be seen in Table 14.7, only the surfaces trenches have a mean length of less than 1 m. Surface samples represent only 5% of the total samples and were not used in the resource estimation. A composite length of 1 m was chosen by Silvercorp. This is considered acceptable although AMC would recommend the optimum interval as 1.5 m

Table 14.7 Statistics for Length in Raw Data Split by Type

Sample Type	No Samples	Minimum	Maximum	Mean	Variance	Stand dev	Median
Surface Drillhole	6813	0.01	513.67	6.02	808.63	28.44	1.50
Surface Trench	262	0.40	6.00	0.86	0.25	0.50	0.74
Underground Channel	1011	0.10	8.62	1.93	0.36	0.60	2.00
Underground Drillhole	1160	0.10	137.37	2.37	34.96	5.91	1.70

The composite statistics for gold, lead and zinc are shown in Tables 14.8 and 14.9.

Table 14.8 Composites Gold Statistics

Zone	Field	No Samples	Minimum	Maximum	Mean	Variance	Stand dev
Gold Zone 1	Au	138	0.02	5.62	1.41	1.10	1.05
Gold Zone 3	Au	2508	0.00	30.1	2.85	10.91	3.30
Gold Zone 5	Au	95	0.09	6.78	1.86	2.38	1.54

Table 14.9 Composites Lead and Zinc Statistics

Zone	Field	No Samples	Minimum	Maximum	Mean	Variance	Stand dev
Zone1_2	Pb	322	0.00	6.18	0.38	0.36	0.60
	Zn	322	0.00	16.89	2.23	3.97	1.99
Zone3	Pb	102	0.03	4.24	0.72	0.79	0.89
	Zn	102	0.02	6.41	1.93	2.49	1.58
Zone5	Pb	1275	0.00	6.00	0.21	0.23	0.48
	Zn	1275	0.00	14.01	0.39	0.75	0.87
Zone9_10	Pb	160	0.10	12.41	1.13	2.15	1.47
	Zn	160	0.06	29.65	2.93	12.77	3.57
Zone12	Pb	242	0.00	16.64	1.40	5.45	2.33
	Zn	242	0.00	16.72	1.97	8.64	2.94

14.4.3 Grade Capping

Statistics show that high grade values only occur in Gold Zone 3. As such, capping grades have only been applied to this zone.

Decile method was used for determination whether cutting of higher grades capping was appropriate (I.S.Parrish,1997). This is a quick study of the metal distribution within the sample population, where the total number of samples divided into deciles, based on grades ranges. Additional split of top decile assists the capping grade.

A decile analysis of the capped and un-capped gold grades shows a very slight difference as shown in Figure 14.7. The top decile of grades has less than 40% of contained metal, so the capping of the high grades is not warranted based on this analysis. However the probability plot of gold distribution in Gold Zone 3 shows a break starting at 19 g/t as shown in Figure 14.8. To be conservative, Gold Zone 3 composites were capped at 19 g/t.

Figure 14.7 Decile distribution for Gold Grades in Gold Zone 3

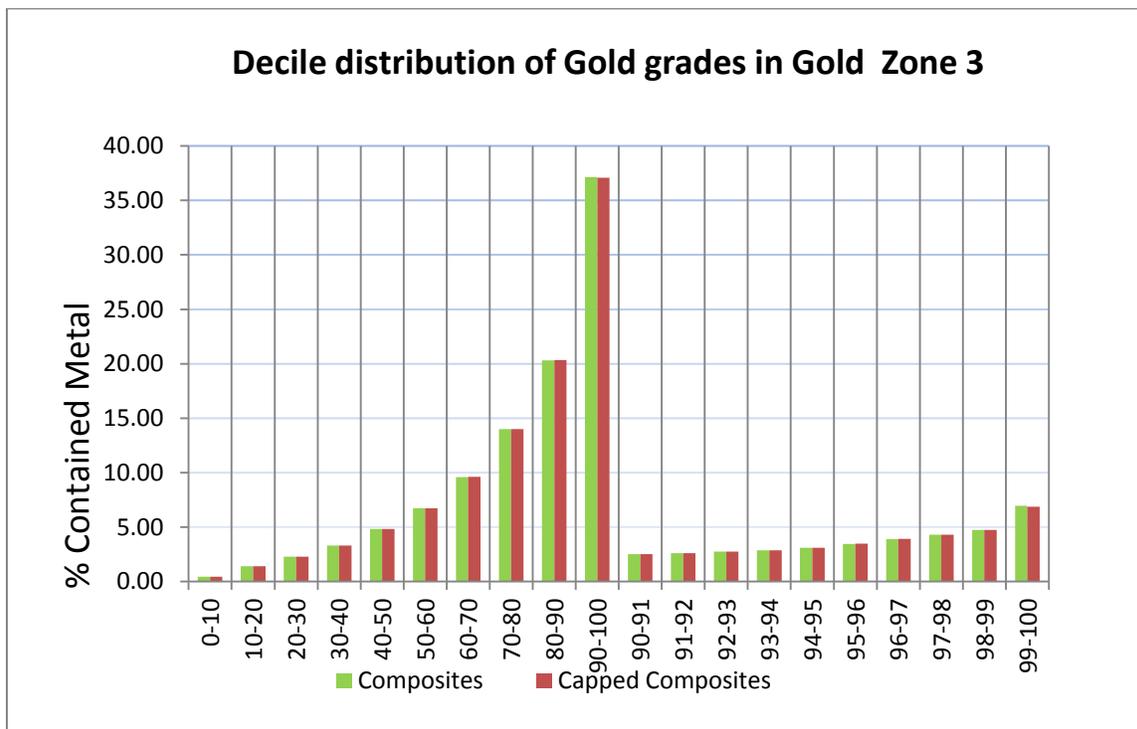
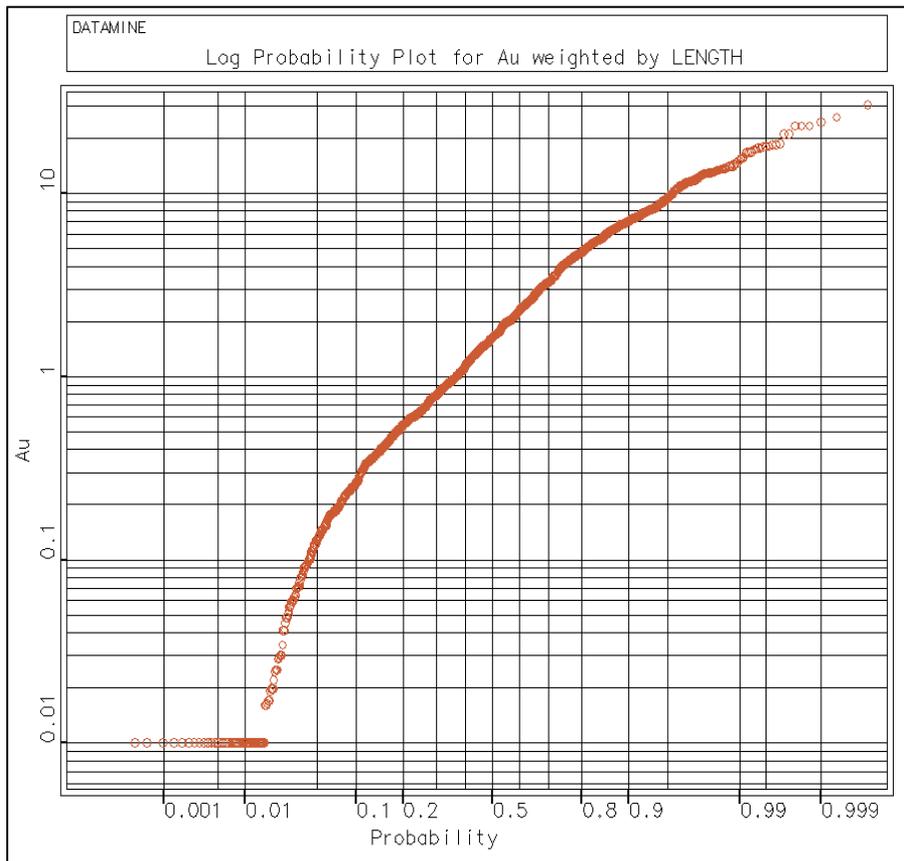


Figure 14.8 Probability Plot for Gold Grades in Composites of Gold Zone 3



14.5 Block Model

14.5.1 Block Model Parameters

Parent blocks of 5 m by 5 m x 2 m (vertical) were used in the block model. The block model name is BYP_MOD_AMC_JULY2012.DM and it has 549,103 records. The block model dimensions are shown in Table 14.10. The model is un-rotated and is in the local system of coordinates.

Table 14.10 Block Model Parameters

Item	X (Easting)	Y (Northing)	Z (Elevation)
Model Origin	29,288.326	28,425.372	-242.7
Parent cell size	5	5	2
Number of cells	289	294	366

Table 14.11 lists the block model fields.

Table 14.11 Block Model Fields

Field	Description
XC	Centroid X coordinate
YC	Centroid Y coordinate
ZC	Centroid Z coordinate
XINC	Cell size on X
YINC	Cell size on Y
ZINC	Cell size on Z
IJK	Identification number
ZONE	Mineralized zone
CLASS	Class (2-indicated, 3-inferred)
DENSITY	Default is 2.81 for Gold and 3.3 for Lead-Zinc Zones
AU	Estimated grade for Gold
Zn	Estimated grade for Zinc
Pb	Estimated grade for Lead
Pb+Zn	Sum of Lead and Zinc
NSAMPS	Number of samples
STOPE	1=mined out

14.5.2 Variography and Grade Estimation

14.5.2.1 Variography

Silvercorp conducted variogram analysis on Gold Zone 3 and Gols Zone 5 as these zones had sufficient sample density. The purpose of the variograms was to determine the length of the search radii.

Figure 14.9 shows the maximum search distance for gold is about 100 m. Figures 14.10 and 14.11 show the maximum search distance for lead and zinc is approximately 150 m.

Figure 14.9 Variogram of Gold for Gold Zone 3

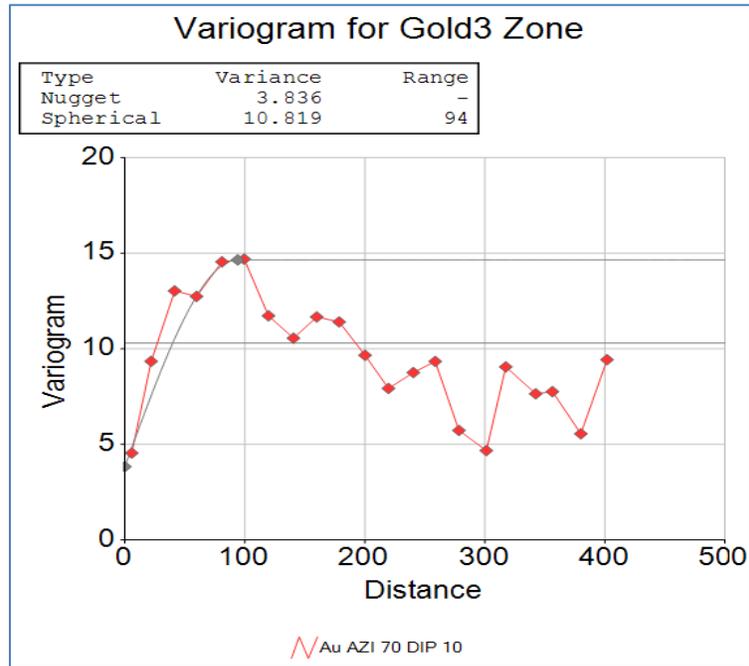


Figure 14.10 Variogram of Lead for Zone 5

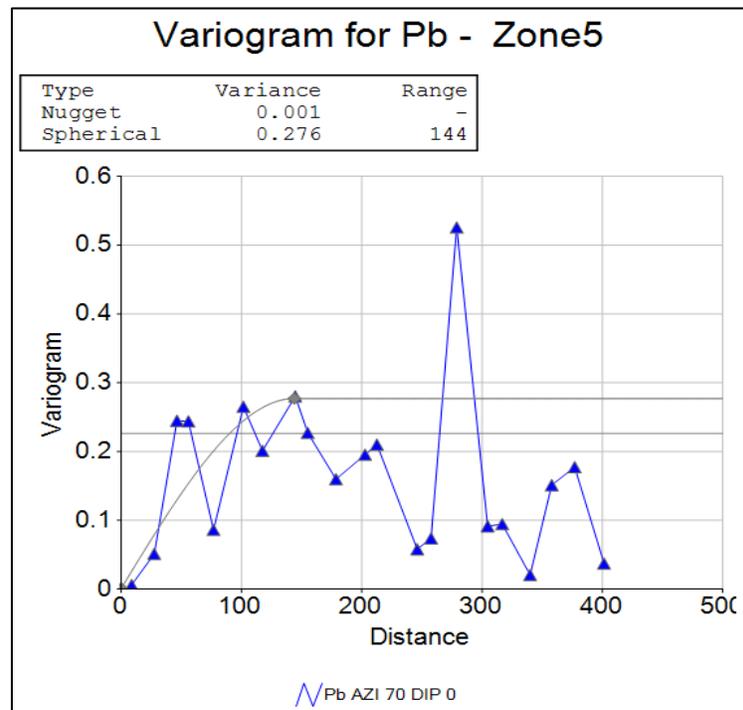
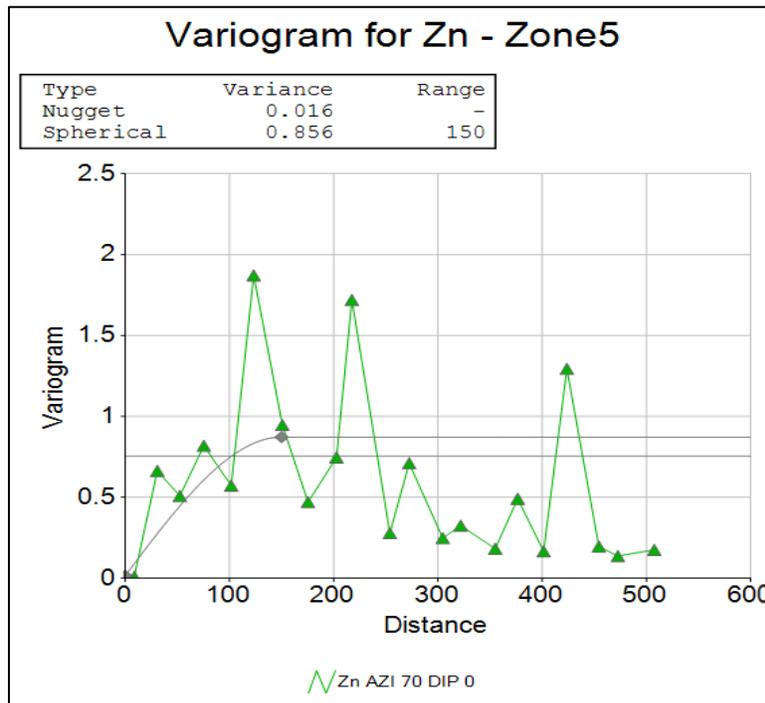


Figure 14.11 Variogram of Zinc for Zone 5



14.5.2.2 Estimation Method

The estimation method used was Inverse Distance Squared (ID^2) and was carried out using a 100 m x 100 m x 50 m search radius for gold mineralization and 150 m x 150 m x 75 m for lead-zinc mineralization. The method requires a minimum numbers of three composites for both the gold and lead-zinc mineralization. The parameters are shown in Table 14.12.

Table 14.12 Estimation Parameters

Zone	Search Radius (m)	Vertical Search (m)	Min Number Samples	Max Number Samples	Bearing	Plunge	Dip
Gold1	100	50	3	15	152	12	0
Gold3	100	50	3	15	150	18	0
Gold5	100	50	3	15	105	52	0
Zone1_2	150	75	3	30	66	34	15
Zone3	150	75	3	30	110	22	-22
Zone5	150	75	3	15	150	7	7
Zone9_10	150	75	3	30	140	22	0
Zone12	150	75	3	30	130	52	0

AMC verified the search parameters provided by Silvercorp and visually checked the three-dimensional search ellipsoids for all zones. The directions and search radius for each zone conformed with the strike and dip of mineralization. One example of the search ellipsoids is shown in Figures 14.12 and 14.13.

Figure 14.12 Search Ellipsoid for GOLD Zone 3 in Plan View

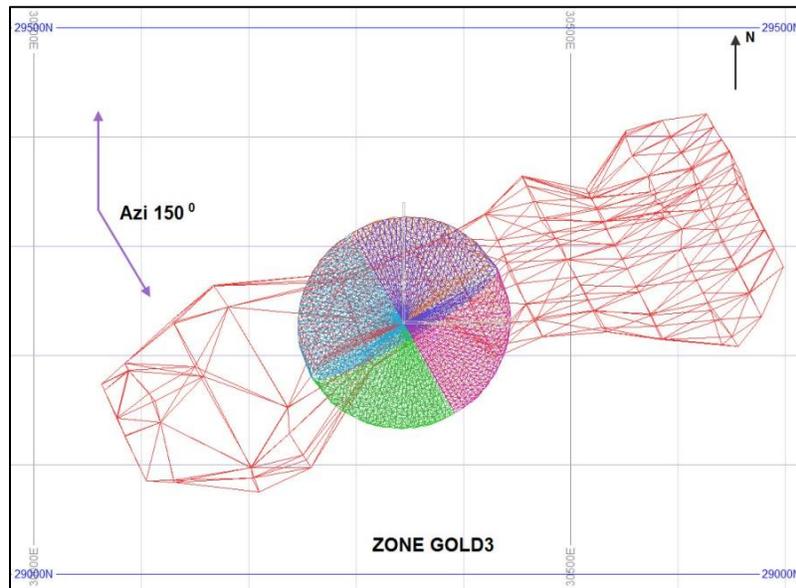
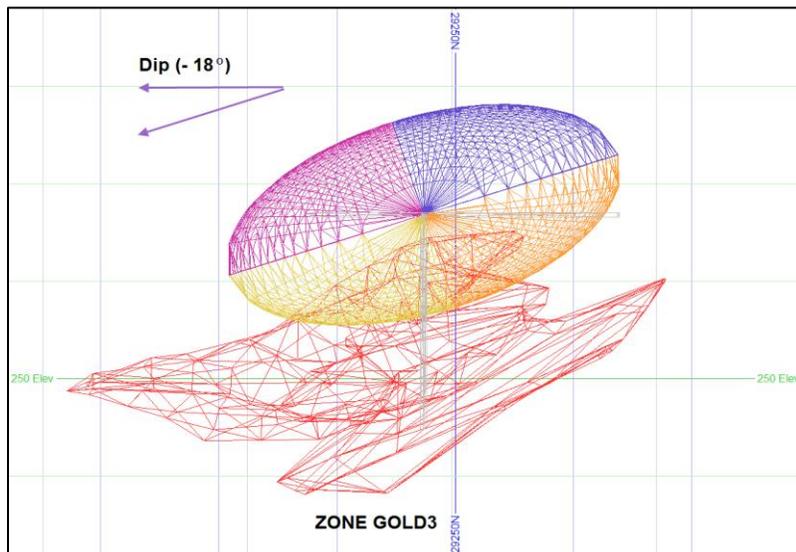


Figure 14.13 Search Ellipsoid for GOLD Zone 3 in Section View

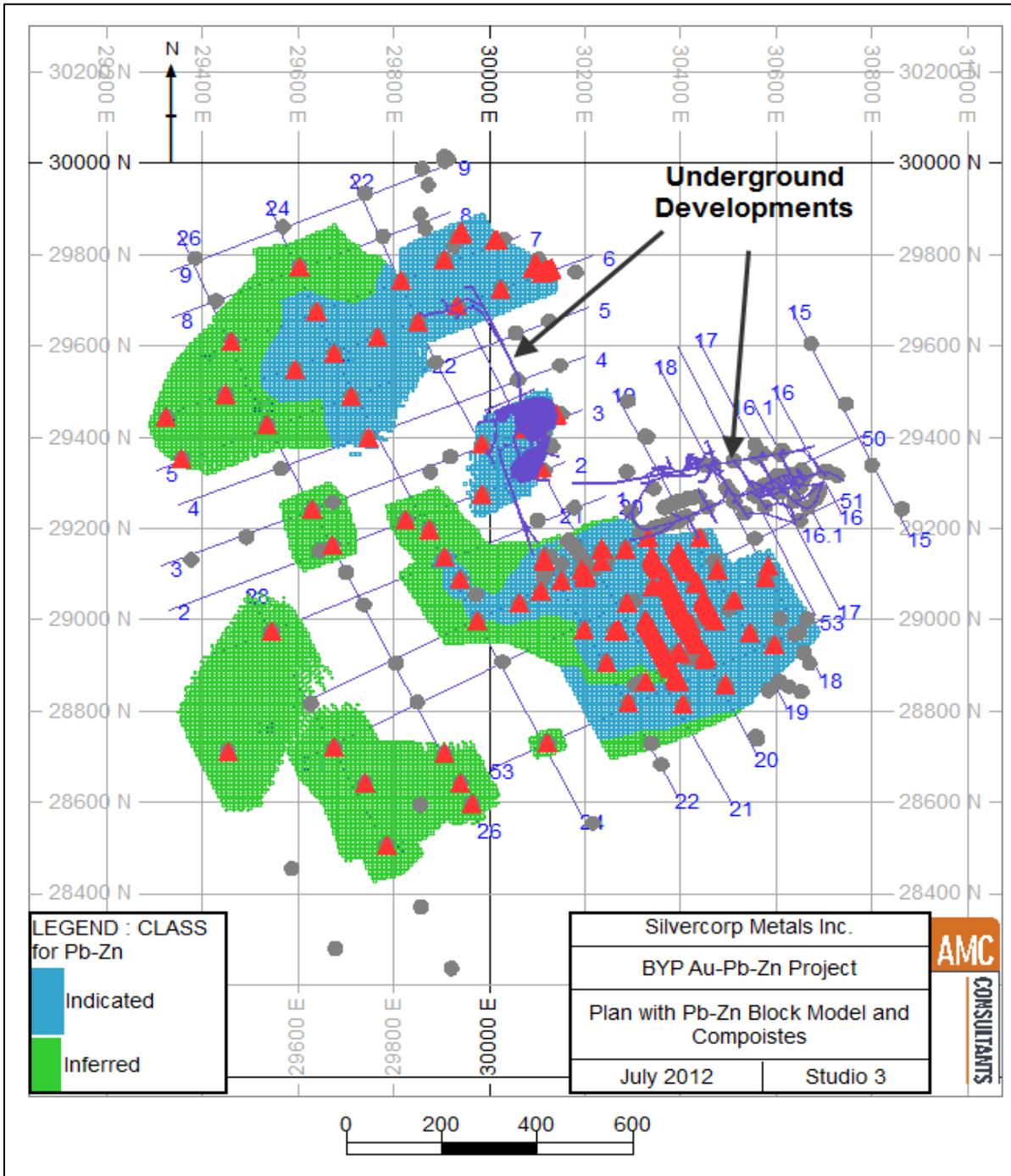


14.5.3 Resource Classification

In AMC's opinion, the mineral resources have been appropriately estimated but required modification with respect to the classification, mainly to remove an unreasonable degree of classification "spottiness". The reclassification by AMC increased the proportion of Indicated Resources and decreased the proportion of Inferred Resources over Silvercorp's estimate.

Figure 14.14 shows a plan projection of the lead-zinc block model, drillholes collars (grey) and composite (red) and underground developments.

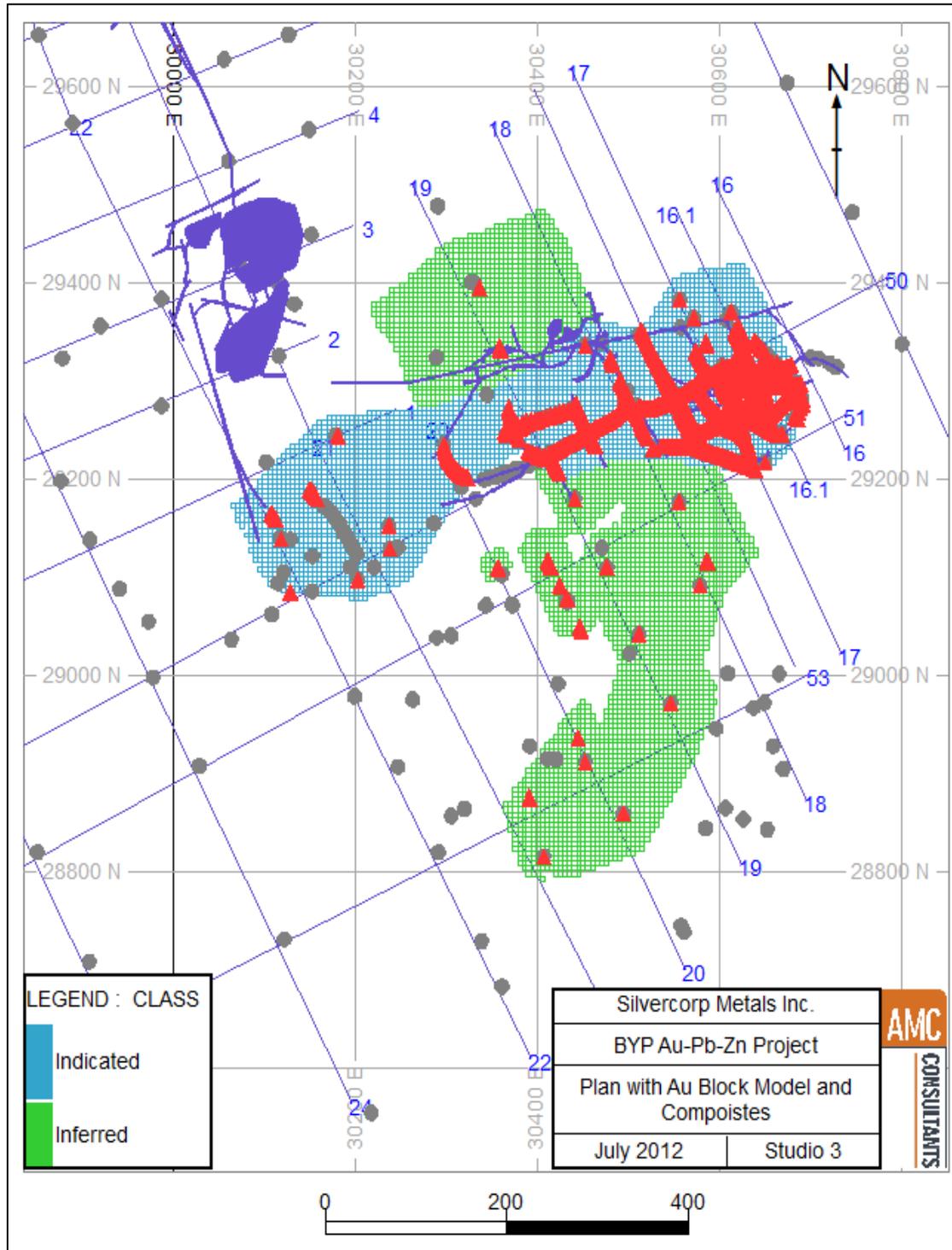
Figure 14.14 Inferred and Indicated Pb-Zn Zones in Plan View



Red = composites, Grey = collars of drillholes, channel samples and trench data

From all three gold mineralization zones, only zone Gold3 can be classified as Indicated. Figure 14.15 shows the Inferred and Indicated gold zones in plan view.

Figure 14.15 Inferred and Indicated Gold Zones in Plan View



Red = composites, Grey = collars of drillholes, channel samples and trench data

Figure 14.17 Longitudinal Section with Block Model Lead-Zinc Zone5 and Drillholes

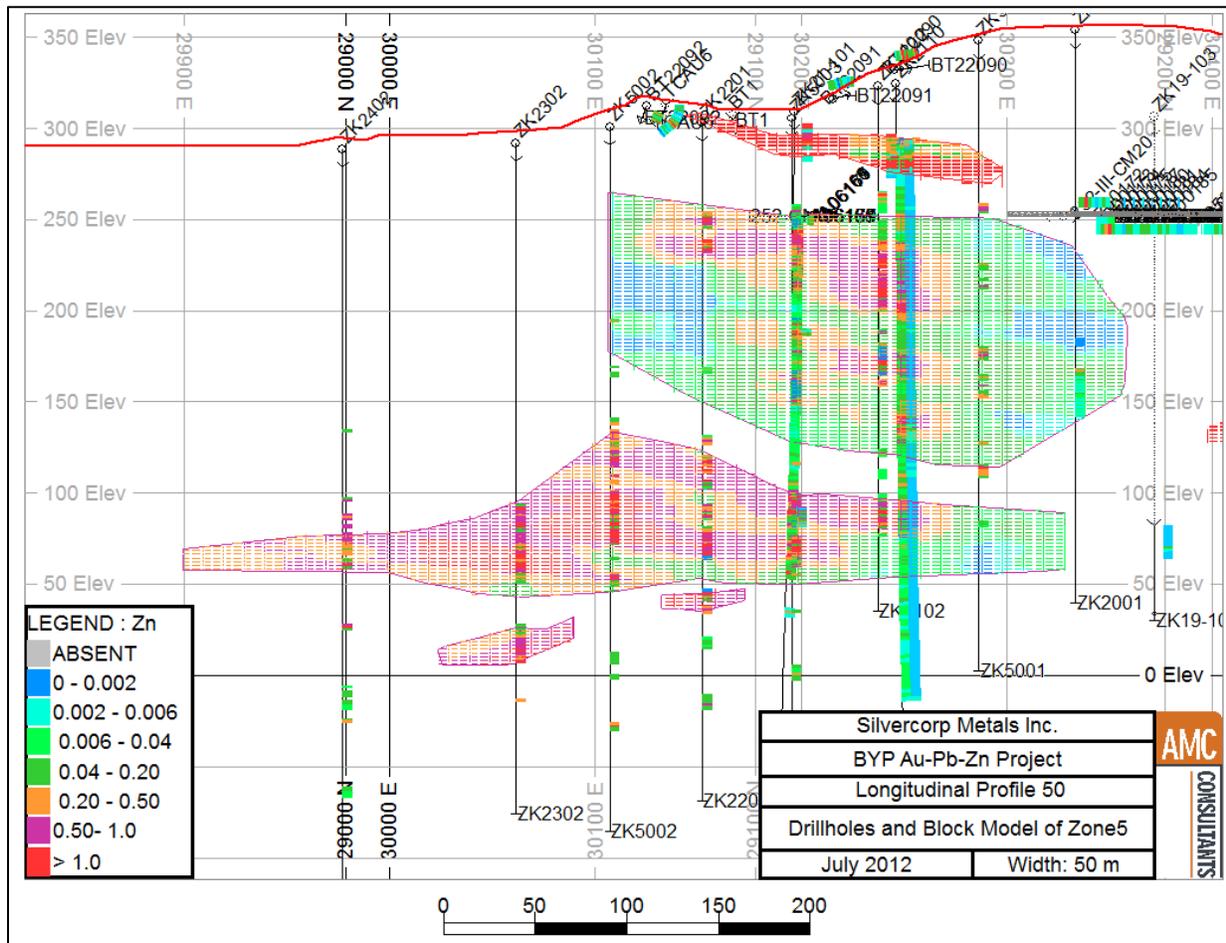


Table 14.13 shows the statistical comparison of the block model versus composites for the gold zones. There is a difference between the average grade of zone Gold3 in the block model and composites. Zone Gold3 relied heavily on closely spaced underground channel samples. The block model estimates restrict the maximum number of samples to 15. This is impacting the average grade and when the data is declustered the average grade of Gold3 composites is approximately 2.1 g/t.

Table 14.13 Statistics for Block Model vs Composites – Gold

Zone	Gold1	Gold1	Gold3	Gold3	Gold5	Gold5
File	Block Model	Composites	Block Model	Composites	Block Model	Composites
NSAMPLES	12569	138	36051	2508	10027	95
MINIMUM	0.234	0.02	0.001	0.00	0.143	0.09
MAXIMUM	3.73	5.62	16.39	19	6.12	6.78
MEAN	1.34	1.41	1.99	2.83	1.95	1.86
VARIANCE	0.21	1.10	2.72	10.31	1.28	2.38
STANDDEV	0.46	1.05	1.65	3.21	1.13	1.54

Table 14.14 and Table 14.15 show the statistical comparison of the block model versus composites for the lead-zinc zones. There are only slight differences between the average grades in the block model and composites.

Table 14.14 Statistics for Block Model versus Composites – Zinc

Zone	Zone1_2		Zone3		zone5		Zone9_10		Zone12	
File	Block Model	Comp								
NSAMPLES	322	67524	102	14410	1275	340199	160	25600	242	38517
MINIMUM	0.00	0.16	0.02	0.021	0.00	0.0	0.06	0.103	0.00	0
MAXIMUM	16.89	13.94	6.41	5.38	14.01	12.12	29.65	16.04	16.72	14.06
MEAN	2.23	1.85	1.93	1.93	0.39	0.43	2.93	3.06	1.97	1.94
VARIANCE	3.97	0.64	2.49	1.08	0.75	0.21	12.77	4.88	8.64	3.36
STANDDEV	1.99	0.80	1.58	1.04	0.87	0.46	3.57	2.21	2.94	1.83

Table 14.15 Statistics for Block Model versus Composites – Lead

Zone	Zone1_2		Zone3		zone5		Zone9_10		Zone12	
File	Block Model	Comp								
NSAMPLES	322	67524	102	14410	1275	340199	160	25600	242	38517
MINIMUM	0.00	0	0.03	0.085	0.00	0.0	0.10	0.159	0.00	0
MAXIMUM	6.18	3.63	4.24	3.22	6.00	4.03	12.41	6.27	16.64	12.37
MEAN	0.38	0.22	0.72	0.75	0.21	0.23	1.13	1.13	1.40	1.24
VARIANCE	0.36	0.05	0.79	0.32	0.23	0.06	2.15	0.65	5.45	1.57
STANDDEV	0.60	0.23	0.89	0.57	0.48	0.25	1.47	0.81	2.33	1.25

14.6 Mineral Resource Estimates

The results from the AMC review and reclassification are shown in the tables below. Table 14.16 shows a summary of the mineral resource and metal content for gold at a cut-off of 1 g/t gold. This cut-off is based on mining, processing and G & A costs provided by Silvercorp and reviewed by AMC.

Table 14.16 Mineral Resources and Metal Content for Gold as of December 2011

Class	Tonnes (M)	Au (g/t)	Au Metal (K oz)
Indicated	3.51	2.59	292
Inferred	2.47	1.84	146

- Notes:
1. CIM definitions apply
 2. The cut off applied is 1 g/t Au for both classes
 3. Resources are rounded to nearest 10,000 tonnes
 4. Figures may not compute due to rounding
 5. Cut-off grades are based on mining, processing and G & A costs of \$38/t.

Table 14.17 shows the minerals resources based on a 2% cut off grade of Pb+Zn. This cut-off is based on mining, processing and G & A costs provided by Silvercorp and reviewed by AMC.

Table 14.17 Mineral Resources and Metal Content for Lead and Zinc as of December 2011

Class	Tonnes (M)	Pb (%)	Zn (%)	Pb Metal (M lb)	Zn Metal (M lb)
Indicated	7.33	1.16	2.52	187	408
Inferred	7.55	0.85	2.75	141	457

Notes: 1. CIM definitions apply
 2. The Pb+Zn cut-off grade is 2% for both classes
 3. Resources are rounded to nearest 10,000 tonnes
 4. Mined tonnages deducted
 5. Figures may not compute due to rounding
 6. Cut-off grades are based on mining, processing and G & A costs of \$38/t.

In Table 14.18, the gold mineral resources are shown at a range of cut off grades with the preferred resource estimate in bold. The same notes apply as above.

Table 14.18 Gold Mineral Resources, Range of Cut-off Grades

COG (Au)	Indicated Resources			Inferred Resources		
	Tonnes (M)	Au (g/t)	Au Metal (K oz)	Tonnes (M)	Au (g/t)	Au Metal (K oz)
0.5	4.61	2.15	319	3.15	1.62	164
1	3.51	2.59	292	2.47	1.84	146
2	1.84	3.67	217	0.65	2.96	61
3	1.02	4.64	153	0.21	4.27	29

In Table 14.19, the lead-zinc mineral resources are shown at a range of cut off grades with the preferred resource estimate in bold. Mined-out areas have been subtracted from the resource. The same notes apply as above.

Table 14.19 Lead-Zinc Mineral Resources, Range of Cut-off Grades

Indicated Resources					
COG (Pb+Zn)	Tonnes (M)	Pb (%)	Zn (%)	Pb (M lb)	Zn (M lb)
1	19.85	0.69	1.56	301	683
2	7.33	1.16	2.52	187	408
3	3.57	1.68	3.31	132	261
4	1.95	2.20	4.08	95	175
Inferred Resources					
COG (Pb+Zn)	Tonnes (M)	Pb (%)	Zn (%)	Pb (M lb)	Zn (M lb)
1	12.27	0.65	2.18	175	590
2	7.55	0.85	2.75	141	457
3	3.10	1.17	4.13	79	279
4	1.87	1.49	4.99	62	206

AMC is not aware of any known environmental, permitting, legal, title, taxation, socio economic, marketing, political, or other similar factors which could materially affect the stated mineral resource estimates. As noted in Section 4 of this report, the BYP mine is currently only permitted for the extraction of lead and zinc and an application for gold extraction is being processed. In AMC's opinion, there is a reasonable expectation of the application being granted.

14.7 Comparison with June 2011 Resource Estimate

The most recently published resource estimate on the Property is the June 2011 Technical Report. A comparison between the two resources is affected by additional drilling that has been conducted since the June 2011 estimate. Table 14.20 and Table 14.21 show a comparison between the resources. As expected with additional infill drilling, the Indicated Resource for gold has increased. The 2011 Technical Report did not include an Indicated Resource for lead and zinc mineralization.

Table 14.20 Comparison of Gold Resources at 1 g/t Au Cut-off Grade

	December 2011		June 2011	
	Indicated	Inferred	Indicated	Inferred
Tonnes (M)	3.51	2.47	2.14	2.82
Au (g/t)	2.59	1.84	3.27	2.29
Oz (k)	292	146	225	208

Table 14.21 Comparison of Lead-Zinc Resources at 2% Pb+Zn Cut-off Grade

	December 2011		June 2011
	Indicated	Inferred	Inferred
Tonnes (M)	7.33	7.55	17.57
Pb (%)	1.16	0.85	0.95
Zn (%)	2.52	2.75	2.57
Pb Metal (M lb)	187	141	366
Zn Metal (M lb)	408	457	995

The decrease in average gold grade between the June 2011 and December 2011 estimates is attributable mainly to the June 2011 estimate being based primarily on historical data, including limited data from Silvercorp's underground sampling from pre-2011 previous tunnels, which related mainly to the higher grade Gold Zone 3. Silvercorp's exploration program later in 2011 delineated additional low grade gold zones, which reduced the average resource grade while increasing the tonnage.

The increase in the tonnage of Indicated lead-zinc resources in December 2011 from zero in June 2011 is due to the additional drilling undertaken in 2011.

If mining costs increase to around \$60/t as discussed in Section 16, resource cut off grades would increase to approximately 1.25 g/t Au for gold mineralization and approximately 3.4% Pb+Zn for lead-zinc mineralization. Contained gold in resources would decrease by only

around 6%, while contained lead plus zinc in resources would be substantially affected, decreasing by 40-45%.

14.8 Recommendations

There are a number of recommendations that AMC makes with respect to the model supplied by Silvercorp that are considered unlikely to impact materially on the global resource estimates. These include:

- Existing topographic requires updating.
- Wireframes solids locally overlap. This does not affect the resource when a cut-grade is applied but should be rectified.
- Due to the locally narrow nature of the mineralization it is recommended that the model be subcelled.
- The composites interval of 1 m is acceptable, though AMC recommends the optimum interval as 1.5 m.
- In the current estimate, grade capping was used, although it does not materially affect the resource. If additional drilling is conducted on Zone Gold3, analysis of the capping should be reviewed.

15 MINERAL RESERVE ESTIMATES

There are no mineral reserve estimates for the Property.

16 MINING METHODS

16.1 Introduction

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 writing, Silvercorp had not prepared an estimate of mineral reserves.

Over seven years of mining activity preceded Silvercorp’s assumption of ownership of the Project in January 2011. The BYP underground operation has been developed using small, conventional tracked equipment (battery locomotive, rail cars, electric rocker shovels and pneumatic hand-held drills). On the west side of the mine, #1 Main and auxiliary adits, and #2 Main Adit serve as fresh air-intake routes and provide access to the various mine levels via internal declines. An exhaust air portal is located on the east side of the mine.

In October 2011, Silvercorp began sinking a 265 m deep shaft to 115 mRL from a surface location adjacent to the crusher site at 380 mRL. The shaft will be used to transport ore and materials, and to provide ventilation and allow underground exploration and development access.

The stope extraction sequence is bottom-up, but with the inter-level extraction sequence generally being top-down. Shrinkage stoping is the main mining method. Stope production drilling is by jackleg and in-stope rock movement is by gravity to draw points. Production mucking is mostly via hand shovels or, occasionally, rocker shovels to rail cars pulled by battery locomotive. Ore transport to surface in up to 4-car trains is via hoist in the decline ore pass and then via electric or battery loco in the adit. From adjacent to the #2 Adit, cars are pulled to the crusher site by a surface hoist installed at 380 m elevation (45 m above #2 Adit – see Figures 16.1 and 16.2).

Figure 16.1 No. 2 Adit and Surface Rail Haulage Incline



Figure 16.2 Surface Hoist Station and Rail Haulage Incline



16.2 Mining Methods & Mine Design

16.2.1 Geotechnical and Hydrogeological Considerations

AMC is not aware of any quantitative geotechnical information that exists for the Property but understands that geotechnical considerations around the mineralized areas have played a significant role in limiting anticipated production rates. Observations during the AMC site visit were of a variety of ground conditions. AMC noted the use of timber, shotcrete, mesh and bolts in areas where ground instability had been encountered. AMC also notes that 4 m rib pillars between stopes have been employed and that placement of cemented tailings backfill into stope voids is being planned for future mining. The excavation of relatively small openings, both in development and stoping, facilitates ground stability, but AMC recommends that a particularly proactive emphasis be placed on ground control and appropriate support in all mining activities.

AMC is not aware that water in-flow to date at the BYP mine has created any particular operating problems. Section 16.2.9 discusses mine dewatering.

16.2.2 Development and Access

The BYP surface accesses are located on the sides of a narrow valley – see Figure 16.3.

As referenced above, #1 and #2 adits provide access from the surface to the mining areas and sinking of a 265 m deep shaft from a surface location above the adits has been underway since the Fall of 2011. The adits are driven slightly to the rise at dimensions of approximately 2.2 m by 2.2 m. As well as being the means of access for men and materials and transport of ore and waste, the adits carry all services such as electrical, compressed air, drill water and

dewatering lines. They are also used for delivery and removal of fresh and return air respectively, and are equipped with narrow gauge rail for the transport of railcars.

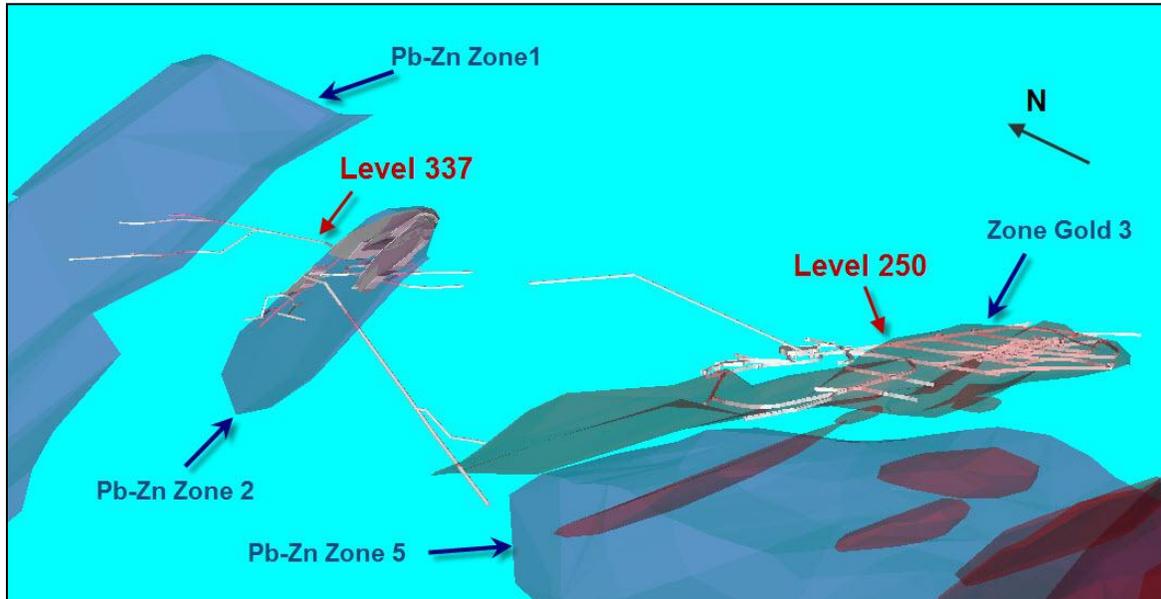
Figure 16.3 Property Valley Viewed from the Surface Site



Operational levels currently connect to declines which are driven at approximately 25 to 28°. Typical dimensions are 2.4 m W x 2.2 m H. They are equipped with narrow gauge rail and steps on one side for foot travel. The main purpose of these drives is haulage of ore and waste, and delivery of ventilation and other services such as water, compressed air, communications and electricity.

Figure 16.4 is an orthogonal view of the BYP underground development.

Figure 16.4 BYP Underground Development

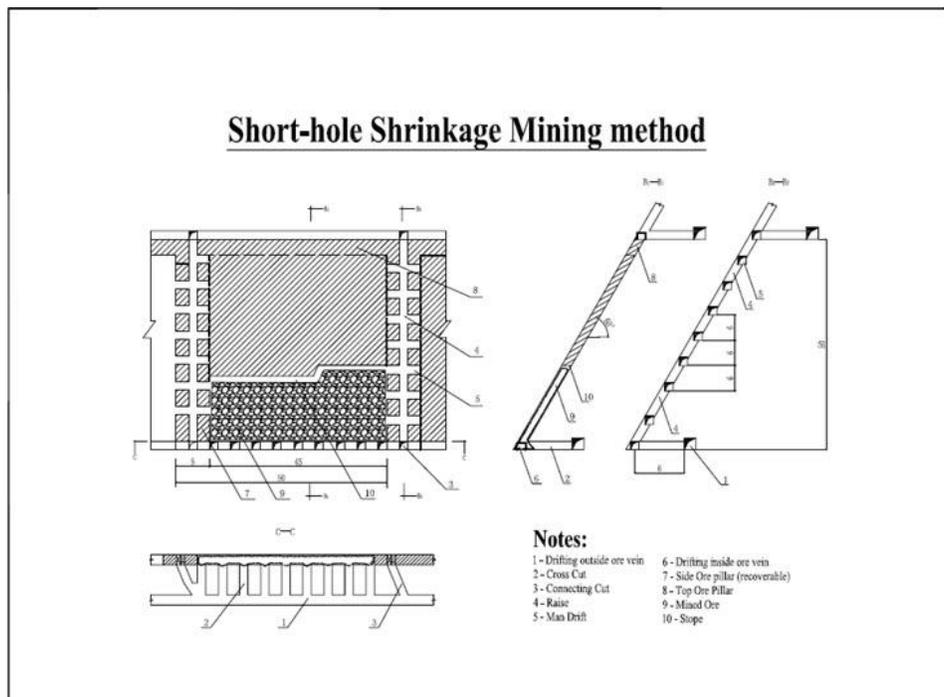


16.2.3 Mining Method

16.2.3.1 Shrinkage Stopping

Variations of shrinkage stoping have been, and continue to be employed at BYP. Figure 16.5 illustrates shrinkage stoping as used in narrow veins.

Figure 16.5 Shrinkage Stopping Method (Narrow Veins)



In wider areas, pillars may be left between 4 m stopping panels or waste packs may be built to allow pillars to be extracted. Figure 16.6 illustrates the envisaged shrinkage stopping variation for the #3 Gold Zone, with paste fill used in primary panels to facilitate secondary panel extraction. Four primary stopping panels and three secondary panels are shown over an ore width of approximately 28 m.

Figure 16.6 Envisaged Shrinkage Stopping Method for Gold Zone 3

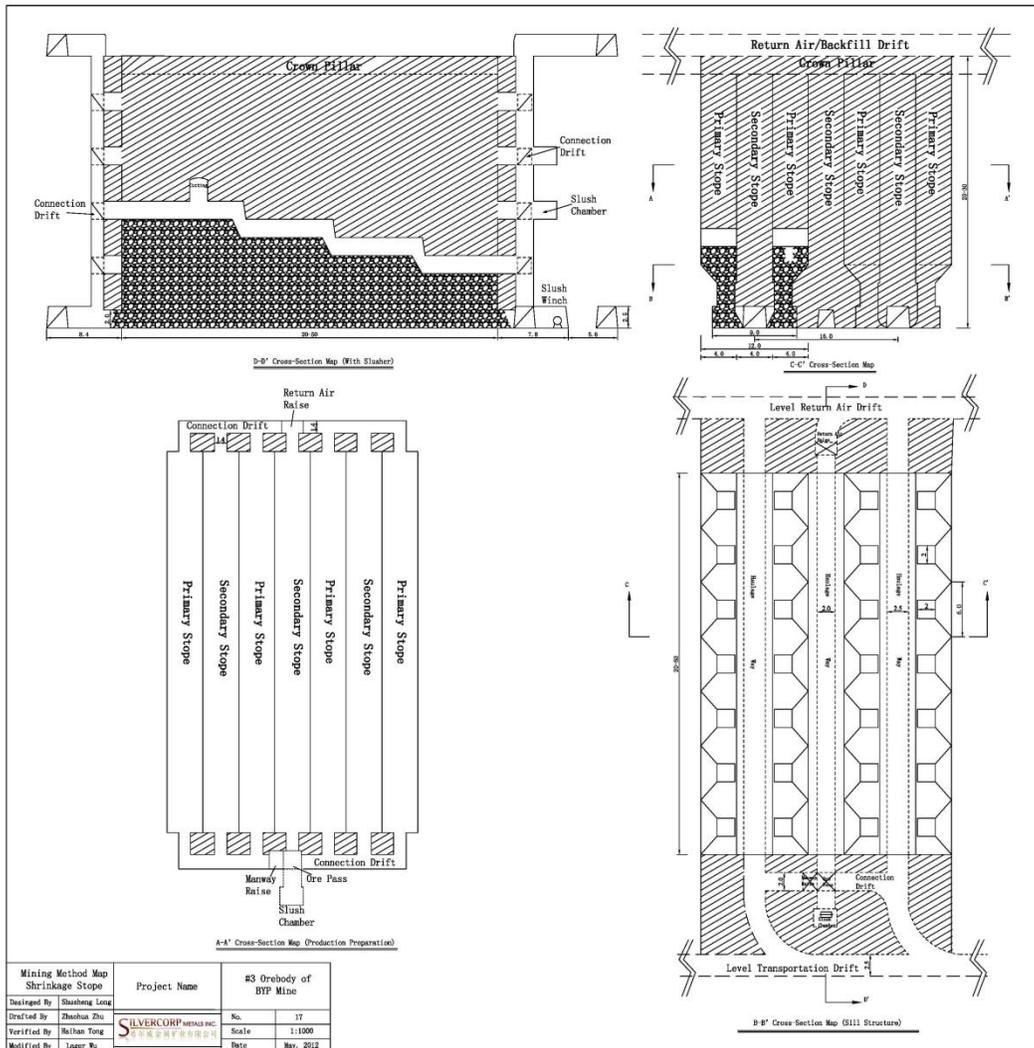


Figure 16.7 shows a typical draw-point access at BYP.

Figure 16.7 Typical Draw-Point Access



16.2.3.2 Dilution and Recovery Factors

AMC understands that factors for dilution and mining recovery at BYP are 5% and 95% respectively. AMC considers that both factors are towards the upper limit of what is reasonably achievable and recommends that they be reviewed in the light of physical extraction constraints and actual reconciliation of mining plan against measured recovery.

16.2.4 Contractor Operation

Wenzhou Yunfeng Construction Ltd. is the main BYP mining contractor. The contract was signed on June 20th, 2011 and is based on a series of bonus and penalty clauses. The cheaper cost of labour and material in China results in costs that, in general, are significantly less than those in Canada or other similar jurisdictions.

As per the contract, Silvercorp will provide mining equipment including winches, generators, air compressors, rail cars, rail tracks and ties, electric cables both for surface and underground, underground pumps and dewatering pipeline, and the main fan for the mining operation. The contractor is responsible for maintenance, repairs and replacement. Silvercorp is also responsible for providing the pipeline for the compressed air and water supply, and main cables for declines, shaft and major transportation drift. Explosives, ground support materials and electricity consumption for underground mining are all provided by Silvercorp. The mine contractor is responsible for underground mining and related consumables.

16.2.5 Ore & Waste Haulage

Current operations are mainly between 338 mRL and 212 mRL. Access to these levels is via adits plus declines. All of the rock from each level is hoisted from declines to adits, and then is transported either to surface ore bins or the waste dump.

A skip shaft is currently under construction between 380 mRL and 115 mRL. Once completed it will be the major hoist for transportation of ore and waste between those elevations.

Currently, hoist winches in #1 Main Adit and #2 Main Adit blind declines are used to transport ore, waste, materials, and equipment. On mining and development levels, the 0.7m³ side-tipping railcars are pushed manually in the lateral drifts and moved by a battery locomotive in the main transportation ways. At the level plat area of blind declines, the railcars are hoisted to adit levels by winches in groups of four units. In the adits, groups of up to eight cars are pulled by a battery or diesel locomotive to the surface.

At surface, ore cars are transported to the unloading platform at 370 mRL via a surface ramp (see Figures 16.1 and 16.2), where the ore is unloaded into an ore bin. Waste cars are tipped adjacent to the adit, with the waste being loaded by a ZL-50 loader into trucks and trucked to a waste dump. It is anticipated that a significant amount of future waste rock will be used underground as backfill material. AMC understands that all waste rock dumps are constructed based on the "Pollution Control Standard of Common Industry Solid Waste Disposal".

Currently there is a temporary waste dump at the portal area of the mine. Most of the waste rock can be recycled for other purposes. Waste not recycled is trucked and dumped to the permanent waste dump south of Zhu Mountain. This waste dump has a capacity of 25,000 m³. Based on preliminary design for the BYP mine, approximately 20,000 m³ of waste rock will be generated over the life-of-mine, of which about 15,000 m³ will be used for backfill.

16.2.6 Equipment

16.2.6.1 Mine Equipment

Other than some auxiliary fans, all key mining equipment is provided by Silvercorp. Maintenance is a contractor responsibility.

Fixed plant is provided by Silvercorp and is predominantly domestically manufactured and locally sourced (Hunan Province). The equipment manufacturers are well known and commonly used.

Tables 16.1 and 16.2 list equipment in the BYP mine.

Table 16.1 Current Owner Equipment List at the BYP Mine

Equipment	Capacity	Quantities
Winch	15-75kW	6
Pump	15-75kW	13
Compressor	37-110kW	4
Generator	150-500kW	2
Fan	11-75kW	4
Transformer	1000kVA	1
High Voltage Feeder Cabinet	1000kVA	1
Low Voltage Feeder Cabinet	600-2000A	3
Low Voltage Reactive Compensation Cabinet	600-1500A	2
Switch Board Cabinet	600-1000A	4
Low Voltage Feeder Cabinet	600-1000A	2
Agitator	3kW	2
Electric Locomotive	3.5kW	2
Cement Pump	11kW	1
Mechanical Mucker	22kW	2
Rail Scale	3t	1
Rail Car	0.7m ³	93
Loader	15kW	2

Table 16.2 Mining Contractor Equipment

Equipment	Capacity	Quantities
Agitator		2
Cement Container		1
Cement Pump	90kW	1
Cement Scale		1
Cement spiral conveyor		1
Compressor	75kW	3
Diesel Locomotive	3.5-14kW	4
Shotcrete Machine		1
Fan	5.5-18.5kW	26
Hand-held Drill (Jackleg)		50
Loader	26kW	4
Low Voltage Transformer	output 36V	33
Mucker	11kW	1
Pickup Truck		3
Pump	2.2kW	12
Sewage Pump	5.5kW	5
Winch	15-132kW	13

16.2.6.2 Equipment Advance Rates

Table 16.3 summarizes the advance rates normally assumed for development and production activities.

Table 16.3 Equipment Advance Rates

Development or Production Activity	Schedule Rate (m/month)	Machine Type
Jackleg – Levels (Hand Mucking)	50	Jackleg (YT-7655)
Jackleg – Stope Raises	40	Jackleg (YT-7655)
Jackleg – Shaft (Mechanical Mucking)	55	Jackleg (YT-7655)
Jackleg – Declines (Mechanical Mucking)	70	Jackleg (YT-7655)

AMC notes that recently projected advance rates for shaft and decline development are 60 m/month and 80 m/month, respectively.

16.2.7 Manpower

The workforce at the BYP Mine is made up of company and contractor personnel. Contractors are used for mine development, production, and exploration. Silvercorp personnel are used for the operation and maintenance of the process plant and surface workshop. Silvercorp provides its own management, technical services and supervisory staff to manage the mine operations. The BYP Mine in total has about 257 workers, including Silvercorp's 107 staff and 150 contract workers from Yunfeng Engineering.

BYP mine will contract an engineering company for mine construction work and technical services such as tailings dam construction and backfill operation.

Table 16.4 is a breakdown of personnel as of December 2011.

Table 16.4 BYP Personnel at December 2011

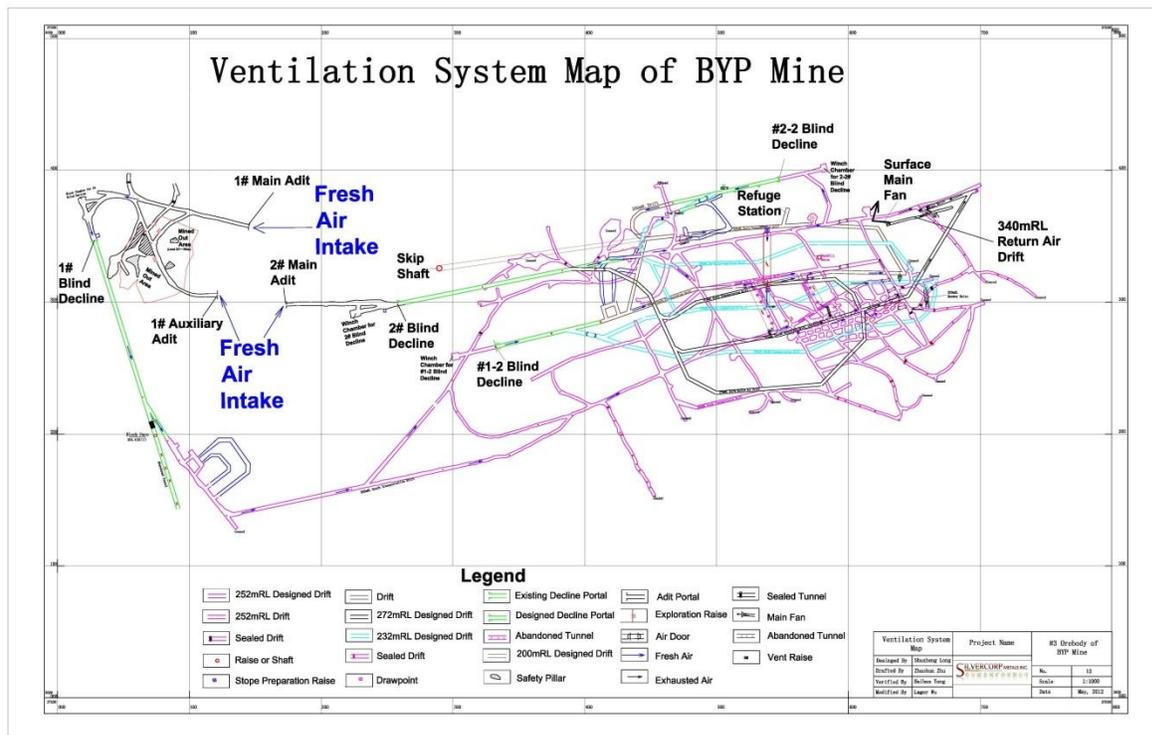
Area	No.
Managers	6
Financial Department	4
Infrastructure Department	4
Geology Department	8
Security Department	5
Sales and Supplement Department	4
Mill Department	31
Inspection Department	5
Administration and Support Staff	16
Engineers	3
Equipment Operators	9
Assay Lab Technicians	4
Mining Technicians & Surveyors	8
Total	107

16.2.8 Ventilation

Mine ventilation requirements are as per Chinese laws and regulations. Among the key ventilation regulations are: minimum ventilation volume per person ($4 \text{ m}^3/\text{min}$), minimum ventilation velocity (typically $0.25\text{-}0.50 \text{ m/sec}$ dependent on location or activity) and minimum diluting volume for diesel emissions ($4 \text{ m}^3/\text{min}/\text{kW}$).

Primary ventilation at the BYP Mine is a pull ventilation system. On the west side of the mine, #1 main and auxiliary adits, and #2 main adit are used for fresh air intake. The return air exits the mine via raises and declines on the east side of the mine. The main ventilation fan is installed at the mouth of the exhaust air portal. Figure 16.8 shows details of the BYP ventilation circuit. Figure 16.9 shows a picture of the main fan at the exhaust air portal. Once the skip shaft is completed; it will also be used for fresh air intake.

Figure 16.8 BYP Ventilation Circuit



The secondary ventilation consists of auxiliary fans for ventilating production faces, development faces and infrastructure chambers. A combination of forced air and exhaust ventilation is applied for long blind-headings.

Total mine ventilation capacity is $30.6 \text{ m}^3/\text{s}$, with air distributed between all active production areas, development faces and maintenance areas.

Figure 16.9 Main Fan at Exhaust Air Portal



16.2.9 Backfill

The use of cemented tailings as backfill is being investigated by Silvercorp in conjunction with the Tiantai Design Institute of Sinosteel Corporation. AMC understands that the investigation will address both operational issues and determination of fill strength parameters, and that the construction of the surface fill plant is planned for the latter part of 2012.

16.2.10 Dewatering

Mine dewatering is regulated by the requirements of the “Chinese Safety Regulations of Metal and Non-metal Mines”. Levels are self-draining with a nominal 0.3% gradient to shafts or blind declines.

There are three underground sumps for mining the Gold Zone 3 deposit. They have a combined capacity of 2,000 m³, which represents approximately eight hours of normal underground water inflow. Eight pumps are installed with total capacity of 600 kW (not including backup pumps) with an additional five pumps at level plats. Relative to total water inflow and pump capacity, daily maintenance is required to ensure smooth operation. Average and maximum water inflows per day are about 6,200 m³ and 10,700 m³ respectively.

The pumps described above are part of two dewatering systems that serve the BYP operation; a more recent system for dewatering from #1 Main Adit (two-stage dewatering) and an older system for dewatering from #2 Main Adit (one-stage dewatering). The water pump parameters for the one-stage and two-stage dewatering are listed in Tables 16.5 and 16.6.

Table 16.5 One-Stage Water Pump Parameters

Pump Chambers	Units	Models	Power	Major Parameters
252mRL North Sump	2	D85-45*4	75kW	Q=100m ³ /h, H=156m
	2	QY80-135/3-45	45kW	Q=100m ³ /h, H=135m
Level Plat #2 Blind Decline	1	WQYN-100/3-15	15kW	Q=25m ³ /h, H=100m

Table 16.6 Two-Stage Water Pump Parameters

Pump Chambers	Units	Models	Power	Major Parameters
200mRL Sump	2	QY65—100/4-30	75kW	Q=65m ³ /h, H=100m
	1	QY65—130/2-37	150kW	Q=65m ³ /h, H=130m
252mRL West Sump	1	QY65—131/5-37	150kW	Q=65m ³ /h, H=131m
Level Plat #1 Blind Decline	2	QY25—120/4-15	30kW	Q=25m ³ /h, H=120m
# 1Blind Decline Portal	2	QY25—120/4-15	30kW	Q=25m ³ /h, H=120m

16.2.11 Water Supply

Water for the mining operations is sourced from three locations.

Water for processing ore is sourced from a fresh-water tank located to the north of the process plant at an elevation of 375 m, and from recycled water that is pumped from the TMF. The fresh-water tank has a capacity of 500 m³.

Water required for drilling and dust suppression is sourced from the underground water supply. Water is pumped from the sumps to the working areas.

Potable water is sourced from a pond in the southeast area of the mine site. AMC understands that there are also potable-water creeks in the vicinity of the mine area that do not freeze in winter. These creeks provide a back-up water source. Two fresh-water tanks with a capacity of 400m³ each are located at the mine site.

16.2.12 Power Supply

A 10kV high voltage line from Xintianpu 35/10kV substation connects to a substation at the mine site. The substation is equipped with a high-voltage dropout protection cabinet and a low-voltage switch cabinet. A KS9-1000-10/0.4 transformer is installed to supply power to the underground mining operation. Two transformers (model number S9-500-10/0.4) provide power to the surface process plant, equipment and the living area. Ten low-voltage power distribution cabinets are located in the underground switch-board chamber. A ground-neutral system is implemented for both of the surface transformers and the underground transformer. Two back-up generator units are in place to provide power for underground ventilation, dewatering and the accommodation area in case of a power failure; the total capacity of these two units is 650 kVA.

Acquisition of one more surface transformer is planned; it will be designated for the backfill system and will provide surplus capacity for mine development and any production expansion in the future.

Also see Section 18.2.

16.2.13 Compressed Air

Compressed air is primarily used for drilling, with jackleg drilling being commonly used in the stopes and conventional development faces in the BYP mine. The compressed air is provided centrally from compressors located in the adit portal areas, two in the northeast area of #1 main adit portal and one to the north of #2 main adit portal area. Connection to underground working areas is via steel piping.

In future, mobile air compressors may be used underground to reduce air losses.

16.2.14 Explosives

See Section 18.12.

16.2.15 Communications

Mine surface communication is available by landline service from China Network Company (CNC) and by mobile phone services from China Mobile (CMCC) and China Unicom.

Telephone and internet services are also available at the mine site. The major dispatching station and switchboard are located in the duty room in the portal area of #1 main adit. The switchboard can directly communicate with all underground working areas. There are 25 small digital exchange phones which allow internal communication between stopes, chambers and surface. Hsin Yeong An (HYA) cable is used for surface and HUVV cable is used for underground tunnels.

16.2.16 Safety

BYP Mine safety is practiced as set out by Chinese health and safety laws and regulations, with all associated requirements to be followed during operation. The Safety and Environmental Department ensures that all personnel receive mandatory safety training. Procedures are in place for enforcing Occupation Health and Safety policies and procedures, making mine safety recommendations and carrying out routine inspections.

A six-member safety committee is maintained at the BYP Mine. It consists of the mine general manager, three portal superintendents, and two other members.

The mine supplies personnel protective equipment (PPE) to each person employed at the mine.

In 2011, there were five lost time injuries at BYP to contract workers and one to a Silvercorp employee. All were either foot or hand injuries.

AMC notes that Silvercorp has gone beyond Chinese statutory requirements in certain areas of safety but also recognizes that some operating practices and procedures fall short of common international standards. AMC recommends that Silvercorp continue with a focus of improving mine and site safety that would include implementation of a policy where the more stringent of either Chinese or Canadian safety standards are employed.

16.3 Production

Mine operations are scheduled for 365 days of the year, but with production on a 330 days per year basis. The current production rate is approximately 500 tonnes per day (tpd). Completion of the #1 Main Shaft will provide the capability for a potential production increase to around 1,000 tpd.

In Silvercorp fiscal year 2012 (April 2011 to March 2012), reported production from the BYP mine was 91,128 tonnes of ore mined and 83,760 tonnes of ore milled, yielding 5,100 ounces of gold and 249,000 pounds of zinc. The tonnage difference between mined and milled was on a surface stockpile at year end.

Silvercorp will continue to utilize the existing 500 tpd flotation mill to mine and process gold mineralization. Construction of an 800 tpd backfill facility for gold mineralization stopes has been planned for the latter part of 2012.

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 writing, Silvercorp had not prepared an estimate of mineral reserves.

17.1 Processing Plant (500tpd⁴)

The plant is used to process two different types of mineralization (PbZn sulphide mineralization and gold mineralization) in the same plant, but treated separately in campaigns:

- PbS/ZnS flotation-using the lead and zinc flotation circuits.
- Gold flotation-using lead flotation circuit only to produce a gold-bearing pyrite concentrate.

17.1.1 Ore Feed Supply and Product Yield

Table 17.1 Flotation Feeds: Feed Grade vs Recovery (2011)

Materials	Wt %	Mass (t/d)	Grade (%)			Recovery (%)		
			Pb	Zn	Au	Pb	Zn	Au
PbS Conc	0.85	3.57	50			82.0		
ZnS Conc	5.11	21.46		45			90.0	
Gold Conc	8.10	34.02			40			90
Tails	85.94	360.95						
Feed Ore	100.00	420	0.5	2.50	3.6	100.00	100.00	100

17.1.2 Process Flowsheet

The flowsheet includes the following major unit operations:

- Crusher circuit - two-stage crushing and one-stage screen (-25mm)
- Ball mill and classification (target 70%-200 mesh)
- Pb/Zn or gold flotation circuit (PbS - 1 stage rougher, 2 stage scavenger, 3 stage cleaner; ZnS-1 stage rougher, 2 stage scavenger, 4 stage cleaner)
- Concentrate dewatering using settling bays

17.1.3 Process Description

The plant is shown in Figure 17.1 and the unit operations are described section by section below:

⁴ The plant was designed to treat 400 tpd, but is capable of treating closer to 500 tpd

Figure 17.1 BYP 500 Tonnes per day Plant



Crushing

Crushing consists of a jaw crusher followed by a cone crusher in closed circuit with a vibrating screen. The primary jaw crusher (Model: PE 400x600) has a closed side setting of 90 mm. Discharge from the primary jaw crusher is conveyed to the 25 mm aperture vibrating screen. Ore larger than 25 mm is conveyed to the secondary cone crusher (Model: PYD 1200 cone crusher) which has a close side setting of 25 mm. Discharge from the secondary crusher is conveyed back to the 25 mm aperture screen (YA1536). Discharge from the screen feeds ore bins with a live capacity of 100 tonnes.

Dust from the crushing and screening processes is collected and captured in a baghouse and then transferred to a process tank. Water is added to the tank to make slurry that is pumped into a pre-flotation tank together with overflow from a ball mill circuit as described below.

Milling-Classification

- Crushed ore from the live bins is conveyed to a closed milling circuit consisting of two Grate ball mills (Model: MQCG 1500x4000 mm) and two spiral classifiers (Model: FG-15).
- The ball charge is made of Mn-steel balls, with diameters ranging from 60 mm to 120 mm.

- The target grind size is 70% passing 200 mesh and the overflow density is maintained at 40% solids by weight for feeding to the conditioning tanks for lead flotation.

Flotation

- The overflow from the classifier flows to the lead rougher conditioning tank, and then to lead rougher flotation cells. The lead flotation bank consists of one stage of roughing, two stages of scavenging and three stages of cleaning.
- Lead scavenger tails flows to zinc flotation. The zinc flotation bank consists of one stage of roughing, two stages of scavenging and four stages of cleaning.

Product Concentrating, Dewatering and Handling

- Both lead and zinc concentrates are discharged to six settling bays for dewatering by evaporation. Moisture averages 14-16% in the final concentrate products.

Tailings Thickening

- Tailings from the zinc scavenger flotation circuit and/or gold flotation, are discharged to the tailings pond, which was originally designed for a life of a further four years at 76,000 tonnes per year mine production. With an eventual increased mine production of 165,000 tonnes per year, the tailings pond will be full by mid 2014.

17.1.4 Sampling

To check the mass balance results, a set of five samples are usually taken every eight hour shift for a total of 15 samples per 24 hour day. The shift samples include flotation feed from the classifier overflow, lead and zinc concentrates from the third-stage cleaners, and lead and zinc tailings from the last scavengers.

17.2 Process Control and Automation

There is no centralized automation station or control room for entire plant process monitoring or control. Operation control is done locally, as described below:

- Ore feed to ball mill is controlled via an electronic scale, water addition is controlled via slurry density and experience.
- The pulp density of the mill spiral classifiers is monitored and adjusted to maintain a density between 28% and 35% solids.
- Chemical dosages are controlled via a localized PLC system for each set of equipment. Chemical dosage is adjusted in a narrow range (around the default target or setting value), based on assay feedback (each half hour) to handle process upsets such as ore feed changes.
- Automatic sampling of key metallurgical accounting streams e.g. flotation feed, concentrates and tailings.
- A central control room in the grinding-flotation building from which TV imaging of key points in the production flow can be monitored.
- To help process monitoring and control, samples are taken every 0.5 hr for the purpose of quality control, mass balance and recovery calculation.

The planned level of process control and automation is basic but adequate, recognizing that the process separation is complex and that operating labour to monitor process variables is low cost and plentiful.

17.3 Ancillary Facilities

17.3.1 Laboratory

- The laboratory is equipped with the usual sample preparation, and wet chemistry and basic photometric analytical equipment as well as crushing, grinding, flotation, gravity separation and fire assay metallurgical testing equipment. The laboratory processes up to 100 samples per day.
- It also conducts routine analysis of ores and concentrates as well as water quality and other environmental testing. It also provides a technical service to the processing plant in monitoring plant conditions, and solving production problems and investigating processes to assist with the improvement efforts.
- Silvercorp's QA/QC check procedures include inserting standards in the sample batches submitted to the labs on a regular basis and submitting duplicate pulps to an independent external lab on an intermittent basis.

17.3.2 Maintenance Workshop(s)

Daily maintenance requirements are serviced through section-specific workshops, each equipped with crane, welding capability and basic machine-shop facilities. More extensive maintenance and major overhaul needs are met through use of appropriate contractors.

17.4 Key Inputs

17.4.1 Power

- Mill power (10 kV power line) is drawn from the town of Baiyunpu, Hunan Province power authority grid, which is 4 km away from the mine.
- Unit power consumption is 23 kW/t of ore, which corresponds to a total demand of 1 MW and an annual consumption of 7.6×10^6 kWh.

17.4.2 Water Usage and Water Balance

Net water usage (fresh water) is approximately 1 m³/t of ore.

The use of recycled water from the tailings dam helps to maintain a zero-discharge water balance for most of the year. Wet season discharges are via a water treatment facility.

17.4.3 Reagents

The reagents used in both plants include:

- Depressant/modifiers: 1-Sodium sulphide, 2-Zinc sulphate, 3-Sodium sulphite, 4-Copper sulphate.

- Collectors: 1-Di-ethyl dithiocarbamate, 2-Ammonium dibutyl dithiophosphate, 3-Butyl xanthate.
- Frother – MIBC.
- Reagent storage and mixing is located adjacent to the grinding/flotation plant and comprises a storage area with hoisting equipment to lift bags and drums through into the mixing area.
- From the mixing area the reagents are pumped up to the dosing station located above the flotation section for dosing and gravity feeding to the various addition points.

18 PROJECT INFRASTRUCTURE

18.1 Tailings Management Facility (TMF)

18.2 Overview

The particulars of Yaposhan dam at BYP are outlined in Table 18.1. This facility was built in September 2009 based on the Preliminary Design of the BYP Tailings Pond completed by Sanmenxia Gold Engineering Design & Research Institute Co. in 2007.

Table 18.1 Outline of the TMF

	Unit	TMF (Yaposhan)
Year Built		2010
Start Operation		Aug. 2011
Total Volume	(Km ³)	306.2
Working Volume	(Km ³)	244.9
Service Life	(yr, design)	4.4
Remaining life	(yr)	4
Production rate	(ore, tpd)	300
Tailings Rate	(tpa, dry)	75,600

Note the above is at a design production rate of 300 tpd. At a production rate of 500 tpd, the TMF will be close to capacity by mid 2014. The life will be extended once the paste backfill plant is operational. Depending on future production plans and the efficiency of the paste backfill plant, it may be necessary to examine other options for tailings disposal, such as deposition of thickened tailings and/or a new TMF.

The TMF design covers:

- Dam
- Trench, seepage collection, water decant system
- Reclaiming and water recycle system
- Geotechnical, safety and risk assessment

18.2.1 Tailings Properties

The properties of tailings from the mill plant are summarized below:

- Dry solids: density 2.23 t/m³, bulk density 1.16 t/m³
- Tailings slurry: before deposition – weight percent solids of 23.3%; after deposition in the pond - solids S.G. 1.36 t/m³.
- Tailings particle sizing: 70% -75 µm (200 mesh). A detailed particle size distribution (PSD) analysis is summarized in Table 18.2.

The compaction and ultimate density is normally quite sensitive to the moisture content. The optimum moisture can be fairly tightly constrained in the +/- 1-2% range. Shear tests are used to determine the internal strength of the tailings, which is important for the stability analysis.

Geochemical properties of the tailings were assessed by a single-element analysis (gold). No leaching tests have been carried out to determine the potential for metal leaching.

Table 18.2 Tailings PSD¹ and Compositions*

Size Range (mm)	Yield (%)	Composition	Distribution (%)
		Au (g/t)	Au
+0.150	2.83	0.81	10.09
-0.150 +0.074	26.63	0.39	35.45
-0.074 +0.043	17.96	0.31	16.67
-0.043 +0.037	10.08	0.42	14.86
-0.037 +0.020	7.17	0.28	4.44
-0.020	35.33	0.23	18.49
Total	100.00	0.33	100.00

*Measured by Sanmenxia Gold Engineering Design and Research Institute Co.
¹Particle size distribution (PSD)

Water used for mineral processing is treated before it is discharged to the tailings pond. Water chemistry is shown in Table 18.3. About 75%~85% of the process water is recycled back to the mill plant for reuse.

Table 18.3 Chemical Compositions for Pond Recycle Water

Elements	Pb	Zn	Cu	As	Si	Cr	Ca	Hg	Mo	pH
Level (mg/l)	0.05	0.03	0.35	0.13	11	n/a	5	n/a	n/a	8
Elements	P	Ni	Cd	Mn	V	Al	Mg	K	Fe	
Level (mg/l)	0.30	n/a	n/a	n/a	n/a	n/a	2	2	0.26	

18.2.2 Site Description

The TMF is located at approximately 1,000 m southwest of the mill plant and 400 m northeast of Yaposhan Village, in a valley surrounded by the Shizinao, Hui and Jian Mountains. It is located on the junction of the Qiyang Epsilon and Xinhua Xia Structures, and two major faults and two minor faults cut through dam area. All the faults located in the TMF area have relatively small gaps (<30 cm) and are filled with clay and gravels.

Jikoupu County has been classified as Grade 6 in terms of seismicity, and therefore a basic design seismic acceleration of 0.05 g is required to be taken into consideration in the design. The seismic rating is in accordance with the China Seismic Intensity Scale (CSIS), which is similar to the Modified Mercalli Intensity (MMI) scale used fairly generally now, and which measures the effect of an earthquake at the surface, as opposed to the now obsolete Richter magnitude scale which measures the energy released at source. In effect, CSIS grade 6 is

similar to VI (Strong) on the MMI, although the CSIS scale also specifies peak acceleration and peak velocity. The 0.05 g acceleration cited above for design purposes would correlate more with MMI V (Moderate) according to the United States Geological Service (USGS) Earthquakes Hazard Program. AMC recommends that this be clarified.

18.2.3 Dam Classification

Table 18.4 shows the Chinese system of dam classification, which is based on the volume and height of the dam. The Yaposhan TMF is classified as a Grade V facility.

Table 18.4 Criteria for Dam Grade Definition (PRC)

Dam Grade Level	Volume V (x10,000 m ³)	Dam Height (m)
I	V>10,000 and/or H>100	
II	V≥10000	H≥100
III	1000≤V<10000	60≤H<100
IV	100≤V<1000	30≤H<60
V	V<100	H<30

Site-specific risk assessment such as geotechnical risk has been carried out by The Third China Aviation Industry Design and Research Institute.

18.2.4 TMF Description

18.2.4.1 Design

A hydrology study was undertaken by the Third Aviation Industrial Design and Research Institute in September 2007.

The following criteria and parameters are based on a preliminary design undertaken by the Sanmenxia Gold Engineering Design & Research Institute Co. (Report dated October 2007):

- Storage capacity calculations for the valley site indicate an estimated available volume of 244,900 m³. It is assumed that, at the dry density of 1.36 t/m³, this volume is equivalent to 333,000 t of tailings.
- At a rate of deposition of 75,600 tpa, the calculated service life is approximately 4.4 years.
- The TMF was put into production in August 2011. Its elevation is 330 m. The dam height is 24 m and would not be increased based on the design. Figures 18.1 and 18.2 show the status of the TMF as of mid-February 2012.

Figure 18.1 Yaposhan TMF (Feb, 2012)



Figure 18.2 Yaposhan TMF Discharge



The TMF 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 scour of the abutments by rainwater run-off. Supernatant water from the TMF is removed via a vertical reinforced concrete decant structure. It is diverted around the embankment via a concrete-lined drainage culvert.

Seepage control is effected 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 TMF and also 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 is recycled back to the mill plant for reuse. Construction is projected to begin in September 2012 on a back-up settling pond to be located 20 m from the existing settling pond.

18.2.4.2 Geotechnical Stability, Safety and Risk Assessment

The Third China Aviation Industry Design and Research Institute prepared a geotechnical report in September 2007, prior to construction of the tailings embankment. In AMC's opinion, the geotechnical assumptions and parameters used in this analysis are appropriate.

Flood calculations have been performed appropriate to the Grade V classification of the TMF, which requires the flood control measures to meet a 1 in 100 year recurrence interval for design purposes with a 1 in 100 year probable maximum flood criterion as well. A safety and reliability analysis for the TMF has been carried out in accord with relevant regulations and requirements. These stipulate minimum Factors of Safety, as determined by the Swedish Circular Arc Method for assessing the potential for slip rotation failure, in the 1.05-1.20 range. The calculated factor of safety is around 3.1, which meets the safety requirement. However, this method is now considered outdated and industry practice would be to conduct finite element numerical modelling, even if just in two-dimensions. It is noted that the quoted factor of safety is consistent with Chinese practice requirements.

18.2.4.3 Site Monitoring Station

A survey monitoring station has been established at the TMF area to undertake horizontal displacement and vertical displacement monitoring of the dam and its base.

18.3 Waste Rock Dumps

A temporary dump is located outside the portals, while the permanent waste dump, is located in the eastern part of the mine site. Based on the current mine and development plan, including the construction of a paste backfill plant, approximately 5,000 m³ of waste rock is expected to be moved to surface during the remaining mine life.

Waste rock from each level is hoisted to portals through the #1 and #2 adits and trucked to the waste dump. Longer term plans are to use the waste rock to backfill some of the old workings.

18.4 Power Supply

The mine is powered by a 10 kV high voltage line from the Xintianpu 35/10 kV substation. This line enters the BYP mine site substation which is equipped with high voltage dropout protection cabinet and low voltage switch cabinet. Underground mining operations, process plant, offices and accommodations are powered from the site substation.

There are two backup generators at site to provide power for underground ventilation, dewatering and accommodations in case of the unexpected power failure. The two backup generators are 400/230 V with total capacity of 650 kVA.

18.5 Roads

A paved provincial highway runs across the south margin of the Property. The mill, underground entrance and tailings storage areas are connected to the provincial highway by a 3 km paved road. A network of gravel roads links the mine camp to the underground adits, process plant, waste dump, water supply areas and TMF. Transportation

Currently, ore is brought to surface via declines equipped with winches and narrow gauge rail cars. The crushers are fed directly from the surface stockpile. The final products from the mill plant are lead, zinc and gold concentrates that are temporarily stored in the concentrate storage house. Heavy-duty trucks are used to transport concentrate to local smelters located within a 350 km radius of the mine on a schedule of every 8 days.

Mine supplies are brought in by small trucks from local markets.

18.6 Water Supply

Domestic water for the mine is pumped from a pond at the southeast part of the mine site. Silvercorp conducts routine tests and monitors for water quality to ensure the water meets safety and sanitary requirements.

Water for drilling and dust suppression underground is sourced from an underground sump.

18.7 Wastewater and Sewage Treatment

See Section 20.4.

18.8 Mine Dewatering

Mine dewatering is in accordance with the “Chinese Safety Regulations of Metal and Non-metal Mines”. The average water inflow to the mine is about 6,000 m³/day, with a maximum of about 10,700 m³/day.

There are two dewatering systems, with #1 adit dewatering the 200 mRL and 230 mRL levels and the #2 adit dewatering the 252 mRL level. There are three pumps which can discharge the maximum water inflow of the day within 20 hours. There are two pipelines of similar size

installed along the decline, one is active and the second is on standby. The total capacity of underground sumps is 7.7 hours at the average water yield.

18.9 Site Communications

Mine surface communications are via landline service from China Network Company and mobile phone services from China Mobile / China Unicom. Internet is also available at the mine site.

The dispatching station and switchboard are located in the duty room in the portal area of #1 main adit. This station communicates directly with all the working faces and chambers in the underground. There are 25 small digital exchange phones that are used for internal communication between stopes, chambers and surface.

18.10 Camp

The camp infrastructure at the mine site consists of dormitory, administration buildings, dining rooms and washrooms for Silvercorp's own management and technical personnel and hourly workers. Steel housing structures, including dining rooms and washrooms, are also built adjacent to the administration buildings as living facilities for the mine contractor workers.

18.11 Dam and Channel

A dam and diversion channel were built at the mine to prevent storm and heavy rainfall from washing-out surface infrastructures and the waste rock dump. The diversion channel is located in the vicinity of the shaft collar to protect the collar.

18.12 Surface Maintenance Workshop

There is a maintenance workshop in the northwest part of the process plant, in which tyre processing, maintenance and servicing, welding, electrical and hydraulic services are available. Mining contractors have their own maintenance workshop adjacent to the two portals. Diesel locomotive, electric locomotive and rail cars, minor equipment (such as jacklegs, auxiliary fans, development pumps, etc) are serviced in this workshop. Additionally, there is also an underground maintenance chamber at 252 mRL operated by the contractor.

18.13 Explosive Magazine

An explosives magazine, detonator storage and security house are located 350 m from #1 adit and the processing plant. These structures are isolated and more than 450 m from the main camp, which meets local safety regulations. Strict security is applied to the magazine area. Designated personnel are responsible for the security of the magazine storage. Surveillance cameras are installed around the magazine area. All explosive tubes and detonators are labelled with barcodes, which are scanned before release from the magazine for security audit purposes.

18.14 Fuel Farm

Fuel tanks have a total capacity of 7,000 litres (l), of which 3,000 l are designated for daily consumption of mine equipment such as excavators and loaders, and the remaining 4,000 l for

the backup generators. The fuel farm is located at the portal of #2 decline and next to the generator room. The contractors have their own small fuel tankers near the portals, and provide fuel for underground diesel locomotives and mobile equipment.

The diesel storage facility is located down-wind from the mine air intake fans and a reasonable distance from buildings, camp and mine portal (based on the requirements of local occupational health and safety regulations and fire prevention requirements). Fire extinguishers and sand are stored in the storage area in case of a fire. Containment for storage of fuel is constructed in the vicinity of the diesel generators and fuel dispensing facilities in case of spill.

18.15 Mine Dry and Administration Building

Dormitory buildings and administration buildings provide showers and washrooms for Silvercorp's employees. There are simply-equipped showers and washrooms in the portal areas for contract workers. Personal protective equipment such as gloves, safety glasses, hard hats and cap lamps and batteries are available from Silvercorp or the contractor.

There is an administration building in the living area that provides working space for management, supervision, geology, engineering, and other operations support staff.

18.16 Warehouse, Concentrate Storage, Assay Laboratory

A warehouse provides storage room for materials and equipment inventory. A concentrate storage house to the south of the main camp area provides temporary storage for concentrates, prior to transportation to local smelters.

There is an assay laboratory in the northwest part of the process plant, which performs daily analysis of mine and process samples.

18.17 Security/Gatehouse

A security department is responsible for daily security tasks. A security/gatehouse is located on the mine site access road with personnel on duty at all times. Additionally, surveillance cameras are installed at the gatehouses. The night shift is responsible for patrolling key site areas such as the concentrate storage house. There are dedicated personnel in charge of inspection of concentrate transportation.

18.18 Compressed Air

Compressed air is primarily used for drilling. Jacklegs are used in all stopes and conventional development faces. There is a need for minor amounts of compressed air for shotcreting, blast hole cleaning, etc. Compressor plants are located adjacent to each portal. Compressed air is reticulated via steel pipes of varying sizes depending on demand to all levels and will be to the emergency refuge stations.

18.19 Underground Harmful Gas Monitoring System

The Underground Harmful Gas Monitoring System is under construction at the BYP mine and must meet the requirement of Coal Mine Safety Regulation (Version 2006). All the

underground areas must be covered. The system is used to monitor the underground ventilation network. Data such as air velocity and carbon monoxide concentration is collected, processed and reported. To supplement the harmful gas monitoring system, safety coordinators will perform random gas inspection with handheld monitoring devices.

18.20 Underground Entry Registration Procedure

All workers (including visitors) going underground have to register at the portal with their name, entry time and date. When the workers exit the mine workings at end of shift they must sign-out. An underground Personal Location System will be implemented in the next expansion phase. It will indicate the exact time of entry and exit for each miner and instantly report the number of workers and their locations in the mine workings.

19 MARKET STUDIES AND CONTRACTS

19.1 Concentrate Marketing

AMC understands that the concentrates will be marketed to existing smelter customers in Hunan province and appropriate terms have been negotiated as referred to in Section 19.2 below.

19.2 Smelter Contracts

AMC understands that the smelter contract terms for the lead and zinc concentrates are similar to those pertaining to Silvercorp's other operations in China where typical deductibles calculate out to the equivalent of 85-90% payable for the lead concentrate and approx 70% for zinc, at long-term prices (assumed to be 1.00\$/lb for each of lead and silver) . AMC considers these to be favourable terms relative to global smelter industry norms.

With respect to the gold concentrates, AMC understands that % payables are typically in the range 85-90%, also in accord with industry norms.

20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

20.1 Introduction

The existing mining permits for the BYP project, in conjunction with safety and environmental certificates, cover all the active mining areas and provide for the right to carry out full mining and mineral processing operations.

There are no cultural minority groups within the general project area. The cultural mosaic of the broader Xinshao County is predominantly Han Chinese. The surrounding land in the mining area is used predominantly for agriculture. There are no ecological forests or strict land control zones in the mining area; the current vegetation within the mining area is mainly secondary vegetation from farming. Larger wild mammals were not found in the region. Occasionally, small nesting birds in the area were observed. The surrounding villagers raise domestic animals such as chickens, ducks, pigs, sheep, goats, and cows.

Yunxiang Mining has made a range of cash donations and contributions to local capital projects and community support programs. In addition, Yunxiang Mining uses local suppliers and service providers, where practical, as an additional means to provide economic benefits to local communities.

20.2 Laws and Regulations

The BYP project will operate under the following Chinese laws, regulations and guidelines:

Laws

1. Law of Environmental Protection PRC (1989)
2. Law of Minerals Resources of PRC (1996)
3. Production Safety Law of the PRC (2002)
4. Law of Occupational Disease Prevention (2001-Amended 2011)
5. Environmental Impact Assessment (EIA) Law (2002)
6. Law on Prevention & Control of Atmospheric Pollution (2000)
7. Law on Prevention & Control of Noise Pollution (1996)
8. Law on Prevention & Control of Water Pollution (1996, amended in 2008)
9. Law on Prevention & Control Environmental Pollution by Solid Waste (2002)
10. Forestry Law (1998)
11. Water Law (1988)
12. Water & Soil Conservancy Law (1991)
13. Land Administration Law (1999)
14. Protection of Wildlife Law (1989)
15. Energy Conservation Law (1998)

16. Management Regulations of Prevention & Cure of Tailings Pollution (1992)
17. Management Regulations of Dangerous Chemical Materials (1987)

Regulation Guidelines

1. Environment Protection Design Regulations of Construction Project (No.002) by Environment Protection Committee of State Council of PRC (1987)
2. Regulations on the Administration of Construction Project Environmental Protection (1998)
3. Regulations for Environmental Monitoring (1983)
4. Regulations on Nature Reserves (1994)
5. Regulations on Administration of Chemicals Subject to Supervision & Control (1995)
6. Regulations on Management of Chemicals Subject to Supervision & Control (1995)
7. Environment Protection Design Regulations of Metallurgical Industry (YB9066-55)
8. Comprehensive Emission Standard of Wastewater (GB8978-1996)
9. Environmental Quality Standard for Surface Water (GB3838-1988)
10. Environmental Quality Standard for Groundwater (GB/T14848-1993)
11. Ambient Air Quality Standard (GB3095-1996)
12. Comprehensive Emission Standard of Atmospheric Pollutants (GB16297-1996)
13. Environmental Quality Standard for Soils (GB15618-1995)
14. Standard of Boundary Noise of Industrial Enterprise (GB12348-90)
15. Emissions Standard for Pollution from Heavy Industry; Non-Ferrous Metals (GB4913-1985)
16. Control Standard on Cyanide for Waste Slugs (GB12502-1990)
17. Standard for Pollution Control on Hazardous Waste Storage (GB18597-2001)
18. Identification Standard for Hazardous Wastes-Identification for Extraction Procedure-Toxicity (GB5085.3-1996)
19. Standard of Landfill and Pollution Control of Hazardous Waste (GB 18598-2001)
20. Environmental Quality Standard for Noise (GB3096-2008)
21. Emission Standard for Industrial Enterprises Noise at Boundary (GB12348-2008)
22. Evaluating Indicator System for Lead and Zinc Industry Cleaner Production (Trial) (2007)

20.3 Waste and Tailings Disposal Management

Sources of the waste from the BYP project are mainly waste rocks produced during mining, mine tailings produced during the processing, and some minor sanitary waste.

Waste rock has to date been deposited in stockpiles adjacent to mine portals and has also been utilized for construction purposes. It 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 stockpiles will be covered with soil and re-vegetated once the stockpile is full. For stabilization of the area, retaining wall spats will be built downstream of the waste rock site. An interception ditch will be constructed upstream to prevent the slope surface from washing out as well as to avoid water and soil loss. A waste rock stockpile in the main exploration development camp has already been covered with soil and vegetation has been planted.

Tailings generated from the 500⁵ tpd processing plant have to date been discharged into a purpose built TSF via a 1,000 metre gravity-fed tailings pipeline. Further details are provided in Section 18.1 of this report.

20.4 Site Monitoring

Comprehensive monitoring plans were developed for the project during the EIA stage. The monitoring plan includes air/dust emission, noise, and wastewater, and monitoring is carried out by qualified persons and licensed institutes. For water environment, an intensive monitoring program was developed and implemented, including sanitary wastewater and surface water by Xinshao County Environmental Protection Bureau. The monitoring is set out in Table 20.1:

Table 20.1 Water Environmental Monitoring Plan for BYP Project

Items	Monitoring points (section)	Monitoring Parameters	Frequency	Monitored by
Sanitary wastewater	Final discharge point	pH, NH ₃ -N, COD _{Cr} , BOD, TSS	6 times/yr	Shaoyang Environmental Monitoring station
Surface water	BYP area	pH, NH ₃ -N, Cd, Pb, As, Zn, COD _{Cr} , and Cu	6 times/yr	
Process wastewater	Discharge point after sedimentation treatment	pH	often	Shaoyang Environmental Monitoring station
		Pb, COD _{Cr} , NH ₃ -N, and SS	6 times/yr	
Mining water	Discharge point after sedimentation tank	Cd, S ²⁻ , As, phenol, Zn, Ag and TPH	6 times/yr	Shaoyang Environmental Monitoring station
		pH, SS, As, Sb, Cd, Cu, Zn, Pb, Hg, phenol and TPH	6 times/yr	

A review to May 2012 indicated that results for surface water, sanitary / process wastewater, and mining water were in compliance with relevant standards. In addition, the TMF 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.

⁵ The plant was designed to treat 400 tpd, but is capable of treating closer to 500 tpd

An environmental protection department consisting of two full-time BYP staff has been created and is responsible for the environment and rehabilitation management work in the mining area.

Water for the BYP project is derived mainly from mountain springs near the mine.

Surface water discharge is monitored through collection and sedimentation treatment of mine water, a containment system (i.e. zero surface water discharge), and the installation of a stormwater drainage bypass system to segregate and divert clean stormwater and to provide flood protection. Except for a small creek, there is no surface water source near the BYP mine.

Wastewater derives from the mine, the processing plant, and domestic sewage. Mine water is pumped to surface via the mine portals, and then pumped to the sedimentation pond for mill processing. The processing plant wastewater is pumped into the sedimentation pond downstream of the TSF via a lime dosing system to assist in flocculation. The settled water is then drained to Sedimentation Pond 2, where the overflow is allowed to drain to the other three settlement ponds. There is another pumping station and emergency containment system 20 m downstream with a 1,985 m³ capacity. The collected tailing water from the TSF in these dams is pumped back to the processing plant for reuse. No tailings water is discharged to the environment.

Sewage from the mining areas is collected in sedimentation tanks; the resulting treated water meets regulatory criteria for its reuse.

There is a groundwater monitoring program in place for the processing plant area, but not for mining areas. The latter is not required under the Chinese environmental approval regime.

20.5 Permitting Requirements

The following permits and approvals have been obtained by BYP as set out below:

1. Environment Assessment Report and Approval for BYP Lead-Zinc-Gold Mine & Mill Project (Shaoyang City Environment Assessment No. 2005-21#), issued by Shaoyang City Environment Protection Bureau, June 29, 2005
2. BYP (3# orebody) Project Safety Pre-assessment Report & Registration by Hunan Xinkuangshan Shanxing Antimony Co. Ltd., March 2012
3. Safety Production Permit (Hunan FM [2009] 9038) for BYP Mine by Hunan Safety Production & Supervision Bureau, valid from July 1, 2009 to June 30 2012. Silvercorp lodged an application for an extension of the permit in April 2012 and it is currently being processed.
4. RUP Report and Approval for BYP Mine by Zhengzhou Branch, SinoSteel Engineering Design & Research Institute Co., Ltd., December 2011
5. The Geological Hazards Assessment Report and Approval for the BYP mine by Hunan Provincial Science and Research Institute of Land and Resources, March 2012
6. Mining License BYP Lead-Zinc Mine, initially issued by Department of Land and Resources of Hunan Province in January 2008 to January 2013
7. Land use right certificate. The land use right pre-assessment report & registration by the Land and Resource Bureau of Shaoyang City, Hunan Province, March 2012

8. Forest land use right permit (Hunan (2011) No.1548), issued by Hunan Forest Bureau in November 2011. The permit covers a forest land area of 2.608 hectares located in Baiyunpu Village, Jukoupu Township, Xinshao County for processing plant and tailing dams construction.

20.6 Social

Residents in the project area reportedly have a positive attitude to the development of the BYP project. Public participation to this project includes information disclosure, the use of inquiry forms, and public interaction for the promotion and improvement of the reclamation process.

The nearest significant community is the Jukoupu Township, approximately 3 km to the south west of the BYP processing plant. The Xinshao County is approximately 21 km to the north east. The area surrounding the BYP project is predominantly agricultural.

Yunxiang Mining has made a number of cash donations and contributions to local capital projects and community support programs within the Xinshao County. To date the company has spent 1,985,000 RMB to support these programs. No records of public complaints in relation to the activities of the BYP project were sighted by the AMC team.

There are no cultural minority groups within the general project area. The local culture of the broader Xinshao County consists predominantly of Han Chinese.

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 for breach of environmental conditions in regard to the BYP project.

BYP production activities are 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 labour or under-age labour is used.

20.7 Remediation and Reclamation

Remediation and reclamation plans have been developed during the BYP project approval stage, including measures during project construction, operation, and closure. Yunxiang Mining has spent approximately \$1.5 million on environmental protection measures, including dust control, wastewater treatment, solid waste disposal, an under-drainage tunnel, soil conservation, water conservation, noise control, ecosystem rehabilitation, and an emergency response plan. Up to the date of this report, a total of 9,600 m² has been replanted with trees and grasses pursuant to the EIA.

20.8 Site Closure Plan

The mine closure will comply with Chinese National Requirements such as Article 21 (Closure Requirements) of the Mineral Resources Law (1996) and Articles 33 and 34 of the Rules of Implementation Procedures of the Mineral Resources Law of the People's Republic of China (2006).

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

When Silvercorp acquired the Property, it was already in production, although there was no medium- to long-term mine plan and no estimate of mineral resources or mineral reserves that were reportable under NI 43-101. While Silvercorp has been working on a production plan and schedule and an estimate of mineral reserves, this process was not complete at the time of writing this report. It is therefore not possible to produce a detailed estimate of capital and operating costs at this time.

Silvercorp anticipates that its cash and total production costs for the fiscal year 2013 (April 2012 to March 2013) will be approximately \$35 and \$60 per tonne of ore respectively, and it has budgeted US\$3.4 million in capital expenditure. AMC notes that the anticipated production cost is significantly higher than the reported cost for fiscal year 2012 of \$38 per tonne, but is reasonably consistent with production costs at Silvercorp's Ying mine in Henan Province. It is reasonable to assume that the non-cash part of total production costs will reduce as mine production ramps up towards a target of approximately 165,000 tpa. AMC has no reason to believe that the capital cost estimate is unreasonable.

22 ECONOMIC ANALYSIS

As mentioned in Section 21, Silvercorp has been working on a production plan and schedule and an estimate of mineral reserves, but these were not complete at the time of writing this report. It is therefore not possible to produce an economic analysis.

However, AMC has satisfied itself that the July 2012 mineral resources have reasonable prospects of economic extraction and that the mine appears to be economic at current metal prices and site costs.

23 ADJACENT PROPERTIES

The following is extracted, with minor amendments, from the 2011 Technical Report.

There are a number of small and medium-sized gold deposits in the direct adjacent area of 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.

A description of the Gaojiaao Mine taken from Chinese Government publications, follows.

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.

24 OTHER RELEVANT DATA AND INFORMATION

Although Silvercorp has yet to develop a detailed mine production plan and schedule, its intention is to mine approximately 70,000 tonnes of gold mineralization and 22,000 tonnes of lead-zinc mineralization in the 2013 fiscal year, yielding approximately 4,700 ounces of gold and approximately 1.3 million pounds of lead and zinc.

25 INTERPRETATION AND CONCLUSIONS

Silvercorp acquired its 70% interest in the Property in January 2011. The underground mine has been in production since 2006, extracting lead-zinc mineralization, and has a 500 (tpd) processing plant. It is currently permitted for the extraction of lead and zinc and an application has been submitted to allow the extraction of gold mineralization, on which Silvercorp intends to focus in the immediate future. There is no known hindrance to granting of the gold extraction permit, and AMC understands that mining / processing gold mineralization prior to formal receipt of a permit is not unusual in China.

To date, five gold zones and 13 major lead-zinc zones have been recognized. A major exploration program was undertaken by Silvercorp in 2010 / 2011, comprising surface and underground drilling and underground sampling. AMC has reviewed the nature and quality of the program, including QA/QC and security procedures, and undertook independent sampling of core. AMC is satisfied that Silvercorp's procedures are consistent with reasonable industry standards and that the assay data may be relied upon for resource and reserve estimation. AMC also reviewed Silvercorp's mineral resource estimates and, subject, to a relatively modest reclassification of Indicated and Inferred Resources, approved and took responsibility for them. Gold mineral resources comprise 3.51 million tonnes averaging 2.6 g/t Au in the Indicated category and 2.47 million tonnes averaging 1.8 g/t Au in the Inferred category. Lead-zinc resources comprise 7.33 million tonnes averaging 1.16% Pb, 2.52% Zn in the Indicated category and 7.55 million tonnes averaging 0.85% Pb, 2.75% Zn in the Inferred category.

With Silvercorp focusing in the short term on mining gold mineralization, AMC recommends further exploration and infill drilling to test for extensions to mineralized zones and to improve confidence in the resources.

Silvercorp has yet to prepare a formal production plan and schedule and consequently there are currently no mineral reserves for the Property. Its intention is to mine approximately 70,000 tonnes of gold mineralization and 22,000 tonnes of lead-zinc mineralization in the 2013 fiscal year, yielding approximately 4,700 ounces of gold and approximately 1.3 million pounds of lead and zinc. Its anticipated total production cost is approximately US\$60 per tonne of ore, and it has budgeted US\$3.4 million in capital expenditure.

The main mining method is shrinkage stoping, using small, conventional tracked equipment. A 240 m deep shaft is currently being developed that would provide the capability to hoist increased production and facilitate underground exploration and development access. The use of cemented tailings as paste backfill is being investigated and the construction of a surface fill plant is planned for later in 2012. While AMC has identified a number of issues that merit investigation and improvement, including some safety procedures, it notes that there appear to be no major risk areas associated with the current underground operation.

The existing 500 tpd plant is used to process both lead-zinc mineralization and gold mineralization by flotation, each treated separately in campaigns. Concentrates will be marketed to existing smelter customers in Hunan province, and smelter contract terms for the lead and zinc concentrates are similar to those pertaining to Silvercorp's other operations in China. The processing plant is relatively straightforward and there are no major risks with its operation. At the current production rate, the TMF will be close to capacity by late 2013. The life will be extended once the paste backfill plant is operational. Depending on future

production plans and the efficiency of the paste backfill plant, it may be necessary to examine other options for tailings disposal, such as deposition of thickened tailings and/or a new TMF.

AMC believes that there are no significant issues with infrastructure, environmental or social aspects of the project. Waste rock is non-acid generating and environmental monitoring to date has not identified any major shortcomings. A site decommissioning plan will be produced at least one year before mine closure.

26 RECOMMENDATIONS

Costs have been estimated where relevant.

- Undertake a drill program of approximately 4,400 m aimed at:
 - Testing for a western extension of mineralization of Gold Zone 3 and for extensions to Gold Zone 1
 - Infilling of Gold Zones 1, 3 and 5 to increase confidence in the resources.
 - Estimated cost \$170,000
- Exercise greater control over the QA/QC program to ensure that duplicates sent for external checks are of mineralized samples only.
- Undertake additional bulk density determinations on a broader suite of samples. Estimated cost \$20,000.
- Review and account for the slight difference in lead values between the Zhengzhou and ALS laboratories.
- Review and resolve a number of relatively minor issues in the next resource estimate. Estimated cost \$25,000.
- Prepare a production plan and schedule and estimate mineral reserves. Estimated cost \$75,000.
- Place a proactive emphasis on ground control and appropriate support in all mining activities. Estimated cost \$25,000.
- Review the factors applied for mining dilution and mining recovery of 5% and 95% respectively.
- Continue with a focus of improving mine and site safety, including implementation of a policy where the more stringent of either Chinese or Canadian safety standards are employed.
- Include a contractor representative on the mine safety committee.

27 REFERENCES

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Kang, R.H., (2002) Analysis of exploration perspectives of gold-antimony deposits in Baimashan- Longshan EW-striking structural zone, Hunan Province Geology and Mineral resources of South China, No.1, 2002, pp 57-61.

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Parrish I.S. (1997) Geologist's Gordian Knot: To cut or not to cut, Mine Engineering, April 1997

Preliminary Design of the BYP Tailings Pond completed by Sanmenxia Gold Engineering Design & Research Institute Co.

Reconnaissance Report upon Geotechnical Engineering of Yaposhan TMF (Sep 2007). Third China Aviation Industry Design and Research Institute.

Geotechnical Risk assessment by Third China Aviation Industry Design and Research Institute.

28 QUALIFIED PERSONS`CERTIFICATES

A Riles

1. I, Alan Riles, MAIG, BMet (Hons), Grad Dipl Professional Management, do hereby certify that I am Associate Principal Consultant Metallurgist with AMC Mining Consultants (Canada) Ltd, Suite 1330, 200 Granville Street, Vancouver, British Columbia V6C 1S4, Canada.
2. The Technical Report to which this certificate applies is entitled "Technical Report for BYP Gold-Lead-Zinc Property, Hunan Province, China" and is effective 30 June 2012 (the "Technical Report").
3. I graduated with a Bachelor of Metallurgy (Hons Class 1) from Sheffield University, UK in 1974. I am a registered member of the Australian Institute of Geoscientists. I have practiced my profession continuously since 1974, with particular experience in study management and both operational and project experience in precious and base metal deposits. I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
4. I visited the BYP property in February 2012 for two days.
5. I am responsible for the preparation of Sections 13, 17, part of 18, 19, 21 and 22 of the Technical Report.
6. I am independent of the issuer as described in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the BYP property.
8. I have read NI 43-101 and certify that the parts of the Technical Report for which I am responsible have been prepared in compliance with the Instrument.
9. As at the effective date of the Technical Report, to the best of my knowledge, information, and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 8th day of August 2012

ORIGINAL SIGNED BY

Alan Riles, B.Met, MAIG

M Molavi

1. I, Mo Molavi P.Eng., M.Eng., B.Eng., of Vancouver, British Columbia do hereby certify that I am a Principal Mining Engineer with AMC Mining Consultants (Canada) Limited, Suite 1330, 200 Granville Street, Vancouver, British Columbia V6C 1S4.
2. The Technical Report to which this certificate applies is entitled "Technical Report for BYP Gold-Lead-Zinc Property, Hunan Province, China" and is effective 30 June 2012 (the "Technical Report").
3. I graduated with a B.Eng. in Mining Engineering from the Laurentian University in Sudbury Ontario in 1979 and an M.Eng. in Mining Engineering specializing in Rock Mechanics and mining methods from the McGill University of Montreal in 1987. I am a registered member in good standing of the Association of Professional Engineers and Geoscientists of Saskatchewan and a Member of the Canadian Institute of Mining, Metallurgy and Petroleum. I have worked as a Mining Engineer for a total of 30 years since my graduation from university and have relevant experience in project management, feasibility studies and technical report preparations for mining projects in North America. I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
4. I visited the BYP property in February 2012 for two days.
5. I am responsible for the preparation of parts of Sections 18 of the Technical Report.
6. I am independent of the issuer as described in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the BYP property.
8. I have read NI 43-101 and certify that the part of the Technical Report for which I am responsible has been prepared in compliance with the Instrument.
9. As at the effective date of the Technical Report, to the best of my knowledge, information, and belief, the part of the Technical Report for which I am responsible contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 8th day of August 2012

ORIGINAL SIGNED AND SEALED BY

Mo Molavi, P.Eng.

D Nussipakynova

1. I, Dinara Nussipakynova, P.Geo., B.Sc. and M.Sc., of Vancouver, British Columbia, do hereby certify that I am a Senior Geologist with AMC Mining Consultants (Canada) Limited, Suite 1330, 200 Granville Street, Vancouver, British Columbia V6C 1S4.
2. The Technical Report to which this certificate applies is entitled "Technical Report for BYP Gold-Lead-Zinc Property, Hunan Province, China" and is effective 30 June 2012 (the "Technical Report").
3. I graduated with a B.Sc. and M.Sc. in Geology from Kazakh National Polytechnic University in 1987. I am a registered member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia. I have worked as a Geologist for a total of 25 years since my graduation from university and have relevant experience in geology, exploration and mineral resource estimation for base and precious metal deposits and in public reporting of mineral assets. I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
4. I have not visited the BYP Property.
5. I am responsible for the preparation of Section 14 of the Technical Report.
6. I am independent of the issuer as described in section 1.5 of NI 43-101.
7. I have had no prior involvement with the BYP property.
8. I have read NI 43-101 and certify that the parts of the Technical Report for which I am responsible have been prepared in compliance with the Instrument.
9. As at the effective date of the Technical Report, to the best of my knowledge, information, and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 8th day of August 2012

ORIGINAL SIGNED AND SEALED BY

Dinara Nussipakynova, P.Geo.

A A Ross

1. I, Adrienne A Ross, P.Geo., P.Geol., of Vancouver, British Columbia, do hereby certify that I am a Senior Geologist with AMC Mining Consultants (Canada) Limited, Suite 1330, 200 Granville Street, Vancouver, British Columbia V6C 1S4.
2. The Technical Report to which this certificate applies is entitled "Technical Report for BYP Gold-Lead-Zinc Property, Hunan Province, China" and is effective 30 June 2012 (the "Technical Report").
3. I graduated with a B.Sc. (Hons) in Geology from the University of Alberta in 1991 and hold a Ph.D. from the University of Western Australia. I am a registered member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia and Alberta. I have practiced my profession for a total of 18 years since my graduation and have relevant experience in geology and exploration for base and precious metal deposits. I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
4. I have not visited the BYP property.
5. I am responsible for the preparation of Sections 8, 10, 11 and 12 of the Technical Report.
6. I am independent of the issuer as described in section 1.5 of NI 43-101.
7. I have had no prior involvement with the BYP property.
8. I have read NI 43-101 and certify that the parts of the Technical Report for which I am responsible have been prepared in compliance with the Instrument.
9. As at the effective date of the Technical Report, to the best of my knowledge, information, and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 8th day of August 2012

ORIGINAL SIGNED AND SEALED BY

Adrienne Ross, P.Geo.

P R Stephenson

1. I, Patrick R Stephenson, P.Geo., B.Sc. (Hons), FAusIMM (CP), MAIG, MCIM, of Vancouver, British Columbia, do hereby certify that I am General Manager and a Principal Geologist with AMC Mining Consultants (Canada) Limited, Suite 1330, 200 Granville Street, Vancouver, British Columbia V6C 1S4.
2. The Technical Report to which this certificate applies is entitled "Technical Report for BYP Gold-Lead-Zinc Property, Hunan Province, China" and is effective 30 June 2012 (the "Technical Report").
3. I graduated with a BSc (Hons) in Geology from Aberdeen University in Scotland in 1971. I am a registered member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia. I have worked as a Geologist and Manager for a total of 40 years since my graduation from university and have relevant experience in geology, exploration and mineral resource estimation for base and precious metal deposits and in public reporting of mineral assets. I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
4. I have not visited the BYP property.
5. I am responsible for the preparation of Sections 1, 25 and 26 of the Technical Report.
6. I am independent of the issuer as described in section 1.5 of NI 43-101.
7. I have had no prior involvement with the BYP property.
8. I have read NI 43-101 and certify that the parts of the Technical Report for which I am responsible have been prepared in compliance with the Instrument.
9. As at the effective date of the Technical Report, to the best of my knowledge, information, and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 8th day of August 2012

ORIGINAL SIGNED AND SEALED BY

Patrick Stephenson, P.Geo.

H A Smith

1. I, Herbert A Smith, P.Eng., B.Sc., M.Sc., of Vancouver, British Columbia do hereby certify that I am a Principal Mining Engineer with AMC Mining Consultants (Canada) Limited, Suite 1330, 200 Granville Street, Vancouver, British Columbia V6C 1S4.
2. The Technical Report to which this certificate applies is entitled "Technical Report for BYP Gold-Lead-Zinc Property, Hunan Province, China" and is effective 30 June 2012 (the "Technical Report").
3. I graduated from the University of Newcastle Upon Tyne with a B.Sc. in Mining Engineering in 1972 and an M.Sc. in Rock Mechanics and Excavation Engineering in 1983. I am a registered member in good standing of the Association of Professional Engineers and Geoscientists of British Columbia, the Association of Professional Engineers of Ontario, and the Association of Professional Engineers, Geologists and Geophysicists of Alberta. I have worked as a Mining Engineer for a total of 35 years since my graduation and have relevant experience in underground mining, feasibility studies and technical report preparation for mining projects. I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
4. I visited the BYP property in February 2012 for two days.
5. I am responsible for the preparation of Sections 15 and 16 of the Technical Report.
6. I am independent of the issuer as described in Section 1.5 of NI 43-101.
7. I have had no prior involvement with the BYP property.
8. I have read NI 43-101 and certify that the parts of the Technical Report for which I am responsible have been prepared in compliance with the Instrument.
9. As at the effective date of the Technical Report, to the best of my knowledge, information, and belief, the parts of the Technical Report for which I am responsible contain all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

Dated this 8th day of August 2012

ORIGINAL SIGNED AND SEALED BY

Herbert A Smith, P.Eng.