Technical Report on the BYP Property, Hunan Province, China

Report For:

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1.0 SUMMARY

Silvercorp sent a contract geologist (Mr. Cullen, P. Geo) to the BYP property to undertake a site visit (May 12) and completion of a NI 43-101 compliant resource report on the BYP property This report is the result, based on an initial property visit (January 16, 17, 2011) and review by Wardrop Minerals this report updates the Wardrop report and resource estimate for the property based on newer data and an improved understanding of the ore bodies. Sections of the Wardrop report have been excerpted with little change while other sections have been either modified or re-written based on updated information, changes to estimation parameters and new ideas for property development.

The BYP Gold-Lead-Zinc Property is located at about 23 kilometers northwest of Shaoyang city, central Hunan Province, southeastern China. The geographical center of the Property is approximately 27°22'33"N and 111°18'21"E. The BYP Property consists of a 3.67 km^2 mining permit owned by the Yunxiang Mining Co. Ltd. (Yunxiang Mining) and a 3.2 km^2 exploration permit for which Yunxiang Mining has submitted all the required application documents to the provincial government. The mining permit (#4300000810016) covers the known area of lead-zinc and gold mineralization within the BYP Property and the exploration permit, under application, covers the adjacent area directly south of the mining permit.

The Pb-Zn and Au mineralization at the BYP property were discovered during two comprehensive exploration programs conducted by a Hunan provincial government geological team in 1970s and early 1990s respectively. Silvercorp carried out an underground sampling program on the currently accessible underground works from August 2010 to January 2011 to verify the historical exploration data and further delineate the major Zone 3 gold zone. Current known mineralization has been delineated with grid drilling, trenching and exploration tunneling.

Since 2006, Yunxiang Mining has been mining portions of the Pb-Zn mineralization at a daily 300 to 400 tons from underground. A total of 160,000 tons of zinc-dominated ore have been processed, mostly from Pb, Zn Zone 2, and the head ore grade is 3.5-4% Zn and 0.3% Pb. Yunxiang Mining has produced zinc concentrate with 41-43% Zn at a recovery rate of 60-70% (based on production record in 2009).

In November, 2010, Silvercorp entered into a share purchase agreement and a Sino-Foreign cooperative joint venture contract to acquire a 70% equity interest in Yunxiang Mining, a local private mining company in Hunan Province, China. Yunxiang Mining's primary asset is the BYP Gold-Lead-Zinc (Au Pb-Zn) Mine with its associated mining and exploration permits. A joint venture company was formed between Silvercorp and Yunxiang Mining in December 2010.

The distribution of gold and lead-zinc mineralization on the Property is controlled by stratigraphy and structure. Gold mineralization is hosted by Devonian clastics and lead and zinc mineralization is hosted in stratigraphically younger Devonian limestone. Post mineral thrusting has juxtaposed older Devonian gold bearing clastics and younger Devonian limestones, complicating the stratigraphy. The gold, lead and zinc mineralization mainly occur as disseminations and veinlets within stratiform and highly altered lenticular bodies. The Pb, Zn mineralization is the oldest, considered to be of the Mississippi Valley Type, generated by mineral rich brines that permeate the pore space, fractures and planes of weakness in the host carbonates during diagenesis, The Au mineralization appears to be later, thrust related and of the Carlin Type whereby Au is deposited in the distal epithermal portion of a major hydrothermal mineralization system driven by intrusion at depth in the core area of the Dachengshan dome structure.

Hunan Nonferrous Metals Research Institute was retained to conduct a preliminary metallurgical test on gold and lead-zinc ore samples collected from underground works by Silvercorp geologists. A gold concentrate of 41.59g/t Au was produced with a recovery rate of 91.65% in a closed-circuit test on the gold ore sample. A closed circuit test with regrinding lead and zinc rougher concentrates have produced a lead concentrate of 55.97%Pb with a recovery rate of 85.87% and a zinc concentrate of 52.40%Zn with a recovery rate of 92.71%.

The author visited the BYP Property on May 12, 2011. Underground development for both gold and lead-zinc zones, historical drill hole sites, drill core storage, current mining and milling facilities were checked during this site visit. Duplicate check samples were collected from two underground exploration tunnels in the Zone 3 Au ore body at the 252 level. Assay results of check samples are well co-related with grade data from the current Silvercorp sampling program. Historical exploration program data was analysed using duplicate analysis conducted by Chinese state-owned geological team and by co-relation with current data in the same area where no duplicate analysis were available (1990-1991 drill program results).

In this report, Silvercorp has estimated the gold and lead/zinc resources based on a data set comprised of exploration data from the two historical programs and Silvercorp's recent underground channel sampling program. The resource in the main gold zone (Zone 3) has been classified as an Indicated Resource. The resource in the remaining three gold and four lead zinc zones has been classified as Inferred .

The estimated indicated gold resource is located in Zone 3. Inferred resources are estimated for gold zones 1 and 2, 3, 5 and 10 and lead zinc zone 12 where it appears a crosscutting gold zone is present. The base case for this estimate is the 1 g/t cutoff which values are bold in Table 1.1

Table 1.1 Resource Estimate for Gold at BYP

			UnCapped Gold			Capped Gold (11.43 g/tAu)		
Category	Zone	Au Cutoff	Tonnes	Au g/t	Oz	Tonnes	Au g/t	Oz
Indicated	gold3	0.5	2,322,320	3.34	249,370	2,289,300	3.11	229,151
		1	**2,175,290**	**3.51**	**245,635**	**2,141,750**	**3.27**	**225,400**
		2	1,653,080	4.16	221,119	1,589,250	3.91	199,653
Inferred	All Zones	0.5	3,301,090	2.09	221,500	3,300,960	2.08	221,011
		1	**2,822,950**	**2.30**	**208,469**	**2,819,830**	**2.29**	**208,000**
		2	1,317,550	3.36	142,386	1,316,380	3.35	141,994

The estimated lead and zinc resources for all zones are presented in table 1.2. The inferred resource represents the total for lead zinc zones 1 and 2, 3 and 5, 9 and 10 and 12. The base case for Pb – Zn mineralization is 3% combined metal content, indicated in **bold font** in table 1.2.

Resource estimates were checked using visual evaluation of block conformity to solid model boundaries and the occurrence of sample values reflective of adjacent block values. A statistical evaluation of the block model final values for Au and for Pb-Zn compares favorably with descriptive statistics for the base data set. The gold resource estimate using ID2 was compared to the same estimate using the unbiased Nearest Neighbor estimator and results were comparable.

Table 1.2 Resource Estimate for Lead and Zinc at BYP

Classification	Zone	% Pb+Zn	Tonnes	Pb %	Zn %	Pb Tonnes	Zn Tonnes
Inferred	All Zones	0.5	25,925,900	0.76	2.10	197,766	544,712
		1	25,273,220	0.78	2.14	196,912	539,967
		2	17,568,740	0.95	2.57	166,203	451,569
		3	**8,314,460**	**1.34**	**3.42**	**111,272**	**283,964**
		5	2,713,340	2.17	4.73	58,852	128,314

A comprehensive 30,000m drilling program is underway at time of writing to upgrade the resource classification of the major ore zones and to further explore the potential of the major ore-controlling structures to contain more mineralization. The greatest exploration potential is considered to exist in the southeast part of the Property where several major faults are inferred to intersect and where the highest grades of both gold and lead and zinc mineralization occur. The estimated cost for the drilling program is CAD$5,000,000.

2.0 INTRODUCTION

The BYP Gold-Lead-Zinc Property is located in central Hunan province, southeastern China at approximately 27°22' North and 111° 18' East. Lead-zinc and gold mineralization was discovered in middle Devonian carbonate and clastic rocks in 1970's and early 1990's respectively by the 418 Geological Team, a State-owned Geological Survey organization. The property remained undeveloped until 2002 when Yunxiang Mining, the current mine owner, acquired an exploration permit covering all the known mineral zones. In January 2008, the provincial government granted Yunxiang Mining a mining permit which covers the major part of the original exploration permit. In July 2009, the provincial government issued a new exploration permit covering the remaining area of the previous exploration permit to Yunxiang Mining.

Silvercorp carried out an internal due diligence study on the BYP Property from August 2010 to January 2011 and decided to form a joint venture with Yunxiang Mining. A joint venture company was formed between Silvercorp and Yunxiang Mining in December 2010. The Property transaction was stil incomplete as of the effective date of this report, May 31, 2011.

2.2 Terms of Reference

Silvercorp has requested that Mr. Cullen carry out a data review and mineral resource estimate for the BYP Property within the current mining permit as part of a Technical Report written in compliance with National Instrument (NI) 43-101 guidelines.

Silvercorp may use this Report as part of the requirements for listing a company on a stock exchange.

Silvercorp provided Mr. Cullen with certain information that is cited in the report or is listed in Section 21.0 References or elsewhere within the Report. This report is based in part on internal company technical reports and maps, published government reports, and a review of available data. Mr. Cullen has not conducted detailed land status evaluations and has relied upon previous qualified reports, public documents and statement by Silvercorp regarding to the Property status and legal title to the Property.

As part of the preparation of this report, Mr. Cullen visited the Property on May 12, 2011.

The effective date of this report is May 31, 2011.

3.0 Reliance on Other Experts

The author is not independent of Silvercorp, as described in section 1.4 of the Instrument and has prepared this report for Silvercorp in order that it may describe the BYP Property resource as required in National Instrument 43-101. Mr. Cullen has relied upon the following experts for completion of this report.

3.1 Previous Reporting by Qualified Persons

The author has relied on information and descriptions contained in the Wardrop NI43-101 compliant report entitled 'TECHNICAL REPORT ON THE BYP PROPERTY, HUNAN PROVINCE CHINA' with an effective date of January 17, 2011 and a report date of March 11, 2011. The qualified persons who created this report were Ruijin Jiang, P. Geo. (site visit) and Greg Z. Mosher, P. Geo. This report includes near verbatim excerpts from Wardrop Report for chapters 4, 5, 7, 9, 11, 13, 15 and Appendices 1 to 3. Analysis of check samples collected on the Wardrop site visit have been included in the data verification section of this report.

3.2 Translation

All documents related to the BYP project are created and stored in the Chinese language. Translations of certain documents were made by Mr. B. Zhang, senior geologist for the BYP project and Ms. C. Zhang, Administrative Assistant in the Vancouver office. Both are Silvercorp employees.

3.3 Resource Estimation

Mr. Yongwei Li, prepared the resource estimate found in Chapter 17 of this report. Mr. Li is a full time employee of Silvercorp undertaking resource estimation and is based in China. He is not a qualified person under the meaning of the instrument and worked under the supervision of the author during review of old estimates and preparation of new estimates for the BYP property.

3.4 Metallurgy

In 2010, two types of ores, Au and Pb-Zn ore, taken from BYP mine were tested by Hunan Non-ferrous Metals Research Institute (HNMRI). The study included assay, mineralogical analysis, mineral processing, mass balance, reporting, water recycle and disposal. Two technical reports respectively referring to Au and Pb-Zn tests were issued to Silvercorp in Jan.02, 2011. John Zhang, metallurgist with Silvercorp compiled these reports into the Chapter 16 Metallurgical Section.

3.5 Disclaimer

The quality of information, conclusions and estimates contained herein is consistent with or exceeds the level of detail required in this form of technical reporting. The report is based on: I) information available at the time of preparation, and II) the assumptions, conditions and qualifications set forth in this report. The report is intended for use by Silvercorp Metals Inc. only, and any other use of or reliance on this report by any third party is at that party's sole risk.

4.0 PROPERTY DESCRIPTION AND LOCATION

The BYP Property is located at 23 kilometers northwest of Shaoyang city, central Hunan Province. Administratively the Property belongs to Baiyunpu Village, Jukoupu Township, Xinshao County, Shaoyang City (Figure 4.1). The center of the Property is located at approximately 27°22'33"N and 111°18'21"E.

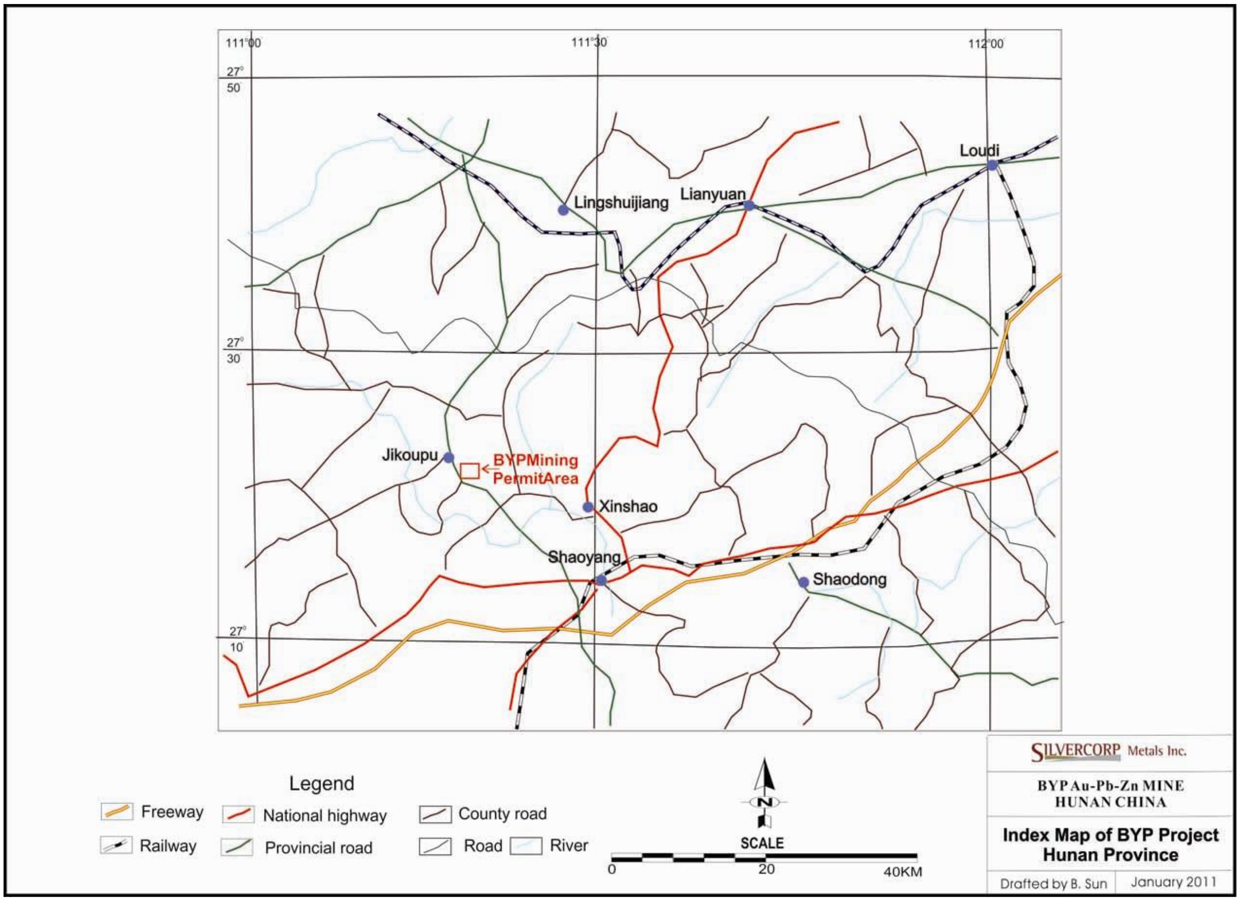

Figure 4.1 BYP Property Location

The property is located in the central section of the east-west-trending Longshan - Baimashan regional metallogenic zone in central Hunan province. The BYP Property consists of a 3.67 km^2 mining permit currently owned by Yunxiang Mining and a 3.2 km^2 exploration permit that is currently under application. (Figure 4.2). The mining permit (#4300000810016) covers the known mineralization area of the BYP 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 BYP Property. On January 8, 2008, the BYP mining permit was granted to Yunxiang Mining by the Bureau of Land and Resources of Hunan Provincial Government. As the holder of the previous exploration permit, Yunxiang Mining may maintain its exploration right for the remaining portion of the previous exploration permit. The application for the exploration permit has been submitted and there are no anticipated obstacles to approval.

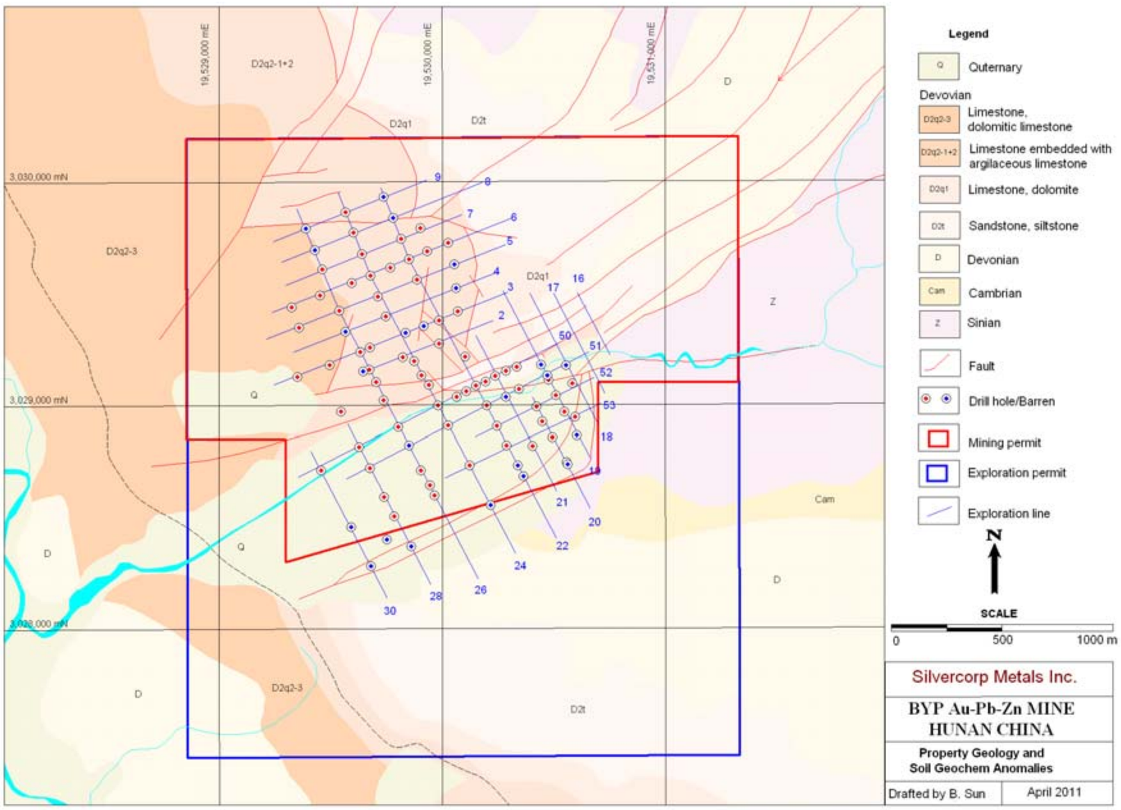

Figure 4.2 **Location of BYP Mining and Exploration Permits**
Revised from Silvercorp map

The BYP mining permit is defined with the following coordinates:

Table 4.1 Coordinates of BYP Mining Permit

Point	**Gauss Coordinates Universal Transverse Mercator Zone 49R**	
	X	Y
1	3030193.80	37528851.00
2	3030199.80	37531324.00
3	3029100.00	37531328.00
4	3029100.00	37530700.00
5	3028700.00	37530700.00
6	3028300.00	37529300.00
7	3028850.00	37529300.00
8	3028850.00	37528854.00

Yunxiang Mining has acquired the surface rights to the land covered by the mining permit for mining and processing operations. The BYP mine has been in production at a daily rate of 300-400 tpd since 2006 (Figure 4.3). Existing surface facilities include a 300-400 tpd operating mill, two storage areas, a new tailings dam and some temporary buildings.

In November, 2010, Silvercorp entered into a share purchase agreement and a Sino- Foreign cooperative joint venture contract to acquire a 70% equity interest in Yunxiang Mining, a local private mining company in Hunan Province, China. Yunxiang Mining's primary asset is the BYP Gold-Lead-Zinc (Au-Pb-Zn) Mine. A joint venture company was formed between Silvercorp and Yunxiang Mining in December 2010. The cost of the share purchase and the Joint Venture capital investment for Silvercorp is approximately US$33 million. The Property transaction was not complete as of the effective date of this report, May 31, 2011.

The mine is currently permitted for the extraction of lead and zinc. Additional government approval may be required for mining gold resources within the same permit area. 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.

Figure 4.3 Mill buildings at BYP adjacent to portal for level 252 decline.

Figure 4.4 Chip sampling the wall of an exploration tunnel on the 252 level

5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The BYP Property is located at the southwest margin of the northeast trending Dachengshan mountain range. The lowest portion in the Property is the southwest part which is surrounded with high mountains in the southeast, northeast and northwest directions. Elevation of the Property is from 241 to 862 meters (m) above sea level. The northeast, east and southeast parts of the property consist of low mountains resulting from the erosion of clastic rocks, and the northwest, west and southwest parts are a combination of low mountains and hills that are underlain by carbonate rocks.

A paved provincial highway runs across the south margin of the Property. The mil, underground entrance and tailing storage areas are connected to the provincial highway by a three-kilometer paved road. Shaoyang, a major local city with a population of more than half a million, is located about 21 km southeast of the Property and can be reached with a 30 minute drive. Shaoyang is connected to other major cities in Hunan Province and nationwide by railroad 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 and wet with an annual average temperature 17.0º C and an average annual precipitation of 135 cm. Maximum Temperatures range from a recorded maximum of 39.8º C to a minimum of -10.8º C. The climate is suitable for year-round exploration and mining.

The high mountainous area is covered with forest; 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 the 35kv substation at Xintianpu and the 110kv substation at Jukoupu respectively and both of them are located 6 kilometers away from the Property.

The district of Shaoyang is one of the most densely-populated areas in Hunan province. There is a historical tradition of mining in adjacent areas. A skilled labor force is available for all levels of mining and related activities.

6.0 HISTORY

6.1 History of Detailed Exploration

State-owned geological teams and private companies have carried out various regional surveys and exploration programs both within the Property and adjacent areas since 1971. Following is a brief summary of the exploration programs conducted on the Property:

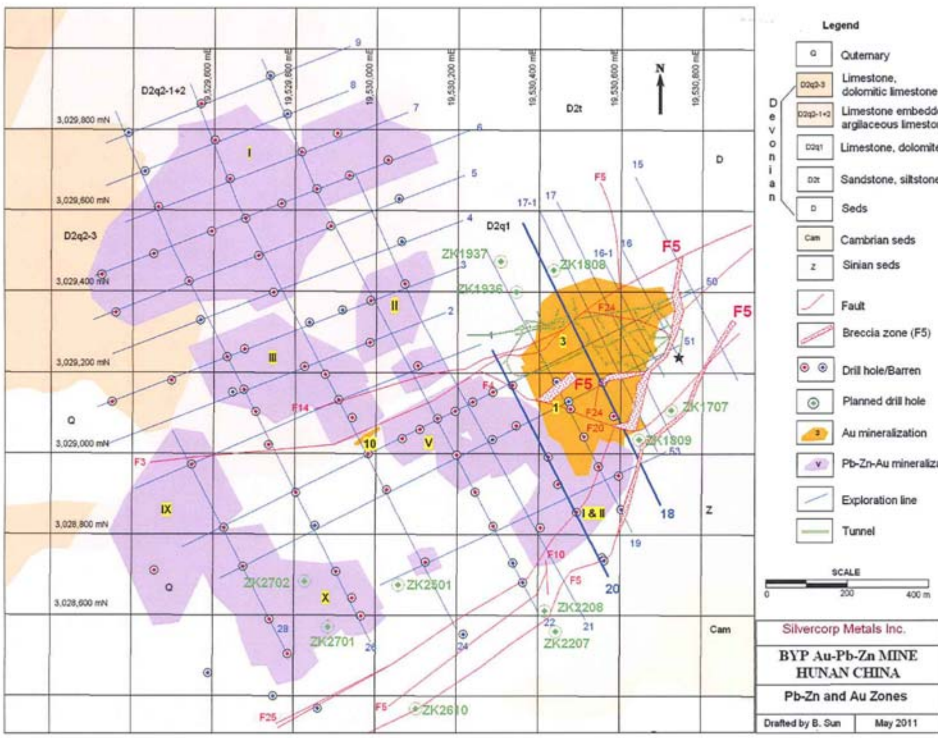

Figure 6.1 **Drill hole locations and mineralized zones at BYP**

6.1.1 Detailed Exploration for Lead and Zinc during 1971 and 1977

6.1.1.1 Description of Program

Detailed exploration program for Pb-Zn resource at BYP was carried out by 468 Geological Exploration team of the Hunan Provincial Geological Bureau. Detailed mapping, IP surveying, topographic surveying, hydrogeological mapping, trenching and metallurgical test were included in the comprehensive program. The Property was covered with a drilling grid of 50-100 X 50-100 meters. 84 drill holes were drilled for a total of 31,033 meters. 12 mineralization zones were delineated within the middle Devonian limestone units in the BYP Property.

6.1.1.2 Controls of Mineralization

All known lead and zinc zones show characteristics of stratabound mineralization and selectively occurred within the thickly bedded carbonate rocks in the upper portion of Middle Devonian (D2q) which overlie the gold-host sequence in the Property. However, form, occurrence, and size of individual zones are obviously controlled and affected by pre-ore and post-ore fault and folds. Lead and zinc mineralization is closely associated with the second-order fractures and interlayer structurally fractured zones at the hanging walls of major faults.

6.1.1.3 Mineralogy

Major metallic minerals in the ore zones include pyrite, sphalerite, galena, and boulangerite. Chalcopyrite and clinohedrite occurred as accessory minerals. Major gangue minerals are calcite and dolomite and minor gangue minerals include barite, quartz and muscovite. Grain size of galena and sphalerite ranges from 0.01mm to 2mm. Ore minerals are unevenly distributed as disseminated and fissure-filling mineralization in mineralized rock.

Depth of oxidation zone in the Property varies from several meters to 20 meters. Oxidation of ore zones is closely related to the extensity and intensity of karst development. At fractured zones with karst caves, sulfides were oxidized to limonite which accumulated as Fe-Mn gossans at surface.

6.1.1.4 Distribution and Characteristics of Lead and Zinc Zones

Eleven of the twelve zones occurred as stratiform and lenticular ore bodies in Devonian limestone, dolomite and marlite. One zone occurred in Cambrian carbonaceous slate. Mineralization zones I, II and III occurred as stratiform zones at the Haitangling section. Most of the lead-zinc zone (No. 2) from which previous production was obtained has been mined out and ore is currently being obtained from a newly-discovered blind lead-zinc zone. Other zones occurred as lenticular bodies at the Baiyunchang section. Mineralization zones IV, V, VI, VII and XI overlapped vertically (Figure 6-2) and zones IX and X also show an overlap relationship. The general occurrence of ore zones is identical to that of host rock with a dip angle from 25 to 30 degrees. Details of occurrences of each individual ore zone are summarized in Table 6-1.

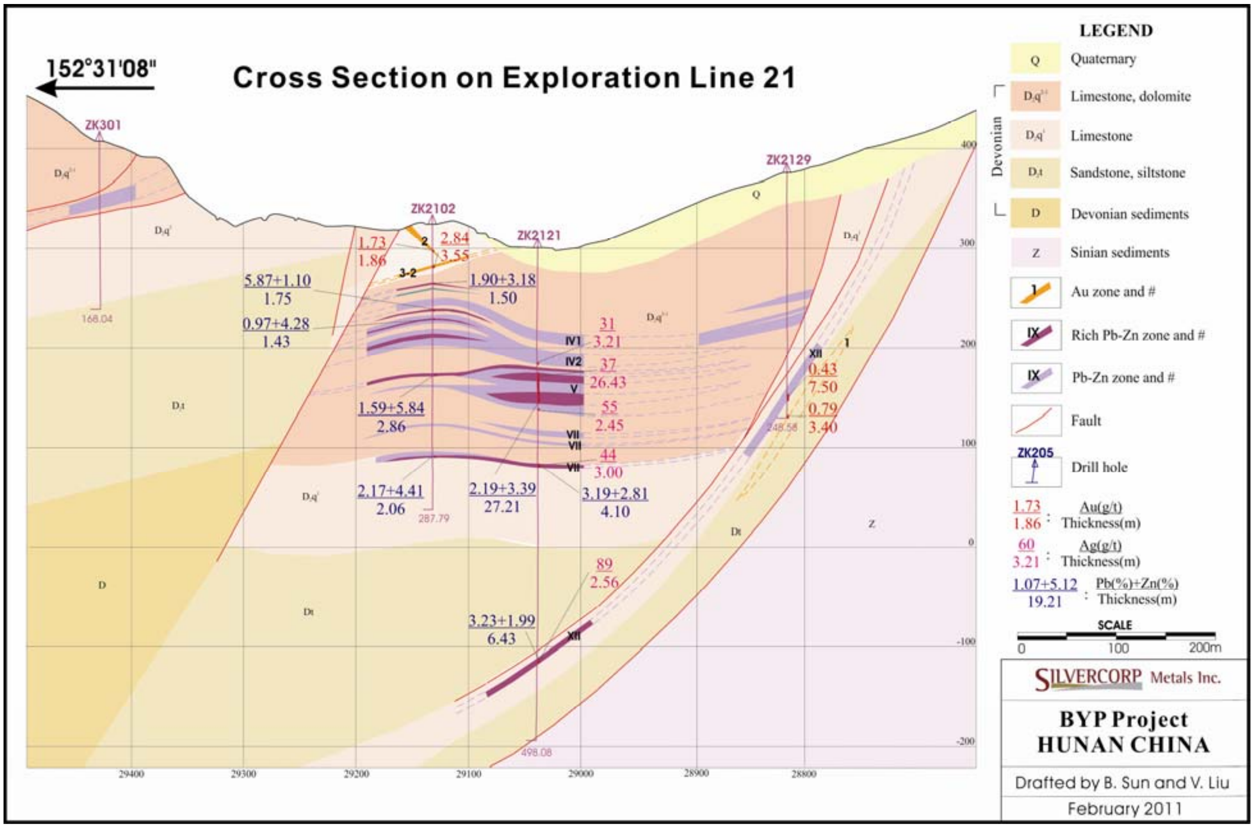

Figure 6.2 Cross section showing overlapped zones

Table 6.1 Features of individual Pb-Zn mineralization zones at BYP

Zone #	Range of Exploration Lines	Controlled with	Type	Occurrences			Form	Layers	Thickness (m)			Average Grade (%)			Footwall Elevation
				Strike	Dip	Angle			Max	Min	Ave	Pb	Zn	Cu	
I	7,6,5,24-1		Zn	NW	SW	25-40	stratiform	1	25.4	1.06	11.57		1.89		477.83-193.77
II	3,2	ZK302, 301, PD3, PD2	Zn	NE	NW	18	stratiform	2	14.86	3.12	9.29	0.46	2.73		366.88-290.97
III	24,26	ZK2611,206,203,2409, 101	Zn	NE	NW	18	stratiform	2	22.01	8.38	14.43	0.47	2.37		105.87- -97.16
IV	50,51	ZK5003,2102,2121,2002	Pb	NWW	SW	20	Lenticular	2	14.67	0.95	8.10	1.48			235.79-224.77
V	50,51	ZK5002,2201,5003,2102, 2121,2002	Pb-Zn	NWW	SW	20-30	Lenticular	1	16.59	0.81	3.91	0.83	2.52		195.02-111.82
VI	50,51,22,24	ZK	Pb-Zn	NWW	SW	20-30	Lenticular	2-10	53.47	1.36	14.78	1.04	1.45		120.60-7.39
VII	0,51,20	ZK2302,5002,2201,5003, 2102,2121,2002,2004	Pb-Zn	NWW	SW	20	Lenticular	1-3	3.89	0.85	2.12	2.35	1.37		55.27-23.41
VIII	24,26,18,30		Cu	NWW	SW	39	Lenticular	1	2.51	2.17				1.47	81.69-
IX	24,26,28	ZK3002,2802,2604,2605, 2606,2405	Pb-Zn	NE	NW	10	Lenticular	1-2	19.15	2.69	11.50	0.99	2.14		58.61-214.94
X	22,24,26		Pb-Zn	NE	NW	12	Lenticular	1-2	25.77	0.91	8.49	1.54	4.96		41.46-115.99
XI	19,20	ZK2608,2602,2401,101, 2201,5002,2201,5003	Pb	NWW	SW	5-20	Lenticular	1	4.93	1.04		1.31			-5.73-149.94
XII	7,6,5,24-1	ZK1921,5201,5202	Pb-Zn	NW	SW	8	Lenticular	1	31.61	24.72	28.16	1.92	4.31		260.12-188.59

Major mineralization zones include Zones I, III, VI, IX, X and XII. Detailed characteristics of these major zones are described in the following paragraphs.

Zone I: The mineralization zone occurred as a simple stratiform zone of 1050m in length, 340m in width and from 1.06m to 25.4m in thickness between exploration lines 5, 6 and 7 at the northern part of the Haitangling section. It was well controlled with drill holes. Sphalerite is the dominant mineral in this zone and average grade is 2.82% Zn.

Zone III: The zone was confined between F3 and F14 and occurred as a stable stratiform zone with a thickness ranging from 8.38 to 22.01 meters. Mineralization developed in interlayered fractured zones which dip to the NW at an angle of 18°. Ore grade is 0.38% Pb and 2.37% Zn.

Zone VI: The zone occurred as lenticular form between exploration lines 50 and 51and consisted of 2 to 10 subzones. The thickness of the zone is from 1.36m to 53.47m with an average of about 15 meters. Grade of the zone is 1.04% Pb and 1.45% Zn. Earlier densely massive pyrite was intercepted in ZK2202 at line 52.

Zone IX: The zone occurred as lenses in interlayer fractured zones developed in the hanging wall of fault F25. Thick mineralization was intercepted in dril holes such as ZK2405, 2605 and 2606 close to the hanging wall rocks of F25(Figure 6-3). The zone obviously pinched out in holes (ZK2604) away from the major fault. The zone generally strikes to northeast and dip to northwest at an angle of 10°. Average grade is 0.99% Pb and 2.14% Zn.

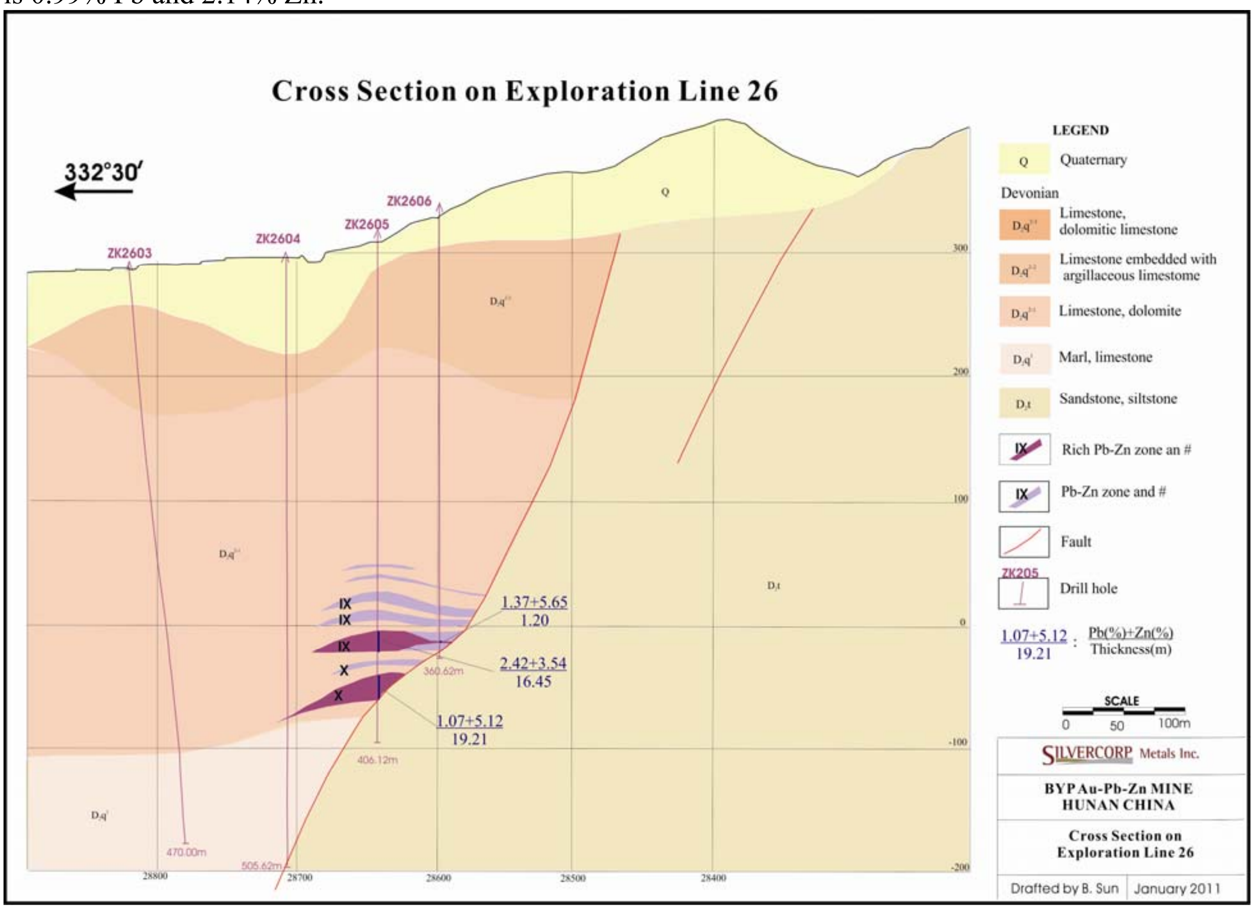

Figure 6.3 Cross section on Line 26

Zone X: Zone X occurs as lenticular zone beneath Zone IX between exploration lines 24 and 28 (Figure 6-3). The zone was developed in the interlayer fractured zones at the hanging wall host rocks and strikes to northeast and dips to northwest at an angle of 12°. Thick mineralization was intercepted near the major fault F25. The zone pinches out quickly away from the fault zone. Ore grade of Zone X is 1.56% Pb and 4.96% Zn.

Previous government exploration programs and associated reports identified 12 lead-zinc zones and four gold zones within the Property during the 1971 – 1977 exploration programme. Some of these zones were either re-numbered or re-defined during the subsequent 1990 – 1992 program as blocks. Silvercorp has created a solid model and to the extent reasonable has conformed to 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. Table 6.2 and Figure 6.4 shows how these zones have been numbered and how the solid model numbering will fit with the original system:

Table 6.2 Pb, Zn Zone numbering scheme for Resource Reporting

Zone Number 1971 -1977 (Pb, Zn)	Block Number 1990 - 1992 (Pb, Zn)	Solid Model Number for Resource Est. 2011 Pb, Zn
Zone 1		Zone 1_2
Zone 2		Zone 1_2
Zone 3		Zone 3_5
Zone 5, 6, 7, 8	Block 1	Zone 3_5
Zone 9	Block 2	Zone 9_10
Zone 10	Block 2	Zone 9_10
Zone 12	Block 3	Zone 12

During the gold exploration program carried out in the Property by 418 geological exploration team from 1990 to 1992, higher grade lead and zinc mineralization zones were detected above the gold-bearing rock unit. The 418 team re-delineated the lead and zinc zones based on new data and previous data. They rezoned some of the previously defined zones into three blocks and delineated higher grade sections within these blocks.

Block 1:

No.1 block includes the previously defined zones IV, V, VI and VII at the northeast up-warping end of the Baiyunchong syncline. Mineralization zones show the same occurrence as that of host rock with a strike direction to northwest and a dip direction to southwest at an angle from 10 to 40°. Mineralization zones in this block extend for 200 to 400 meters along strike and 150 to 500 meters in dip direction.

Higher grade zones were delineated in the middle or lower portion of the ore zones with a length from 50 to 200 meters and a thickness from 3 to 8 meters. Grade of the higher grade zones is 2.1 to 3.75% Pb and 2.54 to 4.76% Zn.

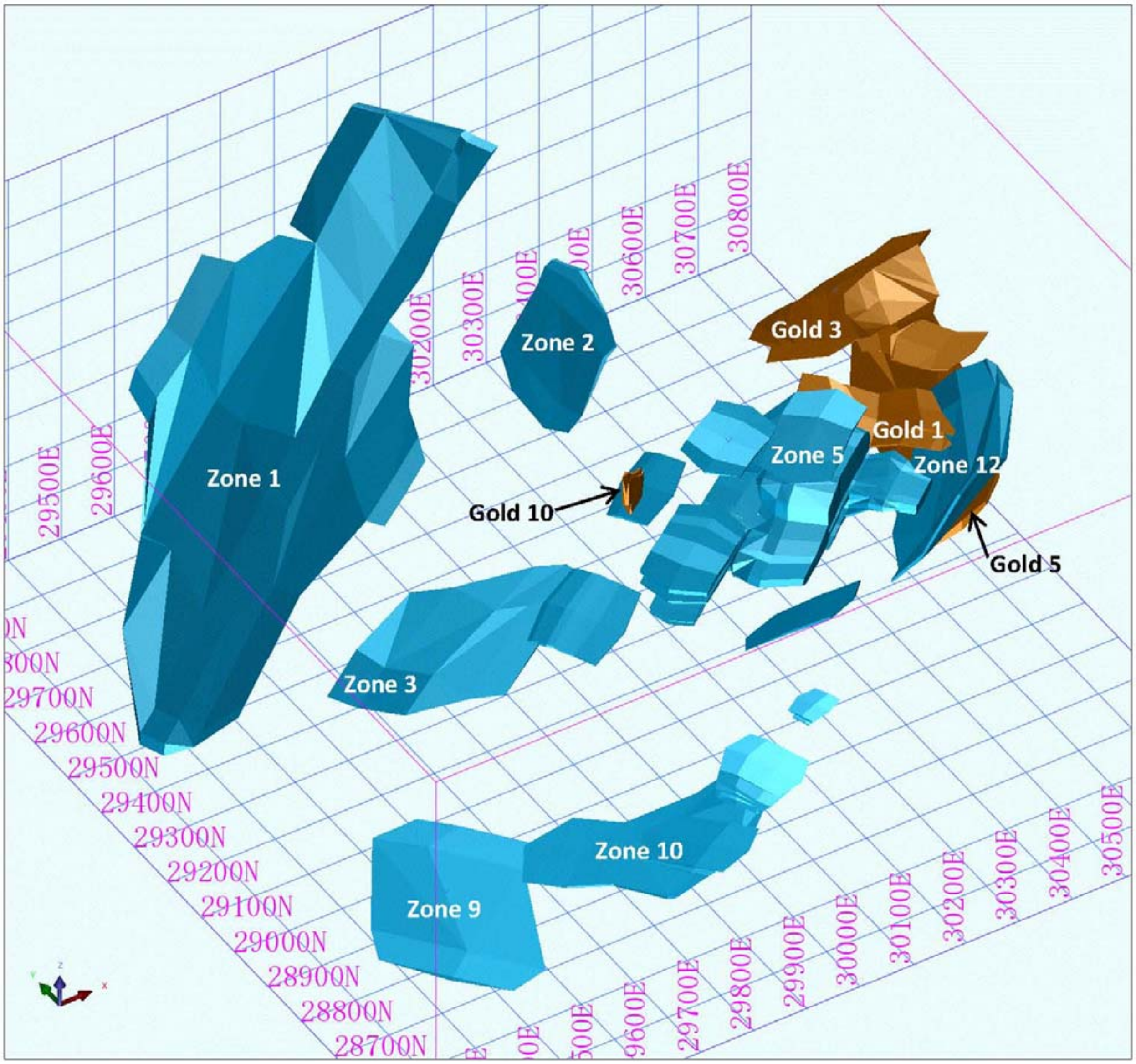

Figure 6.4 **Solid Models of Pb-Zn and Au mineralized zones**

Block 2:
Block 2 includes lead and zinc zones IX and X at the southeast limb of the Baiyunchang syncline between exploration lines 24 and 28. Both the host rock unit and the mineralization zones strike to northeast for 400 meters and dip to northwest for 80 to 300 meters at a dip angle from 5 to 20°. Higher grade zones occurred along the hanging wall of fault F25 and extend for 200 meters along strike and from 80 to 120 meters in dip direction. Thickness of the higher grade zone ranges from 1.71 to 20.56 meters. Grade of the higher grade zone is 1.21-2.38% Pb and 4.62-8.21% Zn.

Block 3:
Block 3 is renamed from Zone XII which occurred as lenticular and stratiform zones in marlite unit at the lower section of D2q. The ore zone is about 600 meter in length with a strike direction from NE to NEE and a dip direction of NW. Maximum thickness is 29.86 meters and maximum dip extension is 700 meters. Ore grade of block 3 is 2.24% Pb and 5.76% Zn.

6.1.2 Detailed Exploration for Gold in 1990 and 1991

6.1.2.1 Description of Program

A comprehensive exploration program consisting of geological mapping, trenching, aditing and drilling was carried out for detailed gold exploration in the BYP Property by the 418 geological exploration team (previously named 468 geological exploration team). 5120.62m was drilled in 21 holes in this program. Six gold mineralization zones with four ore zones were delineated. Three of the four gold ore zones are blind zones hosted in the Devonian fractured sandstone and siltstone units. The Pb-Zn ore zones were re-delineated and high grade Pb-Zn zones were defined in this exploration program.

6.1.2.2 Controls, Alteration and Mineralogy

Known gold mineralization zones occurred as stratiform or lenticular zones in the fractured clastic rocks at lower portion of Middle Devonian sedimentary sequence between exploration lines 15 and 21. They are structurally controlled by two major NE trending faults F3 and F5.

Hydrothermal alteration was well developed in ore zones and near-ore wall rocks. Major alteration types associated with gold mineralization include bleaching, silicification and pyritization. Minor alteration types are arsenopyrite, sericite, carbonate and barite. Zonation of alteration can be recognized from ore zone to wall rocks. Silicification mainly occurred in gold mineralization zone, pyrite, arsenopyrite and bleaching occurred in the near-ore wall rock, and barite, calcite and sericite in zones distal to the ore zone. Fine grained (<1mm) pyrite is the major gold-loading mineral and usually unevenly distributed as veinlets or dissemination in host rocks. Metallic minerals consist of native gold, pyrite, arsenopyrite, sphalerite, galena, siderite, tenorite, and rare stibnite. Major gangue minerals include quartz, sericite.

6.1.2.3 Distribution and Characteristics of Gold Mineralization Zones

Four gold zones were delineated and three of them are concealed zones. The gold mineralization zones occurred at elevation from 50 to 300 meters ASL. Individual zones are from 200 to 300 meters in length and from 2 to 22.14 meters in thickness with a maximum thickness of 40.97 meters. Grade varies from 2 to 3 g/t Au. Maximum average grade for individual intersection is 5.17g/t Au. Thickness and grade are variable within the four known gold zones.

Gold Zones 1 and 2:

Gold zones 1 and 2 are NS-trending zones distributed between lines 18 and 21. Gold mineralization at zone 1 occurred at the hanging wall of F5 and the foot wall of F10 with a strike length of about 250 meters and dip extension of 230 meters to the west at an angle of 50-60°. The north extension of zone 1 is cut by F11 with a horizontal displacement of about 100 meters. The mineralization occurs as stratiform zones in sandstone, siltstone, structural breccia and mylonite at elevations from 100 to 200 meters asl. Thick mineralization of 13.89 meters with an average grade of 4.56g/t Au was intercepted in drill hole ZK1801 located at the east portion of the zone (Figure 6-4). The zone split into four sub-zones with thickness from 1.55 to 4.88 meters and grade from 1.39 to 2.45g/t Au to the west portion of the zone (Figure 6-4).

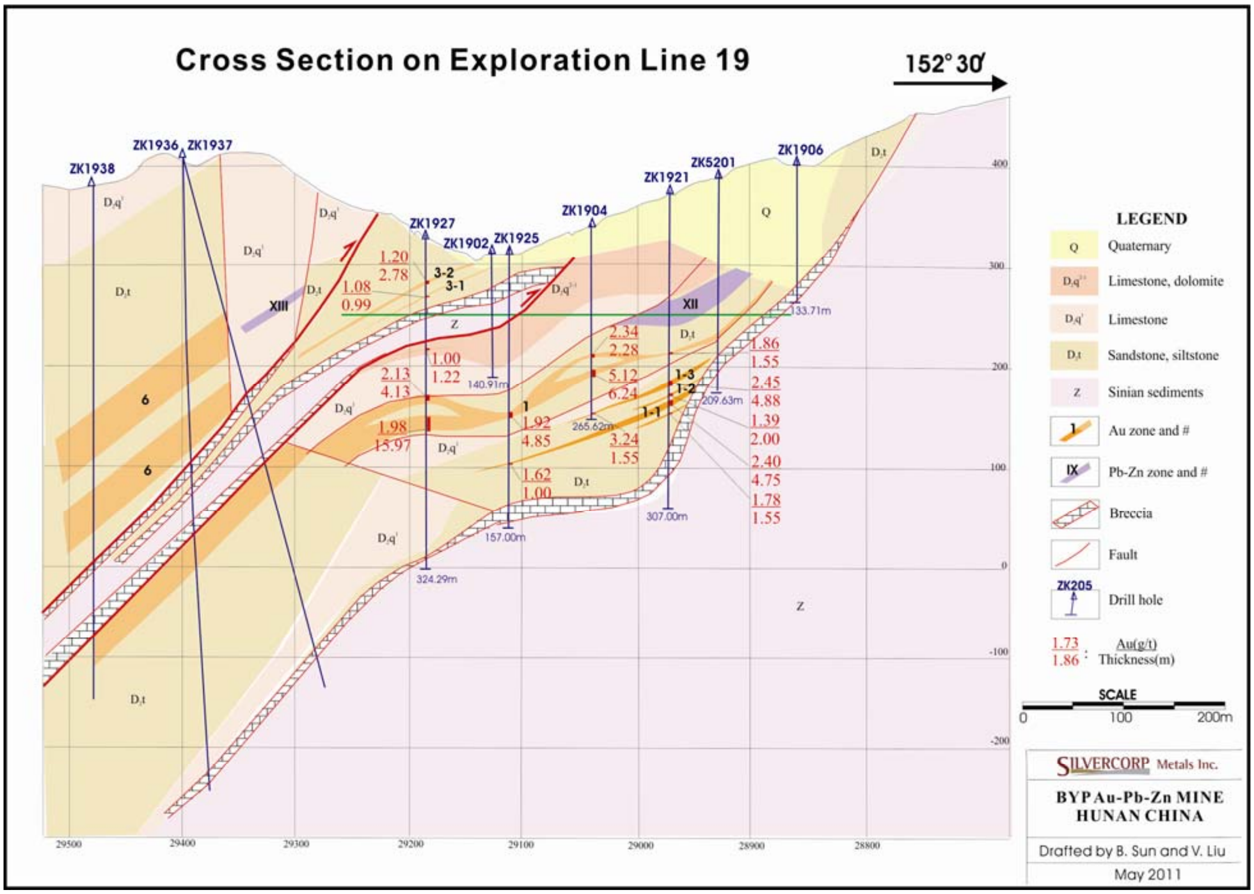

Figure 6.5 **Distribution of gold zone 1 on cross section 19**

Gold Zone 3:

Gold zone 3 is a northwest-trending zone and is the major ore body which constitutes more than 60% of the total previously estimated gold resource at BYP. The zone was defined by F4 and F3 at its south and north boundary and F24 at its northeast boundary. Gold mineralization is hosted by fractured quartz sandstone and siltstone. The main body of Gold Zone 3 mineralization is 390 meters in its longest dimension (NE/SW) and 245 meters in the NW/SE direction. Strike is North-South and dip is to the west at an angle of 40 to 50°.

Major portion of the zone is located between Line 17 and 18. A significant mineralization zone of 40.97 meters (not true thickness) with an average grade of 3.22g/t Au was intercepted in drill hole ZK1723 (Figure 6-6). Three sub-zones were intercepted in drill hole ZK1825, and grade and interception length of each sub-zone is 3.30g/t Au for 17.65 meters, 2.16g/t Au for 3.96 meters and 2.89g/t Au for 9.30 meters (Figure 6-6). The zone pinched out rapidly at lines 50 and 21.

Recent exploration has delineated Zone 3 with exploration tunnels on the 252 level. Tunnels crosscut the zone from hanging wall to footwall and provide a close up view of the silicification halo that surrounds the pyritiferous mineralization, as well as allowing detailed delineation of the extents of the mineralization. Further drilling is being undertaken from underground stations accessed by these new tunnels to further improve delineation of this zone pre-mining.

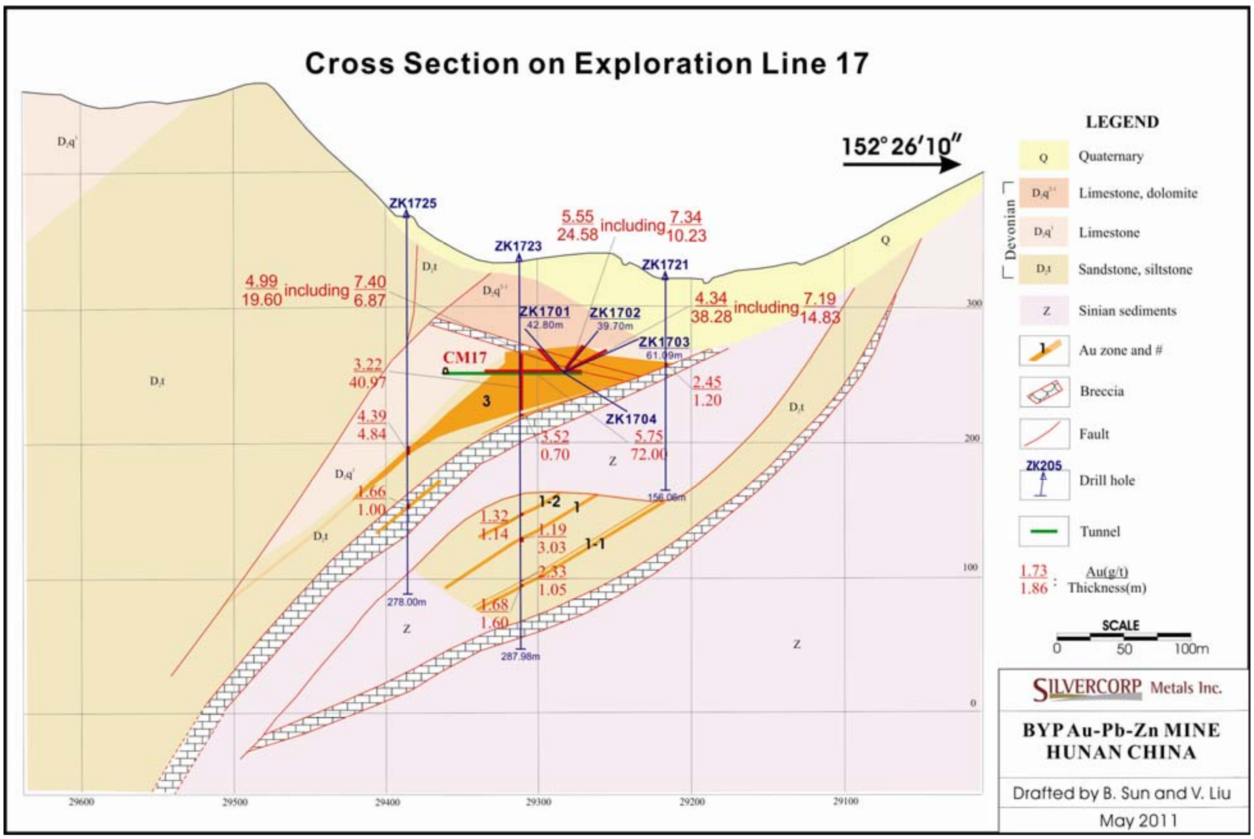

Figure 6.6 Distribution of gold zone 3 on cross sections 17

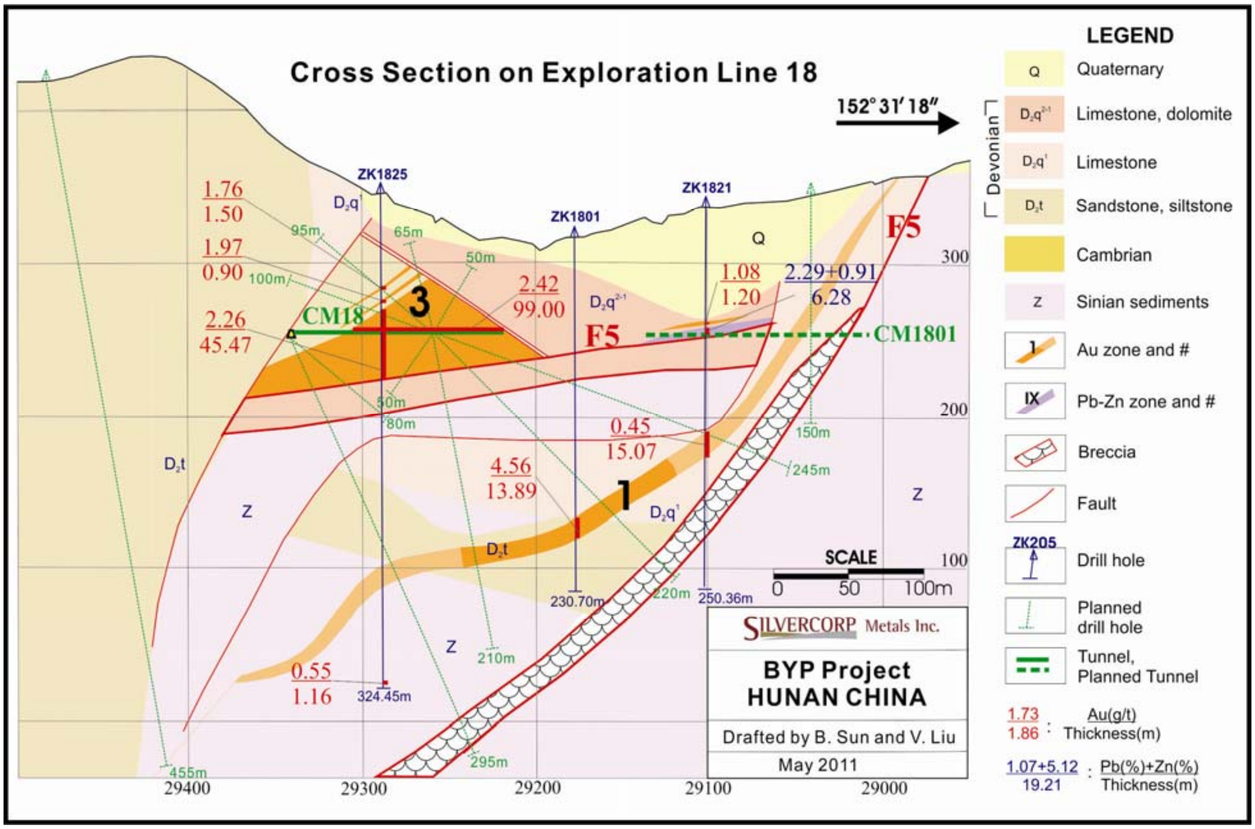

Figure 6.7 Distribution of gold zone 3 on cross sections 18

Gold Zone 5:
Zone 5 occurred at elevation from 90 to 150 meters in fractured siltstone between F5 and F4. Three layers were intercepted with intervals from 2 to 36 meters in drill hole ZK1723 (Figure 6-5). The major layer is 3.03 meters in thickness with a grade of 1.9g/t Au.

Gold Zone 10:
Zone 10 has been intersected at surface by one trench (TCAU8) at approx. section line 24, 600m WSW of Zone 3. It is modeled to have a near vertical dip and for this model has been given an inferred down dip and along strike extent which is purely notional. This zone has an inferred resource associated with it but will require further assessment with trenching and drilling to fully delineate it.

6.1.3 Historical Quality Assurance and Quality Control

In the historical exploration programs a simple quality control program was employed by the 468 (418) geological exploration team in accordance with the official technical standard promulgated by the State General Bureau of Geology. The quality control program consisted of internal and external checks.

During the detailed exploration program for lead and zinc, 174 internal check samples which constitute 3.5% of the total samples were reanalyzed for Pb, Zn and Cu at the lab of the 468 geological exploration team. 80 external check samples which constitute 1.5% of the total samples were analyzed for Pb, Zn and Cu by the central lab of the Hunan Provincial Geological Bureau.

During the gold exploration program from 1990 to 1992, 1216 internal check samples for Au were reanalyzed at the lab of the 418 geological exploration team. 114 internal checks for Pb were made and 108 internal checks for Zn were made. 24 external checks for Au and 12 external checks for Pb and Zn were made at the Hunan Mineral Analysis and Utilization Lab.

The assay quality was measured with 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 had met with the official technical standards promulgated by the State General Bureau of Geology.

6.1.3.1 Pb, Zn Duplicate Analysis

Figures 6-8, 9, 10, and 11 show results of plotting the internal lab results against internal and external duplicate analysis of assays checks from the lead and zinc exploration program.

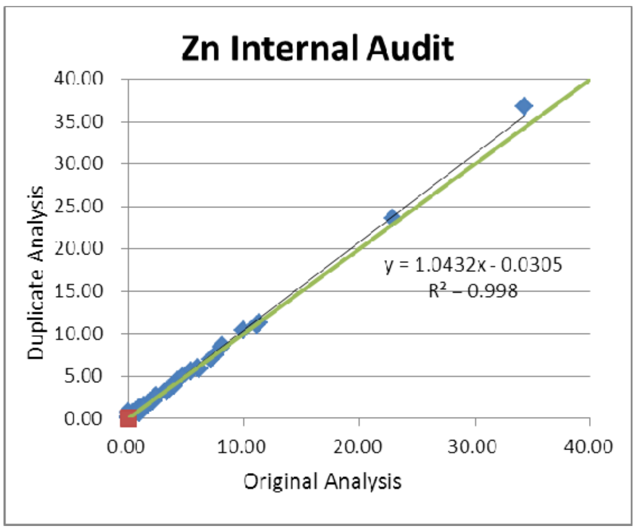

Figure 6.8 **Zinc assay results of internal check samples (1971- 1977 program)**

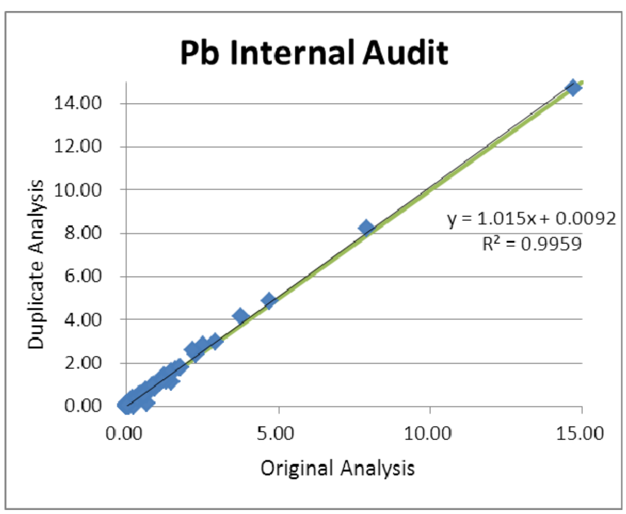

Figure 6.9 **Pb assay results of internal check samples (1971- 1977 program)**

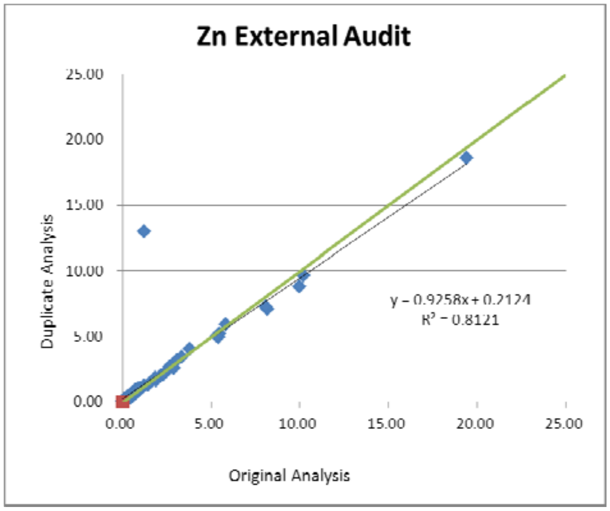

Figure 6.10 **Zn assay results of external check samples (1971- 1977 program)**

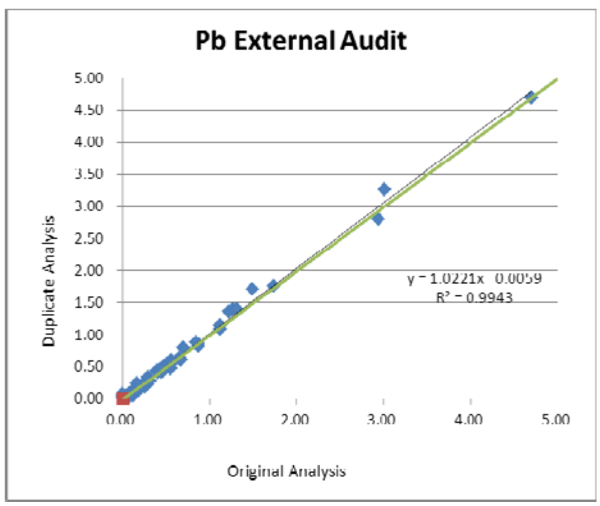

Figure 6.11 **Pb assay results of external check samples (1971- 1977 program)**

The reproducibility of the original data by check assays are considered satisfactory based on R^2 values for trend lines. A second green line indicating 1 to 1 co-relation of results indicates that at the high end of the scale for all analysis some deviation from perfect co-relation occurs but is not systematic, i.e deviation can fall above or below the 100% co-relation line. This is to be anticipated as all analysis have a margin of error which becomes relatively larger as the assayed metal contents become larger. Deviations in this case are not significant. An exception is the obvious deviation in the external Zn audit result where the initial assay returned 1.23% Zn while the check sample returned 12.95% Zn. This may be a typographical error. Since it is the only value that is spurious in the duplicate dataset, it is not considered significant. When that sample is excluded, all duplicate vs original analysis have R^2 values in excess of 0.94 with 1 being a perfect co-relation. The data is considered reliable for resource estimation.

6.1.3.2 Au Historical Data Validation

No records exist of the duplicate analysis data set for the 1990 – 1991 drill program. By collecting data for the most densely sampled area, Gold Zone 3, from both modern (QA/QC controlled data – Chapter 14) and historical data (no QA/QC available) it is possible to get a sense of the data ranges, means and Coefficients of variation for the two data sets in order to make a comparison of the tenor of the mineralization from the two different programs. Table 6.12 shows descriptive statistics for the two

Table 6.3 Descriptive statistics for capped Au values in Gold Zone 3

Au Samples Capped @ 11.43 g/t Au	*2010*	*1990-1991*	*All Data*
Mean	**3.31**	**2.72**	**3.13**
Standard Error	0.25	0.24	0.19
Median	2.08	2.46	2.23
Mode	11.43	1.34	11.43
Standard Deviation	3.13	1.98	2.83
Sample Variance	9.79	3.92	8.01
Kurtosis	1.00	4.35	1.88
Skewness	1.37	1.56	1.53
Range	11.27	11.32	11.32
Minimum	0.16	0.11	0.11
Maximum	11.43	11.43	11.43
Sum	506.43	187.39	693.82
Count	153.00	69.00	222.00
Confidence Level(95.0%)	0.50	0.48	0.37
CV	**0.95**	**0.73**	**0.91**
Low Mean	**2.81**	**2.25**	**2.75**
High Mean	**3.81**	**3.18**	**3.50**

programs and for the combined data set. Based on this analysis it is apparent that the data has no appreciable variation from sample to sample (CV <1) indicating that the gold mineralization in Zone 3 is relatively uniform across the body, based on either new or historical data. The ranges for the population mean at the 95% confidence level for new and historical data overlaps, indicating that the data values are from the same population of values. In addition it is noteworthy that the historical dataset reports generally lower Au values. Including this data in the resource estimation will result in a more conservative estimate.

Based on this review, the author recommends that the historical Au data be considered of sufficient quality to be included in resource estimation.

6.2 Regional Geological Mapping, Geophysical and Geochemical Exploration

6.2.1 Regional Geological Mapping

1:50,000 scale regional geological survey 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 underlay the Pb-Zn-host Devonian limestone on the Property.

6.2.2 Regional Geochemical Sampling Programs

Regional scale geochemical sampling has been completed on three successively more detailed scales in the vicinity of BYP since 1987.

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 Au, As, and Sb regional anomaly over 20 square kilometres was delineated with peak values of 19 ppb Au in the BYP Property and its adjacent areas.

A follow-up survey at 25,000 scale comprising stream sediment sampling was carried out by the 418 geological team in an area of 40 square kilometres covering the BYP Property and it adjacent areas in 1990. Three major composite gold and indicator element anomalies were delineated and the BYP Property was covered by one of the major composite anomalies.

Follow-up 10,000 scale soil sampling was implemented by the 418 team in an area of 5.5 square kilometres after the 25000 scale stream sediment survey on the Property. 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 BYP Property (Figure 6-11).

A composite figure overlaying drilled Pb-Zn and Au deposit outlines on the stream sediment geochemical survey results shows the majority of the BYP base metal and gold mineralization is centered within a 280 ppm Zn anomaly with coincident Au peaks of 8, 20 and 56 ppm Au, labeled Area I. Similar tenor Zn anomalies although smaller in scale are present to the north (Area II) and to the northeast Area 3. These areas are notable for hosting large scale Au anomalies based on stream sediment sampling. Follow up work is recommended to assess the potential of Areas II and III to host economically viable resources of Au and or Pb-Zn.

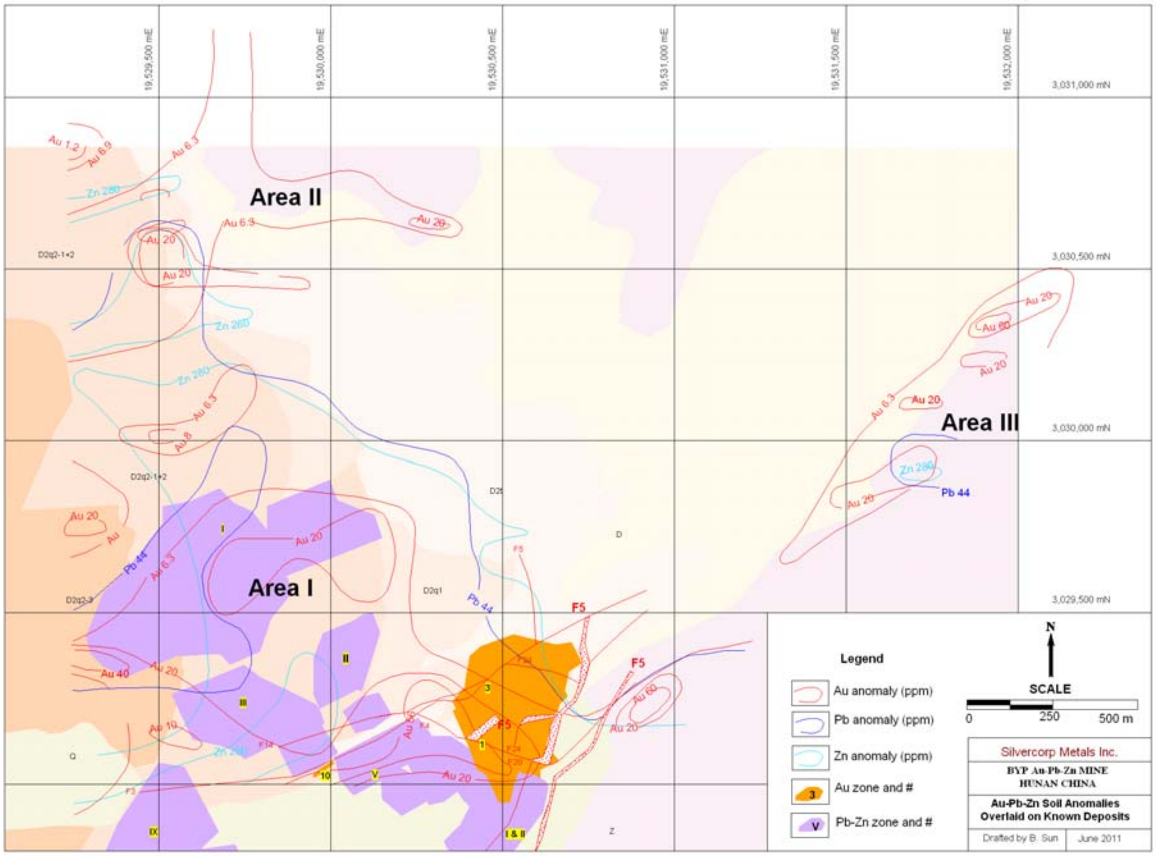

Figure 6.12 Geochemical gold anomalies in soil at BYP and its adjacent areas

6.3 Summary of Work Previously Conducted on the BYP Property

Details of exploration programs conducted on the BYP Property and its direct adjacent areas since 1971 are summarized in Table 6.4.

Table 6.4 Exploration work conducted in previous exploration programs

Program	Unit	Period of Exploration				Total
		1971-1977	1987-1989	1990-1992	2002-2006	
1/2000 topography survey	km^2		8.88			8.8
1/5000 geological mapping	km^2		19			19
1/2000 geological mapping	km^2		2.9	5.44		8.34
1/5000 hydrogeol. mapping	km^2		9			9
1/10,000 IP Surveying	km^2		1.3			1.3
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

6.4 History of Mining

There is no historical record of mining in this area prior to the activities of Yunxiang Mining described below.

From 2006 to 2008, Yunxiang Mining mined 280,000 tonnes of ore from the No.2 Lead zinc zone on Levels 335 m, 310 m and 270 m. About 50,000 tonnes of ore remain between Levels 310 and 270. The estimated grade of the mined ore is about 0.2%Pb and 2% or less Zn.

6.5 Historical Resource Estimates

A qualified person has not done sufficient work to classify the historical estimate as current mineral resources or mineral reserves. Silvercorp is not treating the historical estimate as current mineral resources or mineral reserves as defined in sections 1.2 and 1.3 of Instrument NI43-101 and the historical estimate should not be relied upon

1977: The 468 geological exploration team estimated a C category resource (Chinese standard, non NI43-101 compliant) at the amount of 133,000t lead metal, 401,400t zinc metal, 12.92mt pyrite, 236.9t silver and 366.9t cadmium in12 Pb-Zn ore zones (Table 6.5).

Table 6.5 Result of resource estimate for lead and zinc resource in 1977

# Ore Zone	Tonnage (mt)	Metal Contained (t)					Average Grade (%)			Remarks
		C1		C2						
		Pb	Zn	Pb	Zn	Cu	Pb	Zn	Cu	
1	5.117		69.3		30.2		0.27	1.94		Zinc zone
2	0.328	1.5	9.5				0.46	2.93		Zinc zone
3	2.036			9.6	48.3		0.47	2.37		Zinc zone
4	0.290			4.3			1.48	0.28		Lead zone
5	0.325			2.7	8.2		0.83	2.52		Lead-zinc zone
6	3.642			37.9	52.9		1.04	1.45		Lead-zinc zone
7	0.051			1.2	0.7		2.35	1.37		Lead-zinc zone
8	0.035					0.5			1.43	Copper zone
9	2.343			23.1	50.2		0.99	2.14		Lead-zinc zone
10	2.169			33.4	97.6		1.54	4.96		Lead-zinc zone
11	0.297			3.9			1.31	0.18		Lead zone
12	0.801			15.4	34.5		1.92	4.31		Lead-zinc zone
Total	**17.434**	1.5	78.8	131.5	322.6	0.5	0.75	2.3	1.43	

1992: The 418 geological exploration team estimated a D+E category gold resource (Chinese standard, non NI43-101 compliant) of 14.99t gold metal with an average grade of 2.76g/t. D category resource (Chinese standard, non NI43-101 compliant) of redefined high grade Pb-Zn zone was estimated as 240,700t Pb metal and 164,200t Zn metal with average grade of 2.45%Pb and 5.26%Zn.

Table 6.6 Result of resource estimate for gold in 1992

# Zone	Block #	Economic Category	Thickness (m)	Grade (g/t)	Tonnage (mt)	Contained Gold (t)		Ore Type
						D	E	
1	II	Economic	11.38	4.56	0.4941		2.25	Sulfide
		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	2.509	8.08		Sulfide
		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	Sulfide
Total / Average				2.76	5.44	14.99		

Table 6.7 Result of re-estimate for lead and zinc resource in 1992

Sub-area	Zone #	Category	Tonnage (mt)	Metal Contained (kt)		Average Grade (%)		Result of Resource Estimate in 1977				Increase Resource (kt metal)		Remarks
								Contained Metals (kt)		Average Grade (%)				
				Pb	Zn	Pb	Zn	Pb	Zn	Pb	Zn	Pb	Zn	
Haitangling	I	C	3.58		69.3				69.3		1.94			No re-Estimate Results
		D	1.54		30.2				30.2		1.93			
	II	C	0.33	1.50	9.50			1.5	9.50	0.46	2.93			
	Total	C	3.9	1.50	78.8			1.5	78.8	0.46				
		D	1.54		30.2				30.2					
Baiyunchong	III	D	2.04	9.60	48.3			9.6	48.3	0.47	2.37			Re-estimate results
	XI	D	0.30	3.90				3.9		1.31	0.18			
	IV	D	1.94	12.2	22.9	0.63	1.18	4.3		1.47	0.28	7.9	22.9	
		Including	0.06	1.50	1.80	2.71	3.32							
	V	D	1.70	21.9	34.4	1.29	2.03	2.7	8.2	0.82	2.52	19.2	26.2	
		Including	0.36	7.60	13.1	2.13	3.63							
	VI	D	3.32	31.1	52.3	0.94	1.58	37.9	52.9	1.04	1.45	-6.8	-0.6	
		Including	0.26	6.00	11.1	2.32	4.29							
	VII	D	0.68	11.4	12.3	1.69	1.82	1.20	0.7	2.35	1.37	10.2	11.6	
		Including	0.19	6.6	7.1	3.36	3.66							
	IX	D	2.24	31.3	71.7	1.4	3.0	23.1	50.2	0.99	2.14	8.2	21.5	
		Including	0.47	13.4	38.8	2.84	2.21							
	X	D	1.30	13.5	52.9	1.04	4.08	33.4	97.6	1.54	4.96	-19.9	-44.7	
		Including	0.79	10.0	41.5	1.27	5.26							
	XII	D	2.29	39.9	65.5	1.74	2.85	15.4	34.5	1.92	4.31	24.5	31.0	
		Including	1.00	31.4	50.8	3.15	5.09							
	Total	D	15.81	174.8	360.3			131.5	292.4			43.3	67.9	Including zones III & XI
		Including	3.12	76.5	164.2	2.45	5.26							
Grand Total		C	3.90	1.50	78.8			1.50	78.8					
		D	17.35	174.8	390.5			131	322.6			43.3	67.9	
		C+D	21.25	176.3	469.3			133.0	401.4			43.3	67.9	
		Including	3.12	76.5	164.2									

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

The Chinese government published regulations on exploration of various mineral types, in which each category of resource/reserve requires a particular geological certainty. The spacing of exploration samples which defines geological certainty for each category was determined by the complexity of the type of deposit and variations of geological parameters, such as thickness and grades. Economic parameters for estimates of mineral resources/reserves are defined and issued by authorities. A qualified geological unit, usually a geological exploration team, has to be retained for conducting exploration work, compiling geological reports, and estimating mineral resources/reserves. Although these resource estimates are presented above primarily for historical completeness, and are of unknown reliability, they are considered relevant as were generated in a proscribed manner with clearly-defined methodologies and assumptions.
(See Appendix for details)

6.6 Discussion and Comment

The distribution of major gold mineralization zones and lead-zinc mineralization zones have been reasonably delineated with grid drilling conducted by the state-owned 468 (later renamed as 418) geological exploration team and subsequently confirmed with the underground development and mining in one of the major lead zinc zones and the major gold zone. Host rock of the gold mineralization stratigraphically underlies the host rock of lead and zinc mineralization. Most of the drill holes ended at the bottom of the carbonate rock unit or at the top of the gold-hosting clastic rock unit during the first detailed exploration program in 1970's on the Property. A later gold exploration program was restricted to the southeast 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 been thoroughly investigated yet.

Detailed IP surveys and geochemical soil and rock sampling have proven effective in identifying the gold and lead-zinc mineralization zones on the BYP Property. Areas with both IP and geochemical gold anomalies should be considered as future exploration targets to further expand gold resource in the Property.

7.0 GEOLOGICAL SETTING

7.1 Regional Geology

Tectonically, the BYP Property is located at the subduction zone between the Yangtze and South China Plates. Dominant deep structures are NE-trending faults which are parallel to the suture zone between the two plates.

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

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

Some of the Precambrian formations contain abundant volcanic material and are geochemically high in Au, Sb, W, and As.

At the regional scale, mineralization that occurs within the Property is controlled by the northeast-trending Chengbu-Taojiang fault and the EW-trending Longshan-Baimashan complex structural zone. From east to west, three dome structures, Longshan, Dachengshan and Baimashan, are equidistantly distributed and form the major structural control of the central Hunan Au-Sb-Pb-Zn poly-metallic belt (Figure 7.1).

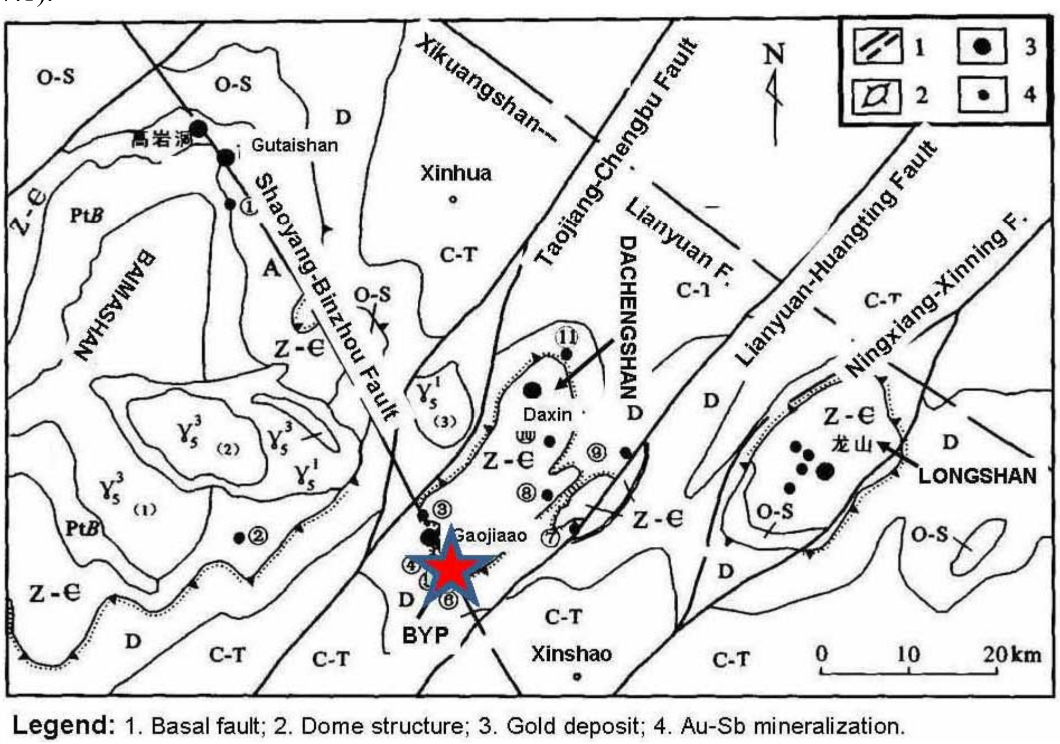

Figure 7.1 Regional Geology of Central Hunan Polymetallic Belt
(Adopted and revised from Gong G.L. et al, 2007)

Precambrian lightly-metamorphosed sandy slate and lower Palaeozoic rocks outcrop within the core areas of the three dome structures. Shallow-sea facies sedimentary clastic and carbonate rocks of Middle and Upper Paleozoic age comprise the flanks of these dome structures. A major granite intrusion outcrops at the core of the Baimashan dome at the west end of the trend. Concealed intrusions were detected beneath the Dachengshan and the Longshan domes.

Regional distribution of known mineral deposits in central Hunan province is controlled by both stratigraphy and regional structure. Three major types of deposits have been recognised in the Central Hunan Polymetallic Belt (Keng, R.H., 2002):

1. 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 ore zone varies from 1 to 20m in thickness and extend for 200m to 500m along strike with a maximum dip extension of 500m. 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).

2. 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.

3. Carbonate rock hosted Lead-zinc deposits: Deposits of this type mainly occur in Devonian limestone at the southwest and northeast 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 southwest plunge end and Heqingyan at the northeast plunge end of the Dachengshan dome structure.

7.2 Property Geology

The BYP Property is located on the southwest flank of the Dachengshan dome structure. 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 and 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 experienced low-grade metamorphism.

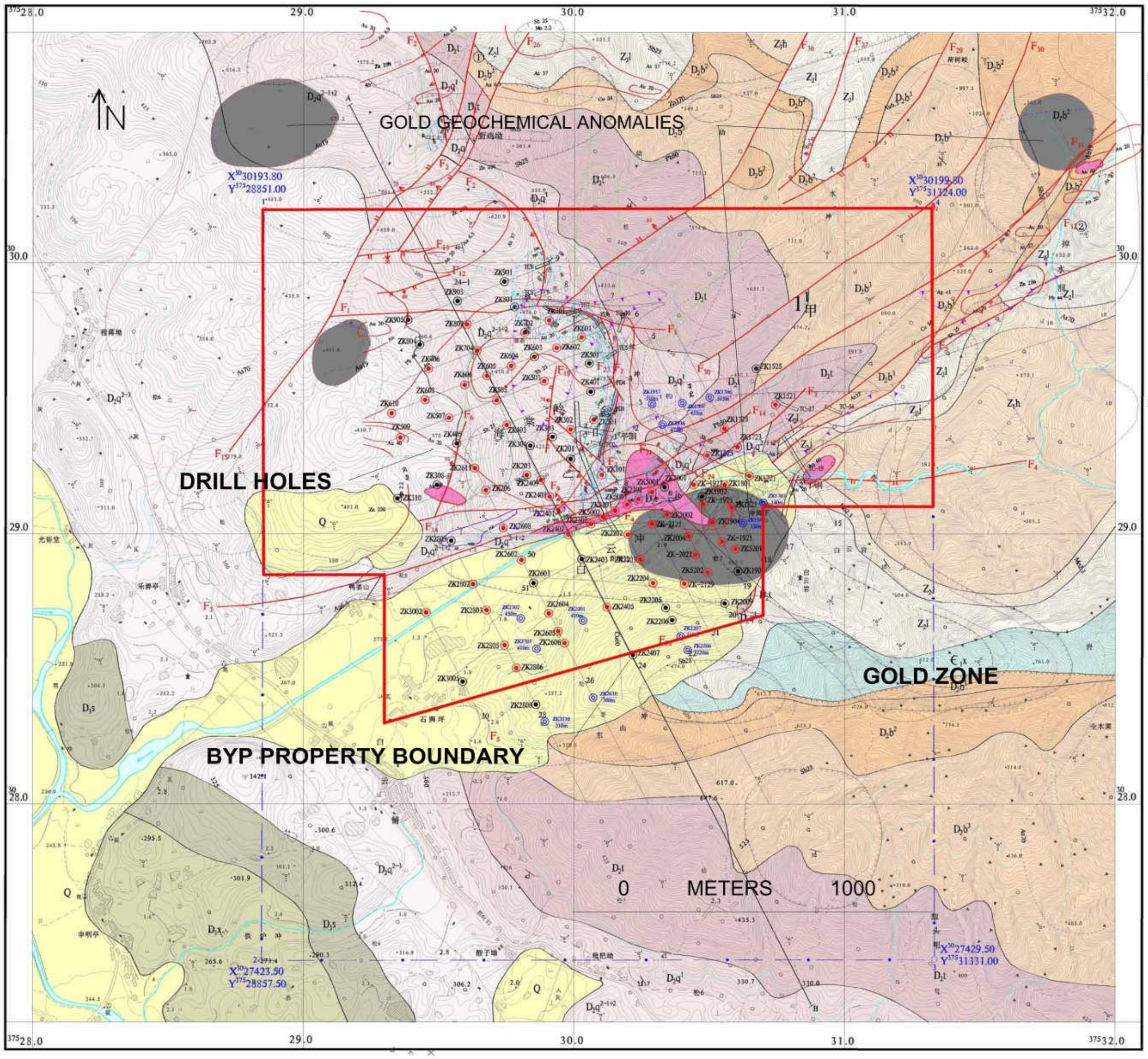

Figure 7.2 **Property geology, BYP Property**
(See Figure 6.1 for legend)

7.2.1 Stratigraphy

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

1. Sinian (Z): Slightly metamorphosed sedimentary rocks distributed in the northeast part of the Property consist of Lower and Upper Sinian series.

   a) Lower Sinian (Z1): Lower Sinian series is divisible into three formations: (1) Jiangkou Formation (Z1j), consisting of light grayish green pebble-bearing sandy slate, siliceous slate, sandstone, siltstone, tuff, and arkose with a thickness from 1062 to 1500 meters; (2) Xiangmeng Formation (Z1x), consisting of calcareous slate, dolomitic tuffaceous slate and dolomite with a thickness from 10 to 20 meters; (3) Hongjiang Formation (Z1h), consisting of grayish thickly bedded glacial drift conglomerate, pebble-bearing slate and occasionally lenticular dolomite with a thickness of 225 meters.

b) Upper Sinian (Z2): Upper Sinian is divisible into two formations: (1) Jinjiadong Formation (Z2j), lies disconformably upon the underlying Z1and consists of grayish banded siliceous slate, silty slate, and dark carbonaceous slate interbedded with carbonate with a thickness from 26 to 31 meters; (2) Liuchapo Formation (Z2l), consisting of light grey and dark grey stratiform and massive siliceous rocks and banded siliceous rocks with a thickness from 22 to 93 meters.

2. Lower Cambrian: Consisting of dark grey carbonaceous shale, siliceous shale, carbonaceous slate and siliceous rock with a thickness of 248.8 meters, conformably contacting with the underlying Sinian rocks.

3. Middle Devonian: Middle Devonian rocks are divisible into the following three formations from bottom to top: Banshan (D2b), Tiaomajian (D2t) and Qizishan Formation (D2q).

    1) Banshan Formation (D2b): The Banshan Formation is composed of sandstone, conglomerate, and quartz siltstone with a total thickness of 363 meters. Rocks in this formation are cemented with purple-red ferrous clay and characterised by low maturity and poor sorting. The Banshan Formation is classified as a shallow-water terrigenous clastic turbidite.

    2) Tiaomajian Formation (D2t): The Tiaomajian Formation is a fine-grained clastic sedimentary sequence including quartz sandstone, siltstone, and mudstone with a total thickness of 216 meters. The formation is considered to have been deposited in a transitional and delta sedimentary environment. This clastic sequence forms the major host rock for gold mineralization in the Property.

    3) Qiziqiao Formation (D2q): The Qiziqiao Formation is composed of lower, dark-gray marl, calcareous shale and biolithite and upper, thick-bedded massive biolithite, dolomite, and limestone with a total thickness of 992 meters. Lead-zinc mineralization in the Property mainly occurs in the middle section of this sequence.

Overall, Middle Devonian sedimentary strata reflect a depositional environment of progressive subsidence.

4. Quaternary (Q): Consisting of diluvium and alluvium with a thickness from 0 to 163 meters.

7.2.2 Structure

Folds and faults of different attitudes are well developed in the BYP Property. Folds trend to 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 deposition deformational events.

8.0 DEPOSIT TYPES

The BYP deposit is comprised of two juxtaposed ore types. The carbonate hosted lead zinc ores bear a strong resemblance to epigenetic Mississippi Valley Type (MVT) lodes associated with passive margin carbonate beds. The gold mineralization is also epigenetic and due to the association with structure and alteration of host rocks is thought to represent deposition from hydrothermal fluids permeating thrust zones that have imbricated the two deposit types. The gold mineralization is probably younger than the Pb, Zn mineralization. Both types of deposition are compatible with closing of a back arc basin or aulacogen where chemical and clastic sediments accumulate in a quiescent environment and are then deformed by folding and thrusting as the basin closes.

8.1 Mississippi Valley Type Lead Zinc Deposits

The following description is a précis of Paradis, et. al. 2007, entitled 'Mississippi Valley-type Lead-Zinc deposits (MVT)'.

Mississippi Valley-type (MVT) deposits are epigenetic, stratabound, carbonate-hosted bodies composed predominantly of sphalerite, galena, iron sulphides, and carbonates. The deposits occur mainly in dolostone as open-space fillings, collapse breccias, and/or as replacement of the carbonate host rock. The deposits are epigenetic, having been emplaced after lithification of the host rocks. MVT deposits originate from saline basinal metalliferous fluids at temperatures in the range of 75 to 200°C (Leach and Sangster, 1993). They are located in carbonate platform settings, typically in relatively undeformed orogenic foreland rocks, commonly in foreland thrust belts (Figure 8.1).

Individual deposits are generally less than 2 million tonnes, are zinc-dominant, and possess grades that rarely exceed 10% (Pb+Zn). Silver and copper content in MVT deposits is low and when reported, silver grades vary from 10 to 161 g/t Ag. The deposits characteristically occur in clusters, referred to as "districts". MVT deposits are part of a larger family of carbonate hosted deposits, all of which are epigenetic and contain zinc. MVT-associated deposits include a variety of deposits that belong to the spectrum of sediment-hosted base-metal deposits. These include SEDEX deposits, Broken Hill-type Pb-Zn deposits, sandstone-hosted Pb deposits, carbonate hosted Cu-Pb-Zn deposits (or Kipushi type), fracture-controlled carbonate-hosted F (±Ba) deposits, carbonate-hosted manto-type Ag-Pb-Zn deposits, high-temperature carbonate replacement Pb-Zn (±Fe, ±Cu, ±Ag, ±Au) deposits (Megaw et al., 1996; Smith, 1996; Titley, 1996), and the diapir-related Zn-Pb (±Ag, ±Cd, ±Cu, ±Hg) deposits (Sheppard et al., 1996).

MVT deposits occur in clusters of a few to hundreds of individual sulphide bodies that vary in character and shape and are often interconnected (Figure 8.2). Deposits range from massive replacement zones to open-space fillings of breccias and fractures, to disseminated clusters of crystals that occupy intergranular pore spaces (Leach and Sangster, 1993). The MVT sulphide bodies are, discordant on the deposit scale, but stratabound on a district scale. The deposits are hosted in carbonate rocks, usually dolostone, less frequently limestone. The dolostone consists of medium- to coarse-grained white sparry dolomite that has replaced a fine-grained dolostone host, which itself has replaced a limestone host.

MVT deposits have simple mineral assemblages that consist of sphalerite, galena, pyrite, marcasite, dolomite, calcite, quartz, and occasionally barite, fluorite, celestite, gypsum, anhydrite, native sulphur, and pyrrhotite. The majority of MVT deposits have essentially no geochemical signature because of limited primary dispersion of elements bound in sphalerite and galena within the carbonate rocks (Lavery et al., 1994). When weathering of the sulphides occurs and minerals such as limonite, cerussite, anglesite,

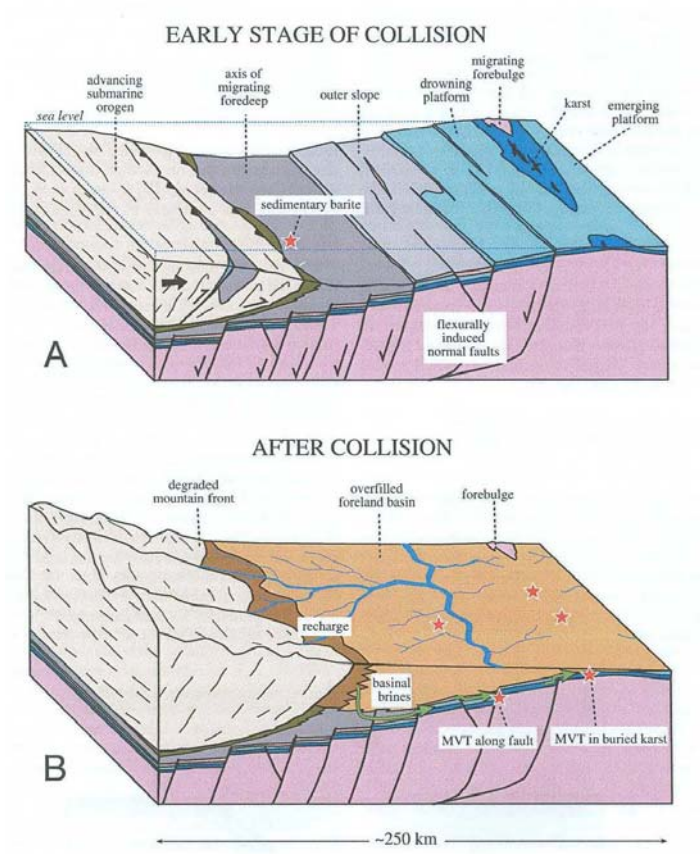

Figure 8.1 Block diagram of foreland evolution and deposition of MVT Lead Zinc.
(from Leach, et.al., 2010)

smithsonite, hemimorphite, and pyromorphite are formed, the soil and stream sediments of the regions surrounding the deposits may contain anomalous concentrations of Pb, Zn, Fe, and trace elements Sb, As, Bi, Ag, Tl, Cd, Mn, and Cu.

Most MVT deposits show features of hydrothermal brecciation, recrystallization, dissolution, dolomitization, and silicification. The hydrothermal breccias known as collapse breccias result from the dissolution of underlying carbonate beds and are interpreted as meteoric karst or hydrothermal karst (Kyle, 1981; Sass-Gustkiewicz et al., 1982; Leach and Sangster, 1993). Extensive hydrothermal dolomitization forms an envelope around most deposits, which extends tens to hundreds of metres beyond the sulphide bodies. According to Leach and Sangster (1993), the dolomitic halos can be pre-, syn-, or post-sulphides. This hydrothermal dolomitization consists of coarse crystalline white sparry dolomite and saddle dolomite cement.

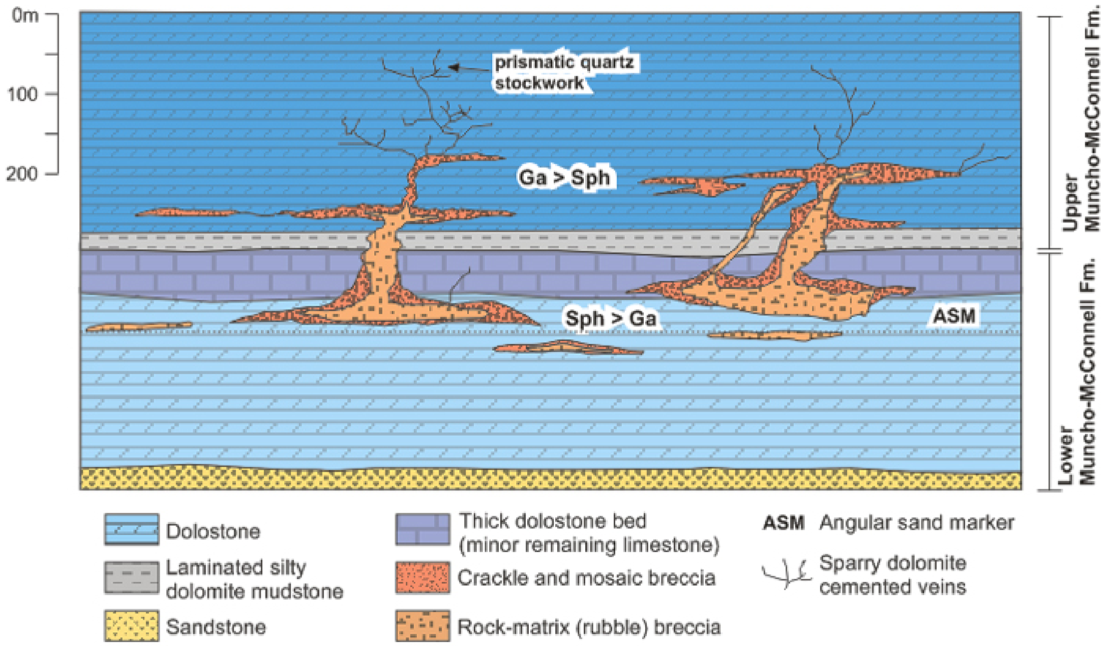

Figure 8.2 Schematic of the Robb Lake breccia-hosted Zn-Pb sulphide bodies.
(from Paradis et. al, 2007).

Criteria Indicating Good Potential for MVT Deposits

1 Tectonic setting: Deposits are hosted in platform carbonate successions developed on the flanks of sedimentary basins; most are found in orogenic foreland thrust belts, few are found in, or adjacent to, extensional environments, and fewer in intracratonic basins.

2 Tectonic events and ages: Deposits formed mainly during large contractional tectonic events at specific times in the history of the Earth, i.e. Devonian-Permian and Cretaceous-Tertiary; a few known deposits are associated with extensional tectonic events that occurred during the Ordovician (e.g. Nanisivik deposit) and Late Devonian-Early Mississippian (e.g. Lennard Shelf deposits in Australia).

3 Coeval SEDEX deposits may be present in adjacent continental rift basins. There is a geographic and temporal linkage between Phanerozoic MVT and SEDEX deposits, particularly in western Canada (Goodfellow et al., 1993; Nelson et al., 2002).

8.2 Sediment Hosted Disseminated Gold Deposits (CARLIN-TYPE)

Gold mineralization on the BYP Property is considered to be formed in the distal portion of a major hydrothermal mineralization system that originated from intrusions at depth in the core area of the dome structure. Emplacement of mineralization was controlled by fractures and host-rock chemistry. This style of gold mineralisation is primarily known as “Carlin-style” or “Carlin-like”.

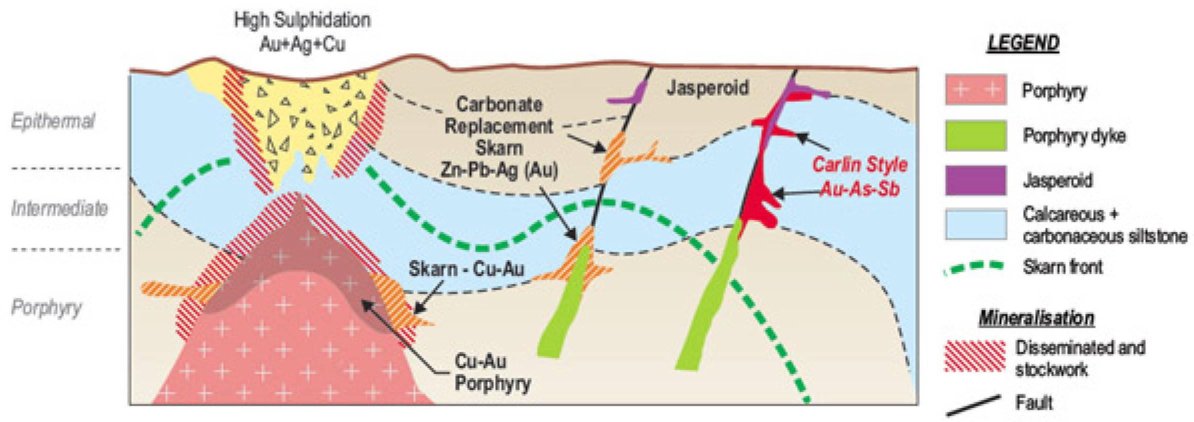

Figure 8.3 Geological section through a porphyry cored mineralizing system.

The following description of Carlin Type Gold deposits is excerpted from ‘The British Columbia Sediment -Hosted Gold Project’, 1999, a review paper by David V. Lefebure, Derek A. Brown and Gerald E. Ray, British Columbia Geological Survey Geological Field Work 1998, Paper 1999-1 with figures from the Navaho Gold report on Carlin Style Mineralization found at http://www.navahogold.com/.

Carlin Type deposits are now identified as 'sediment hosted, disseminated, stratabound yet structurally controlled precious metal mineralization' (Ralph J. Roberts Research for Research in Economic Geology, web page, 1998).

Key Features

Carlin type deposits contain micron sized gold within very fine grained disseminated sulphides in stratabound zones and in discordant breccias. The most common host rocks are impure carbonates, however, other sedimentary and igneous lithologies can host mineralization. Gold is structurally controlled at all scales. For a deposit to be considered a sediment hosted disseminated gold deposit it usually has many of the following features:

- nonvisible, micron gold within arsenical pyrite or pyrite (refractory ore)
- nonvisible, extremely fine native gold within iron oxide or attached to clay (oxide ore)
- anomalous values of silver, arsenic, mercury, and antimony and low base metals

  associated realgar, orpiment and/or stibnite sedimentary host sequences containing silty carbonate or calcareous siltstone
- intensely silicified zones, commonly called jasperoid
- carbonate dissolution (decalcification)

- associated brittle structures

The alteration associated with these deposits is often inconspicuous (Christensen, 1994). It consists of carbonate dissolution (decalcification), pervasive silica replacement and deposition, alteration of aluminosilicates to clay and sulphidation of iron to form pyrite. Gold is usually the only metal recovered from Carlin deposits. While minor sphalerite and galena are noted in some zones, the deposits rarely have any copper minerals.

Global Distribution

Outside of Nevada, there are a large number of these deposits in the southwest Guizhou and western Hunan regions of southeastern China (Cunningham et al., 1988). The setting for these mines is generally similar to Nevada. The Chinese gold mineralization is hosted by Upper Permian to Middle Triassic shelf carbonates which have experienced broad, open folding and some high angle faulting (Christensen et al., 1996). Although the Guizhou area apparently lacks igneous rocks, they are reported at some other Chinese deposits (Griffin, personal communication, 1998).

Genesis

Currently, there is no clear understanding of the genesis of sediment hosted microscopic gold deposits. Three general models have been proposed to explain the origin of the oreforming fluids magmatic, metamorphic and amagmatic. All three models involve generation of hydrothermal fluids at temperatures of 160 to 250 °C with low salinities and significant CO_2 contents, as found in fluid inclusions in Carlin-type deposits (Arehart, 1996; Ilchik and Barton, 1997).

Characteristics

TECTONIC SETTINGS: Passive continental margins with subsequent deformation and intrusive activity and island arc terranes.

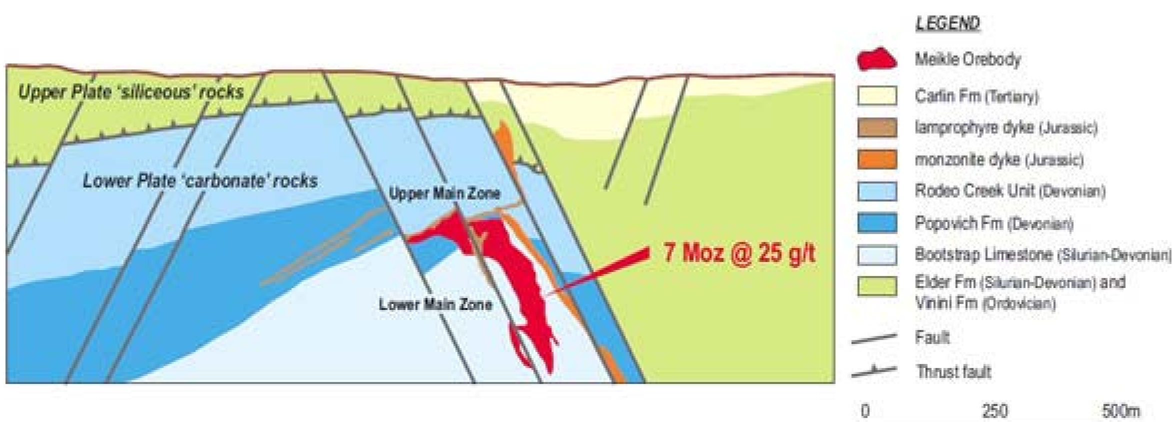

Figure 8.4 Section through Carlin Type Gold setting in Nevada.

DEPOSITIONAL ENVIRONMENT / GEOLOGICAL SETTING: Host rocks to the Nevadan deposits were deposited in shelf basin transitional (somewhat anoxic) environments, formed mainly as carbonate turbidites (up to 150 m thick), characterized by slow sedimentation. These rocks are presently allochthonous in thrust fault slices and have been overprinted by Miocene basin and range extension. There are Mesozoic to Tertiary felsic plutons near many deposits.

AGE OF MINERALIZATION: Mainly Tertiary, but can be any age.

HOST/ASSOCIATED ROCK TYPES: Host rocks are most commonly thin bedded silty or argillaceous carbonaceous limestone or dolomite, commonly with carbonaceous shale. Although less productive, non-carbonate siliciclastic and rare metavolcanic rocks are local hosts. Felsic plutons and dikes are also mineralized at some deposits.

DEPOSIT FORM: Generally tabular, stratabound bodies localized at contacts between contrasting lithologies. Bodies are irregular in shape, but commonly straddle lithological contacts which, in some cases, are thrust faults. Some ore zones (often higher grade) are discordant and consist of breccias developed in steep fault zones. Sulphides (mainly pyrite) and gold are disseminated in both cases.

TEXTURE/STRUCTURE: Silica replacement of carbonate is accompanied by volume loss so that brecciation of host rocks is common. Tectonic brecciation adjacent to steep normal faults is also common. Generally less than 1% finegrained sulphides are disseminated throughout the host rock.

ORE MINERALOGY [Principal and subordinate]: Native gold (micronsized), ptrite with arsenian rims, arsenoptrite, stibnite, realgar, orpiment, cinnabar, fluorite, barite, rare thallium minerals.

GANGUE MINERALOGY [Principal and subordinate]: Finegrained quartz, barite, clay minerals, carbonaceous matter and latestage calcite veins.

ALTERATION MINERALOGY: Strongly controlled by local stratigraphic and structural features. Central core of strong silicification close to mineralization with silica veins and jasperoid; peripheral argillic alteration and decarbonation ("sanding") of carbonate rocks common in ore. Carbonaceous material is present in some deposits.

WEATHERING: Nevada deposits have undergone deep supergene alteration due to Miocene weathering. Supergene alunite and kaolinite are widely developed and sulphides converted to hematite. Such weathering has made many deposits amenable to heapleach processing.

ORE CONTROLS: 1. Selective replacement of carbonaceous carbonate rocks adjacent to and along highangle faults, regional thrust faults or bedding. 2. Presence of small felsic plutons (dikes) that may have caused geothermal activity and intruded a shallow hydrocarbon reservoir or area of hydrocarbonenriched rocks, imposing a convecting geothermal system on the local groundwater. 3. Deep structural controls are believed responsible for regional trends and may be related to Precambrian crystalline basement structures and/or accreted terrane boundaries.(from Schroeter and Poulsen, 1996)

Exploration Factors: A review of the available stream sediment geochemistry of Nevada, USA (including the Carlin district) shows that widespread elevated arsenic values occur in the vicinity of all the large Carlin-style gold deposits even though these deposits may have very subtle gold responses. A notable feature of these arsenic anomalies is their significant areal extent.

9.0 MINERALIZATION

Characteristics of gold and lead-zinc ore zones in the BYP Property will be described in detail in the following sections.

9.1 Lead-Zinc Mineralization

Twelve lead-zinc zones were delineated by the 468 Geological Team of the Hunan Provincial Geological Bureau in early 1970's. All known lead and zinc zones show characteristics of stratabound mineralization and selectively occur within thickly-bedded carbonate rocks in the upper portion of the Middle Devonian Qiziqiao Formation (D2q) which overlies clastic rocks of the Tiaomajian Formation that contain the gold mineralization. However, form, occurrence, and size of individual zones are clearly controlled and affected by pre-ore and post-ore faults and folds. Lead and zinc mineralization is closely associated with second-order fractures and interlayer fracture zones in the hanging walls of major faults F2and F5.

Major metallic minerals in the mineral 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 (Figure 9.1). Grain size of galena and sphalerite ranges from 0.01mm to 2mm. Ore minerals are unevenly distributed as disseminated and fissure-filling mineralization.

Figure 9.1 Mineralized limestone: sulphide veinlet and silicification

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

Eleven of the twelve historically-defined zones occur as stratiform and lenticular bodies in Devonian limestone, dolomite and marl. One zone occurs in Cambrian-age carbonaceous slate.

9.2 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. Historical exploration data shows that individual zones vary from 200 to 300 meters in length and from two to 22 meters in width.

Hydrothermal alteration is well developed in mineral zones and adjacent wall rocks. Major alteration types associated with gold mineralization include bleaching, silicification and pyritization (Figure 9.2). Minor alteration types are arsenopyrite, sericite, carbonate and barite. Zonation of alteration can be recognized from ore zone to wall rocks. Silicification mainly occurs in the zones of gold mineralization, pyrite, arsenopyrite and bleaching occur in the wall rock, and barite, calcite and sericite in zones distal to mineralization (Fig. 9.2) Fine-grained (<1mm) pyrite is the major host mineral of 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 9.2 Mineralized, silicified siltstone

10.0 EXPLORATION

10.1 Underground Development from 2002 to 2011

After having acquired the exploration permit on the BYP Property, Yunxiang Mining completed underground development on Levels 335 and 310 in Lead-zinc Zone 2 and on Level 252 in Gold Zone 3 with the dual purpose of detailed exploration and mining. The two zones are well constrained with drifts, crosscuts and declines. This exploration and development work led to the discovery of a new higher-grade lead and zinc zone about 50 meters northwest of Gold Zone 3 on Level 252.

10.2 Underground Sampling Program in 2010 and 2011 by Silvercorp

During the second half of 2010 and January 2011, Silvercorp geologists carried out a sampling program along drifts and crosscuts following the advance of the underground development on Level 252 with a dual purpose of verifying previous exploration data and collecting a reliable data set for a resource update. Chip fragments were continuously collected along a line on one side of the wall in the drifts and crosscuts. The sample length varies from 1.8 to 5 meters, but most of the samples are 3 or 2 meters in length and 3 kilograms in weight. In total, 260 chip samples were collected during the Silvercorp sampling program.

Figure 10.1 Photo showing sample line along crosscut wall.

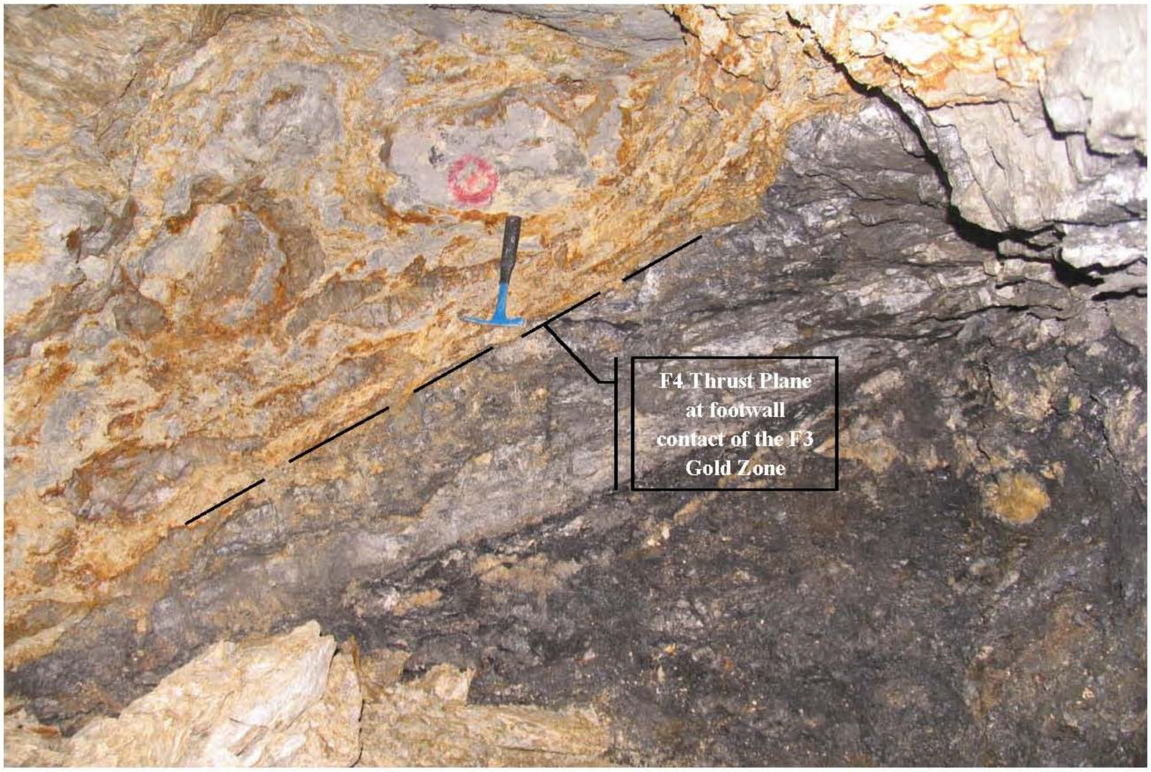

Figure 10.2 F4 Thrust fault contact between Gold Zone 3 (left) and footwall carbonates
Geological hammer for scale.

Significant gold mineralization zones defined in the underground sampling program includes 2.42g/t Au over 99 meters along crosscut CM18, 4.83g/t Au over 90 meters along crosscut CM17.5, 5.75g/t Au over 70 meters along crosscut CM17, and 2.79g/t Au over 70 meters along crosscut CM16.5 (Figure 10-1).

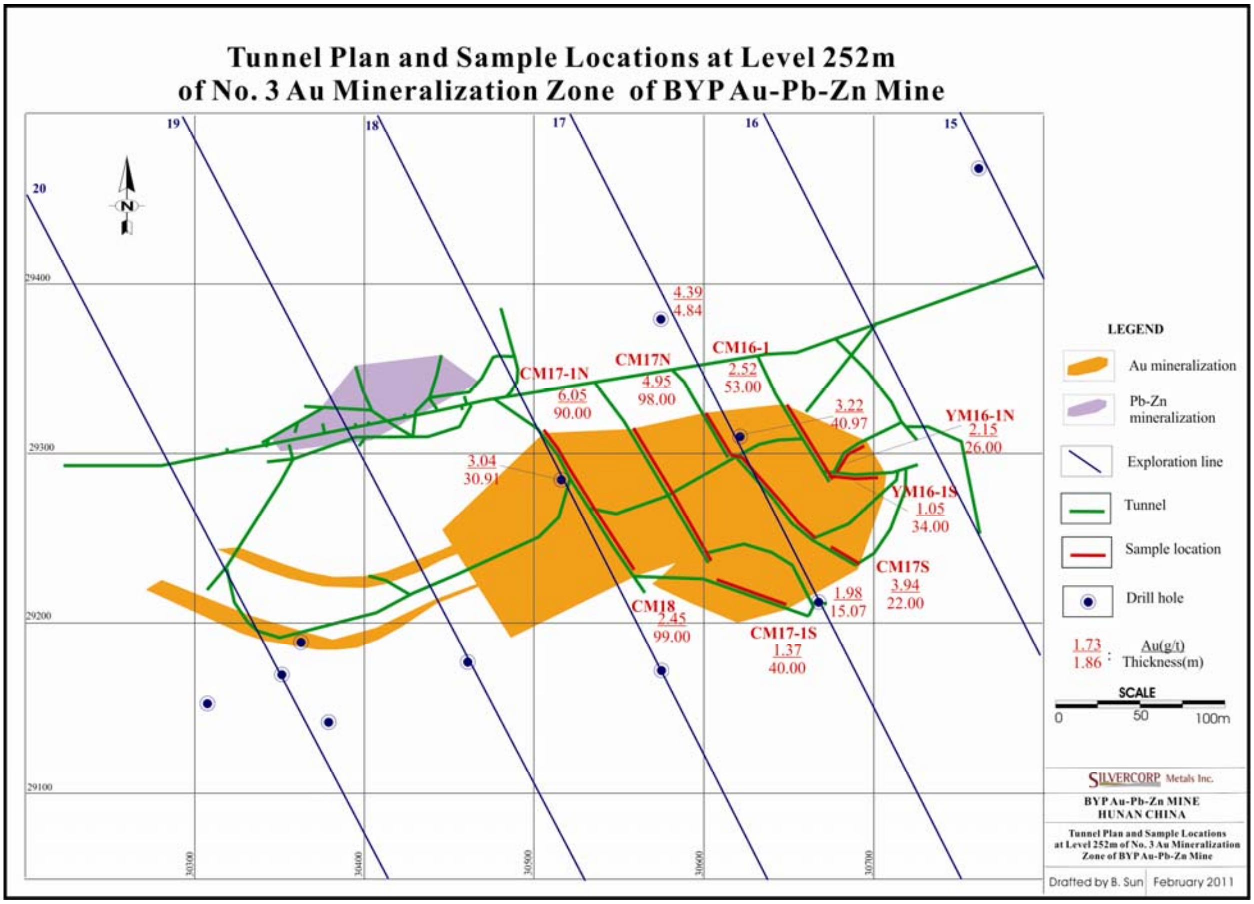

Figure 10.3 **Sample locations on Level 252m**

11.0 DRILLING

Silvercorp began a surface and underground drilling program on March 5, 2011. Three surface and four underground drill rigs are currently active. Surface drilling is targeting extension of known mineralization, improving understanding of the geology and increasing the Au, Pb and Zn resource base by testing for new mineralized zones along strike and down dip. Underground drilling is providing detailed understanding of the number 3 Gold Zone, testing the margins and exploring for extensions.

At time of writing (mid May, 2011) 3 surface holes for a total of 1507 meters had been completed of a budgeted 15 holes and 5035 meters. Underground the four operating rigs had completed 20 holes for a total of 2059.55 m of a budgeted 98 holes and 24,900 m. Drilling is collecting NQ sized core on surface and underground. Four geologists have been committed to this program completing drill set up, core logging, core sampling and completion of sections and plans. Drill holes are located by survey using a Pentax R-202NE total station for surface and underground collars.

The program has projected finish dates of end of 2011 for surface drilling and early 2012 for the underground program.

Figure 11.1 Underground drill testing Gold Zone 3 from level 252, BYP Mine.

12.0 SAMPLING METHOD AND APPROACH

In the second half of 2010, Silvercorp geologists collected 260 channel samples from crosscuts and drifts on Level 252 within Gold Zone 3. Samples were continuously chipped and collected along a sample line on the walls of crosscuts and drifts. Sample length is from 2 to 3 meters. In consideration of the homogeneous nature of gold mineralization in Zone 3, it is considered that chip samples collected by Silvercorp are representative of the zone. In 2011 a drill program to further define extensions to the Zone 3 mineralization was initiated and is in progress at time of writing.

12.1 Channel Sampling and Sample Marking

Channels are selected and marked by the geologist along the wall of the drift and then excavated with a hammer and chisel for a width of approximately 10 cm. The channel is generally on the order of 0.5mm deep but discontinuities in the rock may create deeper fractures in places. The objective is to remove the same amount of sampled material per length of channel to avoid over or under representing grades in any one part of the channel. Excavated rock is collected in a bag held tightly against the face and the sample number is written on the wall and on the bag upon completion of each individual sample. Sample sites observed during the site visit were very well delineated, regular in width and depth. (Fig. 10.1)

12.2 Core Sampling and Sample Marking

Drill cores are collected at the rig in core boxes allowing cores to be packaged in 1 meter intervals. Core is delivered to the core shack on site for logging and sampling by the drill contractor. Cores are sampled on 1 meter intervals after zones of interest have been logged and marked for sampling by a geologist. Cores are split using a rock saw with 50% going back into the core box for long term storage and future reference and the remaining 50% being broken up and bagged for analysis. The location of the sample is marked in the core box and a sample tag including sample number, date, from and to meterage, total length, drill rig used and sampler’s name is enclosed in plastic and placed in the sampled space. The sample bag is marked with the sample number on the outside.

12.3 Sample Packaging

Samples from the exploration program are stored in a double locked room near the main adit to the 252 level. The location of this space is not as important as it’s security so the location may move to suit the requirements of the program or the availability of space in future. In preparation for shipping the samples are collected into rice bags with a limit of approximately 20kg of samples per bag. An inventory of samples within each bag is written on the outside and the details of each large bag are collected on a weigh bill for the transport contractor and the lab. Samples prepared for shipping are collected in the secure room until shipment. Keys to the secure room are held by the Chief geologist and the mine manager’s designated person.

12.4 Transportation and Chain of Custody

Samples from the BYP site are shipped by road. A security company contracted for the purpose picks up the bagged and inventoried samples and packages them in secure lock boxes for transport. The weigh bill is signed off by the Mine Manager’s designated person and the security company representative to acknowledge change of custody and as a record of the chain of custody from minesite to analytical lab.

13.0 SAMPLE PREPARATION, ANALYSES AND SECURITY

13.1 Sample Preparation in Silvercorp's Sampling Program

The samples collected by Silvercorp in their underground sampling program were prepared at ALS lab in Guangzhou with the following procedure:

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

13.2 Analysis in Silvercorp's Sampling Program

The Silvercorp samples were analyzed by ALS at their laboratory in Guangzhou using standard fire assay fusion-AAS finish procedure to analyze lower grade samples from 0.005 to 10ppm Au, and fire assay fusion-electronic analytical balance method to analyze high grade samples from 0.05 to 1000ppm Au.

13.3 Quality Assurance and Quality Control for Silvercorp's Current Program

Programs by Silvercorp in 2010 and early 2011 relied on 3rd party analysis of pulp duplicates as a means of quality control. The external check program consisted of insertion of twenty six (26) check samples prepared with rejects and pulps, recoded and inserted into new batches of samples by Silvercorp geologists as a test of reproducibility of results at the ALS lab. Figure 13-1 shows assay data of the original samples and the internal check samples. The reproducibility of the original assays by the check samples is considered excellent.

A full QA/QC program was employed during Silvercorp's latest sampling program in 2011. In the latest program of sampling in Zone 3, 125 channel samples were submitted along with inserted blanks, duplicates and reference materials. The results of the QA/QC work indicate no appreciable variation between the various methods (core and chip) and by association, acceptance of all the latest Silvercorp data as accurate and suitable for use in resource estimation.

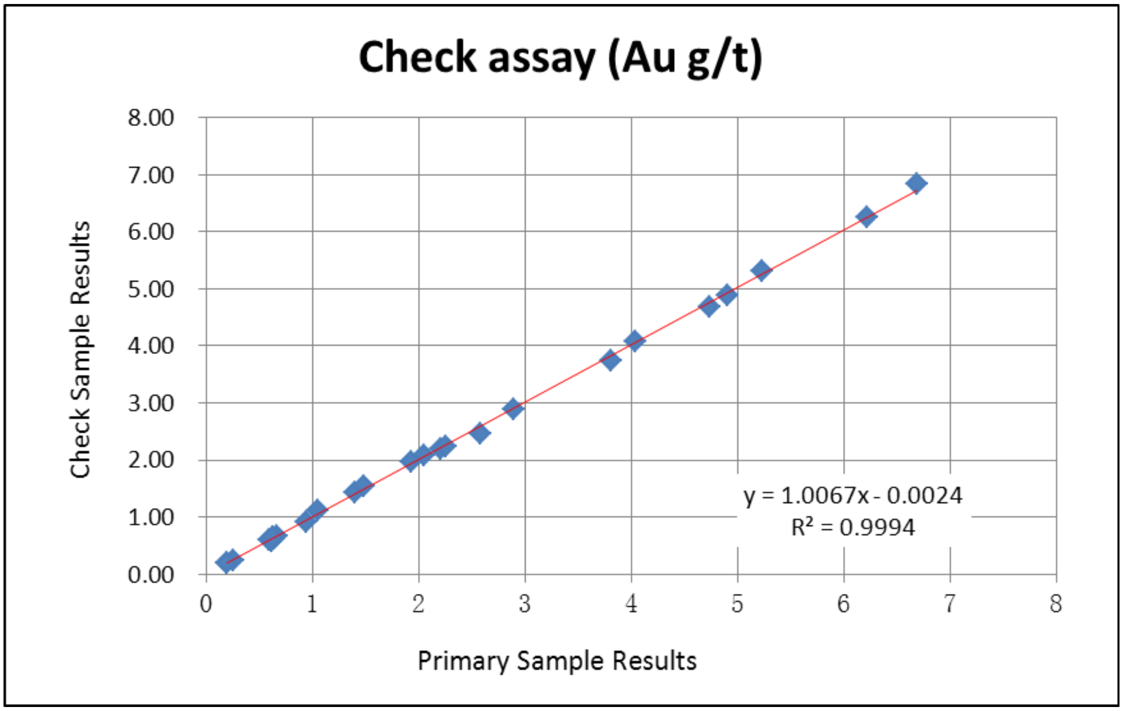

Figure 13.1 Result of internal check at ALS Chemex lab in Guangzhou

Four certified reference materials were used in the QA/QC program for the underground sampling program. GAu-20 and GAu-22 are purchased from the Institute of Geophysical and Geochemical Exploration (IGGE) which is a well regarded lab in China and has provided various certified reference materials for most of the exploration programs in China since early 1980's. The recommended values for the two certified reference materials from IGGE are 32.3g/t Au /SD1.4g/t Au and 5.72g/t /SD0.22g/t Au respectively. SF45 and SJ53 are two certified reference materials purchased from Rocklabs in New Zealand. The recommended values for SF45 and SJ53 are 0.848 g/t /SD0.028 g/t Au and 2.637 g/t /SD0.048 g/t Au respectively. 18 reference samples were inserted into the 260 samples collected during Silvercorp's underground sampling program. Assay results of the 18 reference samples are shown in Figure 13-2. Assay results of reference materials GAu-20, SF45 and SJ53 are well within the acceptable range. Three assay results of the six reference samples made from GAu-22 failed to fall into the expected range.

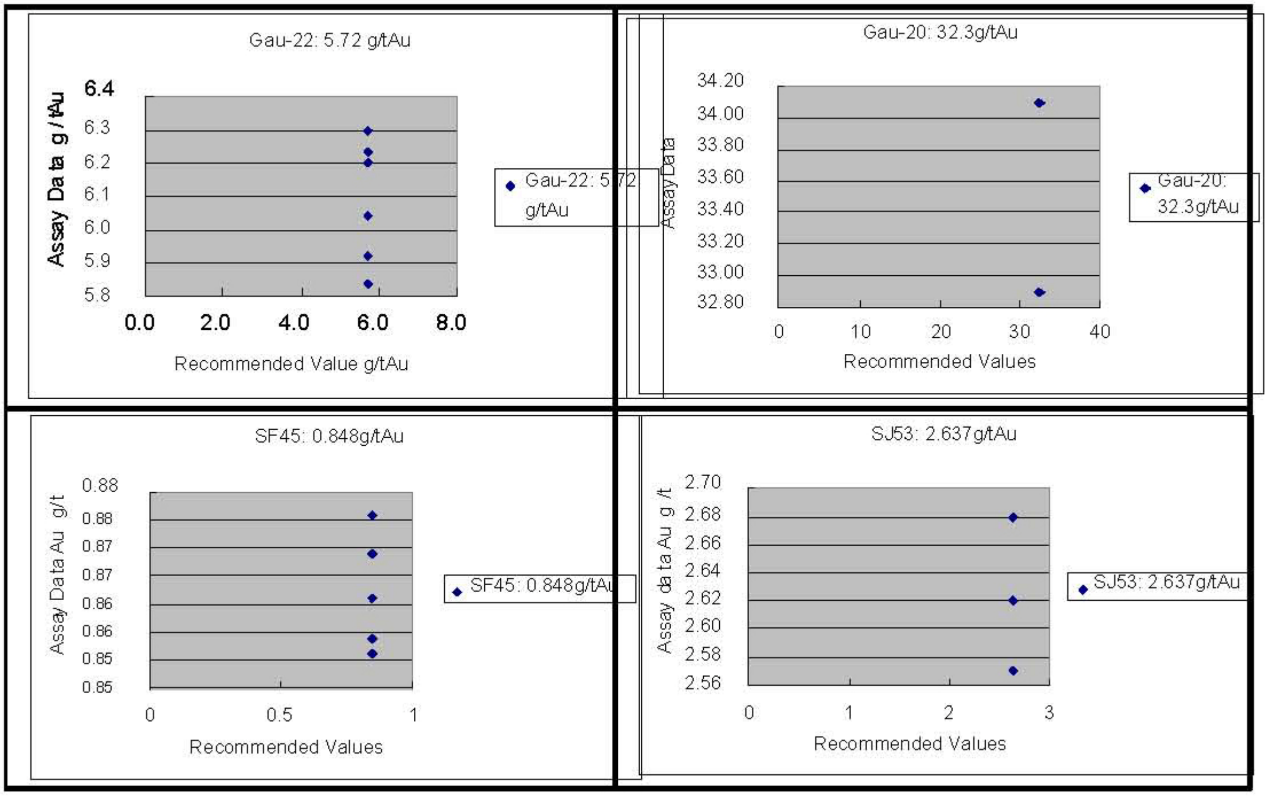

Figure 13.2 Assay results for the standards used in the QA/QC program at BYP, 2010

13.4 Discussion and Comment

Sampling programs conducted more than 20 years ago cannot be checked by direct methods of duplicate analysis or twinned samples. These data are compared to more recent work where modern QA/QC practices were employed as circumstantial verification of the accuracy of previous work. No large scale deviations were seen between samples collected in areas adjacent to previous work and current results from those areas. The historical data collected adjacent to modern work has been accepted as suitable for resource estimation work based on spatial association and by extension, assuming the same conditions applied to all historical analysis, the entire historical data set has been accepted as suitable for resource work.

14.0 DATA VERIFICATION

14.1 Gold Data

14.1.1 Gold Data pre 2010

Pre 2010 sampling relied on drill core. Quality control relied on duplicate analysis

In the underground sampling programs in 2010 and 2011, three batches of 260 samples were collected from Level 252 to evaluate Gold Zone 3. Only external checks were arranged for the first two batches of 135 samples. A full scale QA/QC program has been employed for the third batch of 125 samples by inserting blanks, duplicates and reference materials.

During the Wardrop site visit to the BYP Property from January 16 to 17, five check samples were collected from Gold Zone 3 on Level 252 (samples BYP-1, 2, 3, 4, 5) , one sample from lead-zinc Zone 2 on Level 331 (BYP-6), one sample from lead-zinc Zone 2 on Level 310 (BYP-7), and one sample from ore piles of lead-zinc from Zone 13 on Level 252. The author conducted a site visit on May 12, 2011 and collected a further two check samples in the Zone 3 gold orebody on Level 252. Wardrop's five check samples from the number 3 gold zone are duplicates of Silvercorp's samples BY64, BY43, BY114, BY100 and BY211 respectively. The author's samples in the same gold zone duplicate Silvercorp samples A00011 and A01515.

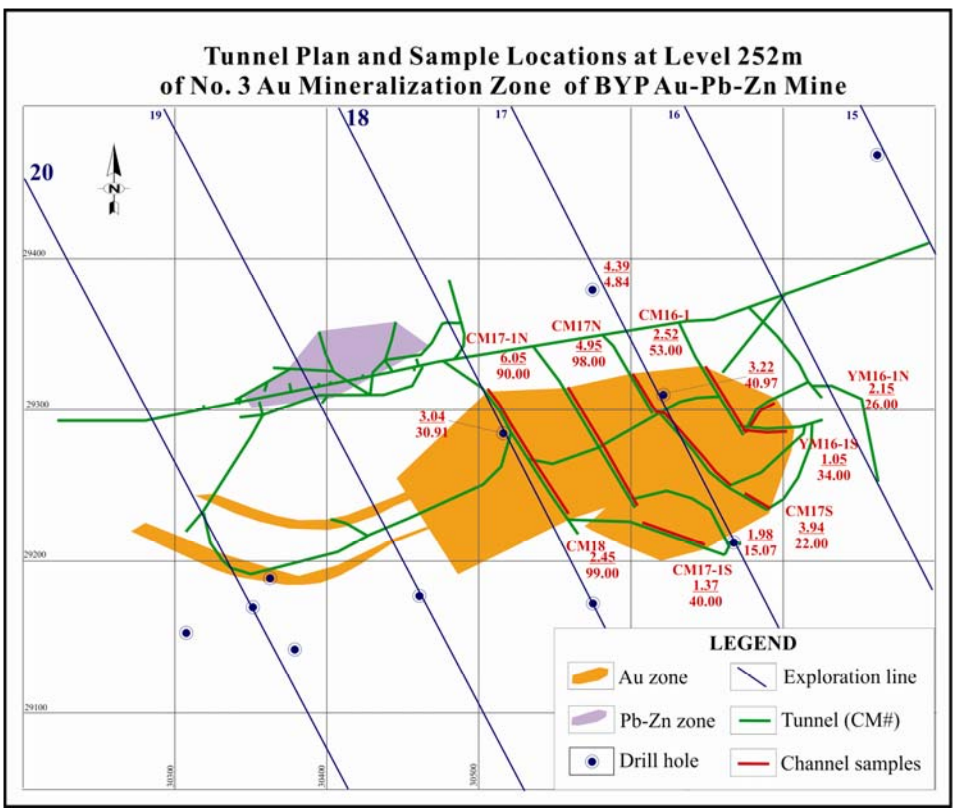

Figure 14.1 Location of check samples at Level 252m

The seven check samples collected in gold ore zone 3 were analyzed for gold with fire assay fusion-AAS finish, and the three samples collected from lead and zinc ore zones 2 and 13 were analyzed for Pb and Zn with 4-acid digestion-AAS finish at SGS lab in Tianjin. Comparison of the analytical results of check samples, Silvercorp's samples and historically reported grade is shown in Table 14-1. These results are considered to be consistent with assay results obtained from both historical and recent sampling programs.

Table 14.1 Assay data of check samples, Silvercorp samples and historical data

Sample#	BYP-1	BYP-2	BYP-3	BYP-4	BYP-5	A00011	A01515	BYP-6	BYP-7	BYP-8
Location	Level 252/Au Zone 3							Level 335/Pb-Zn zone 2	Level 310/Pb-Zn zone 2	Level 252/Pb-Zn zone 13
Check Sample	6.43	17.2	7.93	4.06	1.85	23.21	3.61	2.93,0.12	0.74,0.06	4.25,0.2
Silvercorp's	5.29	19.2	6.69	4.73	4.68	21	3.36	4.32,0.32	1.26,0.07	4.00,0.28
Historical Data	3.30/ ZK1825			3.22/ ZK1723				Pb: 0.46% Zn: 2.93%		

15.0 ADJACENT PROPERTIES

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

The medium-sized Gaojiaao mine is located about 4 km southwest of the BYP 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 degrees. Individual ore zones are from 70 to 320 meters in length, from four to 13 meters in width, and from 20 to 100 meters in dip extension. Average grade of stratiform and lenticular ore zones is from 2.0 to 5.1g/t Au. Gold veins occur in NW trending faults with variable dips towards the NE. Individual veins are from 140 to 220 meters in length, from 4.0 to 7.3 meters in average width and from 20 to 220 meters in dip extension. The dominant host rock is oxidized siltstone. The average grade of vein-type mineralization is from 1.8 to 4.5 g/t Au. Gold mineralization at the Gaojiaao mine is associated with pyritization, silicification and bleaching. Gaojiaoao has been in production with open pit mining and heap leaching recovery since 1989.

16.0 MINERAL PROCESSING AND METALLURGICAL TESTING

In 2010, two types of ores, Au and Pb-Zn ore, taken from BYP mine were tested by Hunan Non-ferrous Metals Research Institute (HNMRI). The study included assay, mineralogical analysis, mineral processing, mass balance, reporting, water recycle and disposal. Two technical reports respectively referring to Au and Pb-Zn tests were issued to Silvercorp in Jan.02, 2011.

16.1 Test Samples

16.1.1 Gold ores

In September 2010, Silvercorp collected 102 pieces of drill core samples (By24 to BY125) from ore body #3 (at the 252m level) during the 2010 drilling program. By mixing these core materials, HNMRI prepared three batches of bulk samples for the lab tests. The assay results for these three batches of bulk samples were analysed for gold (refer to table 16-1).

Table 16.1 BYP Gold Samples Used for Gold Metallurgical Testing (2010)

Sample No.	Location	Weight (kg)	Au (g/t)
BY-1	Body#3		3.45
BY-2	Body#3		3.30
BY-3	Body#3		3.75
Average			3.50

16.1.2 Pb-Zn ores

In 2010, Silvercorp Metals collected Pb-Zn ore samples from three different locations. The samples were analysed for the main beneficial elements, i.e., lead, zinc, silver and sulphur (table 16-2).

Table 16.2 Summary of BYP Samples Used for Metallurgical Testing

Sample No.	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
Avg			3.21	0.99	0.37	

In order to produce a bulk composite sample for flotation tests, the two samples BYP2 and BYP3 were mixed at a ratio of 3:2 (BYP2:BYP3). The final mixed bulk sample (7.55g/t Ag, 0.25g/t Au, 1.24% Pb and 4.08% Zn) was used to conduct an ore processing experiment in order to produce a lead concentrate and a zinc concentrate, and to recover silver.

16.2 Mineralogy and Occurrences of the Beneficial Elements

16.2.1 Gold Ore

The mineralogical analysis results for the gold ore composite samples are summarized in Table 16-3. The major non-sulfide components are gangue minerals (50.36% quartz), mica and clay minerals. The major sulphide mineral is pyrite (3.18%).

Table 16.3 Summary of Mineralogy of the Samples Taken From BYP Deposit

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

Characterizations of gold and other minerals present are summarized below:

Native Gold – native gold was not detected from the polished specimen sample of the primary ore. 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 4), which is favourable for flotation.
Other sulfides – trace amounts of other sulphides, such as sphalerite, galena and chalcopyrite (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, dispersed in the ore.
Other gangue minerals - the main gangue minerals are quartz (50.36%), kaolinite, sericite, chlorite, amphibole and feldspar.

Table 16.4 Summary of Pyrite Grain Size and Size Distribution (Gold Ore)

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 16.5) on ground ore 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 16.5 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			

16.2.2 Pb-Zn Ore

The mineralogy of the composite samples is summarized in Table 16.6. The major components are gangue minerals (62% calcite) and sulphide minerals (sphalerite 5.79, pyrite 4.68, galena 1.18%).

Table 16.6 Summary of Mineralogy of the Samples Taken From BYP Deposit

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
Hematite	1.5	Calamine	Trace
Chalcopyrite	Trace		
Anglesite	0.11	Others	0.31
Stibnite	0.42	**Total**	**100**

Occurrence of Lead as PbS (table 16.7). 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 16.7 Summary of Lead Mineralogy

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

*Occurrence of Zinc as ZnS (table 16.8)***.** 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 16.8 Summary of Zinc Mineralogy

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

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 16.1 to 16.4 show the photos (reflection light) of ore sample specimens for mineralogical study purposes.

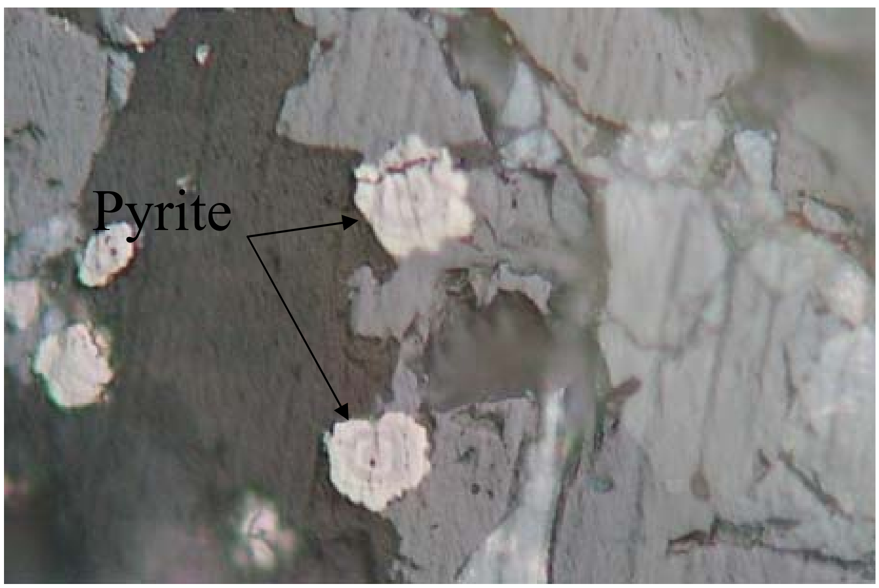

Figure 16.1 Colloidal structure of pyrite showing concentric growth rings
(magnification 10×100)

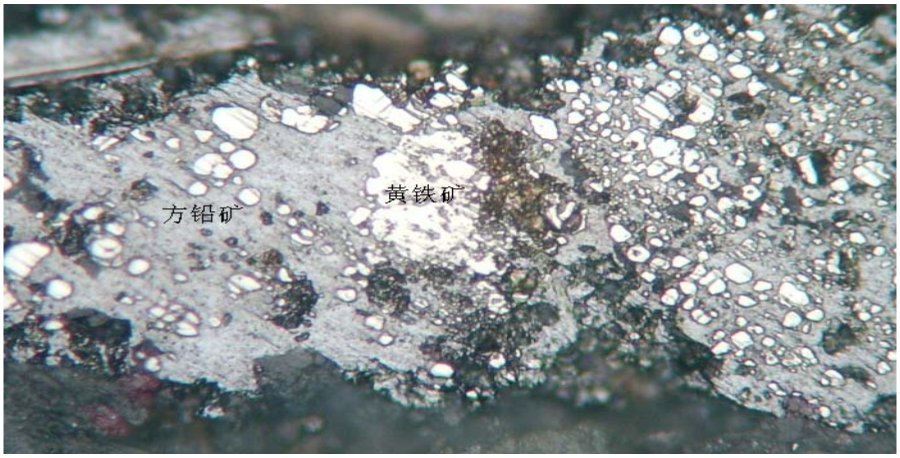

Figure 16.2 Galena (mottled grey) with inclusions of pyrite (mottled white). Pyrite particles are about 0 ~ 10mm
(magnification 10×50)

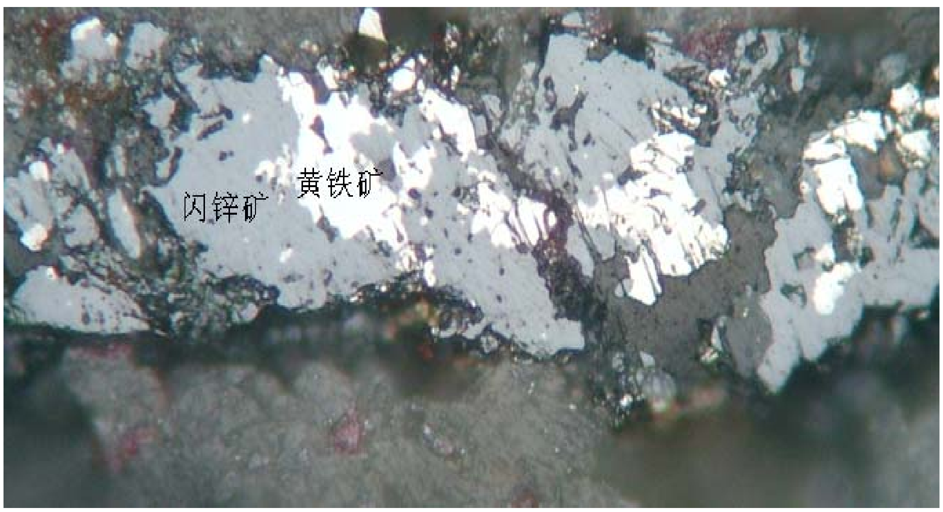

Figure 16.3 Sphalerite (medium grey) with pyrite (bright white) inclusions
(magnification 10×50)

16.3 Summary of the Metallurgical Test Results

16.3.1 Gold Ore

In 1992, Brigade 418 of the Hunan Bureau of Geology and Minerals conducted a preliminary cyanidation study using as-is mined gold oxide ore samples (gold 1.5g/t, no flotation) from BYP orebody #3. The test conditions were: chemical dosage (1 kg/t ore: NaCN 1.00; lime 0.6, zinc sheet 0.1), operating time 10 days under room temperature. The cyanidation leaching recovery is about 85%.

In 2010, Silvercorp retained HNMRI to conduct a flotation study, using a locked-cycle flowsheet (figure

16.4) with one-stage rougher/2-stage scavenger/2-stage cleaner operation.

The test results show that a gold concentrate product (Au 41.59g/t) was produced with a gold flotation recovery of 91.65%. Tables 16.9, 10 and 11 show the recovery and compositions, respectively.

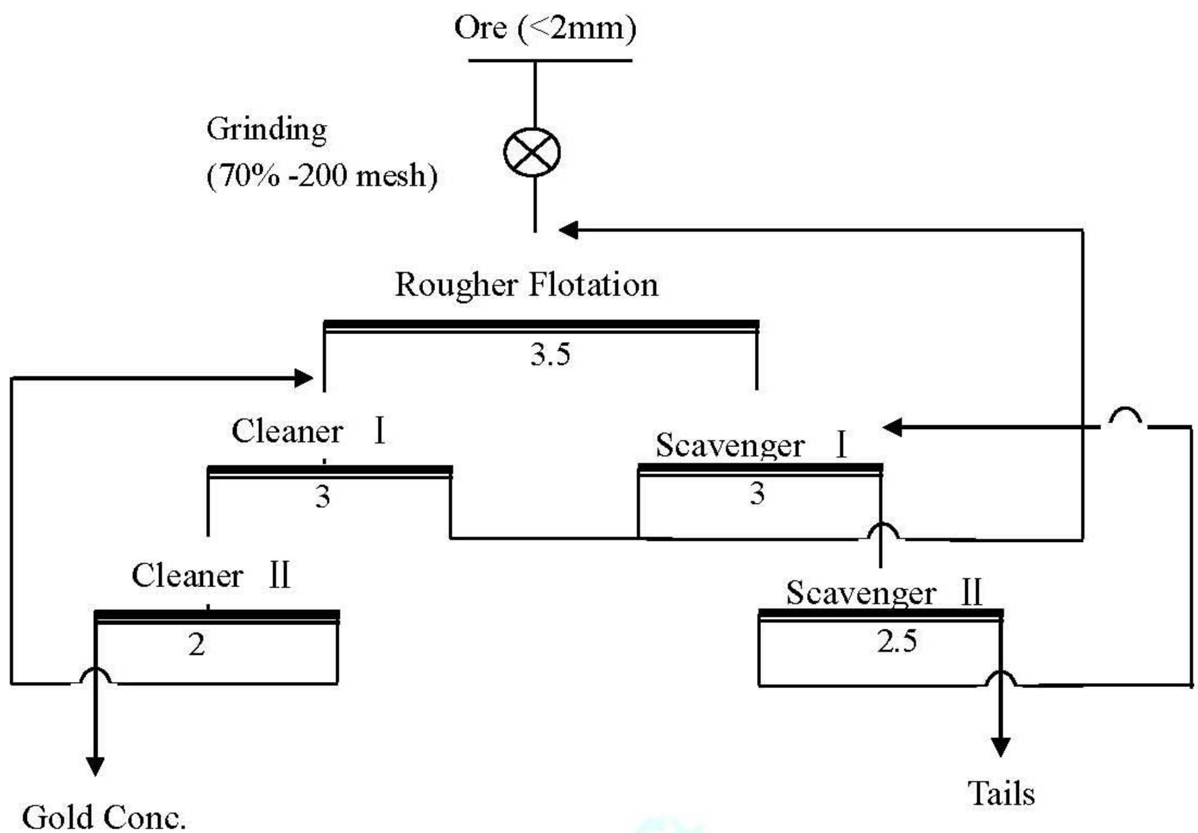

Figure 16.4 Locked Cycle Flow Sheet

Table 16.9 Mass Balance of BYP Gold Ore Flotation Tests

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

Table 16.10 Composition of Gold Conc Product (%)

Element	S	MgO	Al_2O_3	SiO_2	CaO	TFe
Comp. (%)	42.23	0.76	2.09	10.04	1.75	28.34
Element	As	K	Na_2O	Au (g/t)	Ag (g/t)	
Comp. (%)	3.64	1.11	0.14	41.59	38.63	

Table 16.11 Flotation Tails Composition (%)

Element	S	MgO	Al_2O_3	SiO_2	CaO	Fe(t)
Comp.(%)	0.12	0.76	9.48	74.48	2.73	2.05
Element	As	K	Na_2O	Au (g/t)	Ag (g/t)	
Comp.(%)	0.23	1.82	2.34	0.31	<1	

16.3.2 Pb Zn Ore

Between 1971and 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". The preliminary test results are summarized in table 16.12.

Table 16.12 Flotation Results of Locked Cycle Test (year 1971-1977)

Product Name	Weight (%)	Grades				Recovery Rate (%)			
		Pb (%)	Zn (%)	S (%)	Ag (g/t)	Pb	Zn	S	Ag
Lead/Zinc Con.	N/A	11.17	35.55	30.11	176	64.05	89.61		
Sulphur Con.	N/A	0.99	0.55	35.92	N/A			64.6	
Tails	N/A								
Ore	100.00	1.21	2.45	13.51	21.4	100.00	100.00	-	100.00

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 16.1.2) bulk composite material. Head sample assay results are listed in Table 16.13.

Table 16.13 Head Grade of the Blended Test Sample

Cu (%)	Pb (%)	Zn (%)	S (%)	Fe (%)	Au(g/t)	Ag(g/t)
0.03	1.24	4.08	5.12	2.3	0.23	7.55

After performing a number of tests at different conditions, optimized test parameters and processing techniques were finalized. From there, locked cycle tests were performed.

The following three different types of locked cycle tests 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 conc; and
Option 3- Locked cycle with regrinding of Pb rougher conc and Zn rougher conc.

Table 16.14 summarizes a comparison between options 1 and 2 vs option 3 in terms of product grades and recovery. Option 3 is recommended for commercial design consideration due to the advantages of high product grades with reasonable recoveries.

Table 16.14 Comparison of Locked Cycle Test Results (Grade and Recoveries)

Option	Lead Conc Grades				Zn Conc Grade			
	Yield (%)	Pb (%)	Zn (%)	Ag (g/t)	Yield (%)	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

Figure 1 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; and locked close loop between Pb and Zn circuit.

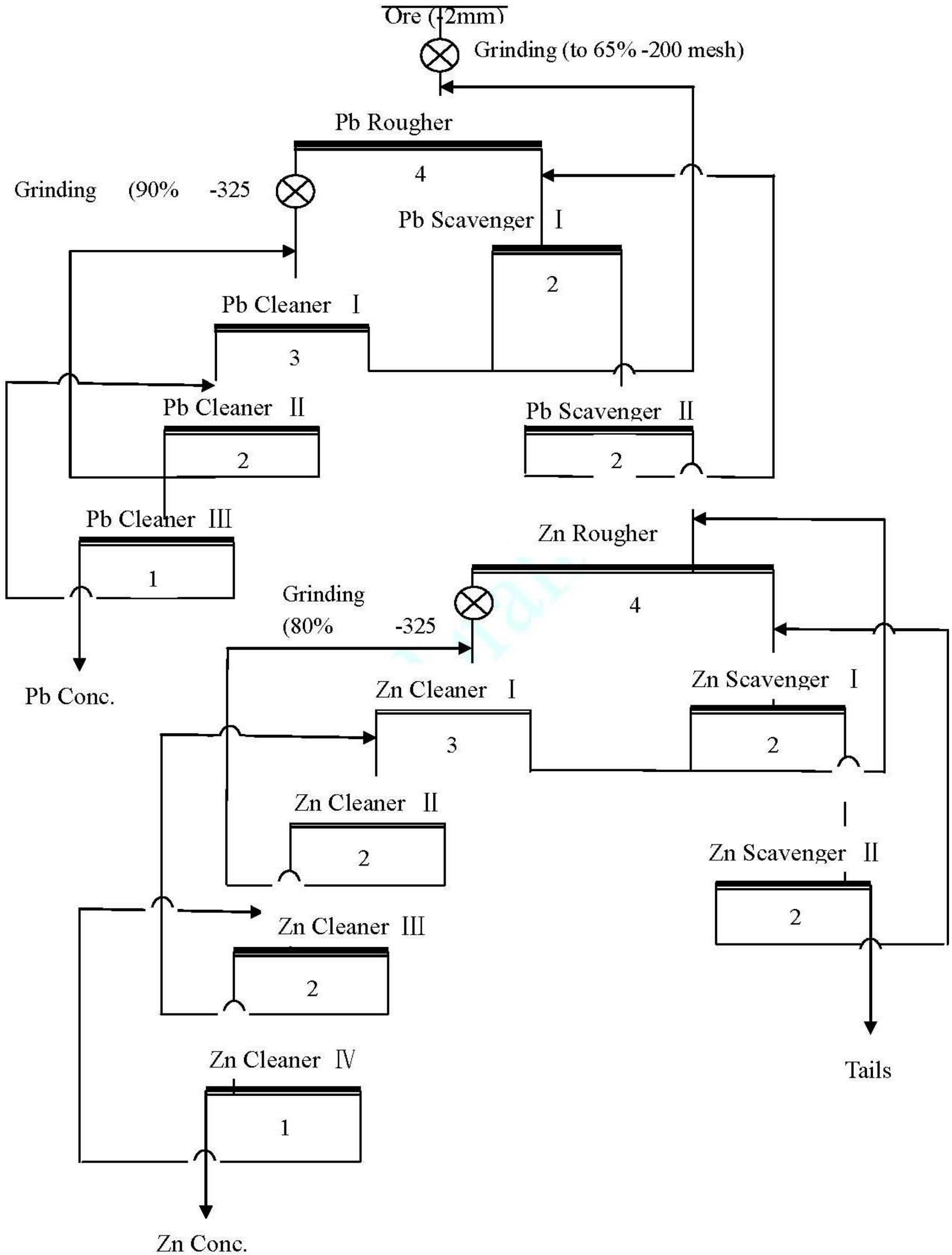

Figure 16.5 Locked Cycle Flowsheet for PbZn Flotation (Option 3)

Table 16.15 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 Ore	100.00	1.12	3.95	7.13	100.00	100.00	100.00

The compositions for lead, zinc concentrate and tails are summarized in tables 16.16, 16.17 and 16.18, respectively. The results show that lead and zinc concentrate products met the spec for class #4 and #2, respectively.

Table 16.16 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	SiO_2	CaO	MgO	Al_2O_3	Au(g/t)	Ag(g/t)	Sb
Comp(%)	0.38	2.47	0.20	0.34	0.1	170.14	3.89

Table 16.17 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	SiO_2	CaO	MgO	Al_2O_3	Au(g/t)	Ag(g/t)	Sb
Comp(%)	0.42	4.22	0.22	0.96	0.2	53.65	0.22

Table 16.18 Tails Composition(%) (Option 3)

Element	Pb	Zn	Cu	S	As	TFe	Mn
Comp (%)	0.11	0.22	0.02	3.12	0.15	2.21	0.51
Element	SiO_2	CaO	MgO	Al_2O_3	Au(g/t)	Ag(g/t)	Sb
Comp (%)	11.55	50.43	1.18	2.83	0.2	<5.0	0.15

16.4 Bulk Density

16.4.1 Pb-Zn Ore

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/cm^3, respectively.

We are satisfied with the procedures and approach taken by HNMRI to determine bulk density values for resource estimation purposes. Nevertheless, it is recommended that additional bulk density determinations be done on a regular basis with checks from different independent laboratories.

17.0 MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES

17.1 Exploratory Data Analysis

17.1.1 Assays

Silvercorp's exploration and development drill program is ongoing at time of writing. In order to proceed with the resource estimation a data cutoff date has been imposed provided a database for BYP including, location, survey, geology and assay data for 100 drill holes (3,760 assays) and 67 trench and underground channel sample locations (625 assays). The assays comprise 1,596 for gold, 2,830 for lead, 2,825 for zinc and 149 for silver. The geology data includes lithological identifications as well as formation names. Most of the drill holes pre 2011 were drilled vertically and no down-hole orientation surveys were made. The data were checked for data entry errors, a small number of which were found and corrected.

17.1.2 Capping

Capping is the process of truncating high values that are considered to be statistically anomalous with respect to the population of values to which they belong. Capping is commonly applied to gold populations where highly anomalous samples are possible due to inclusion of gold 'nuggets' (visible gold, local high grade concentrations) which skew the population of data values towards the high end of the scale. These values are selectively removed based on the distribution of sample values in the data set. Anomalous values create a high grade 'tail' (Figure 17.1) that is removed by capping all values considered to be non-representative of the population to some limiting value by inspection or mathematical methods of population analysis.

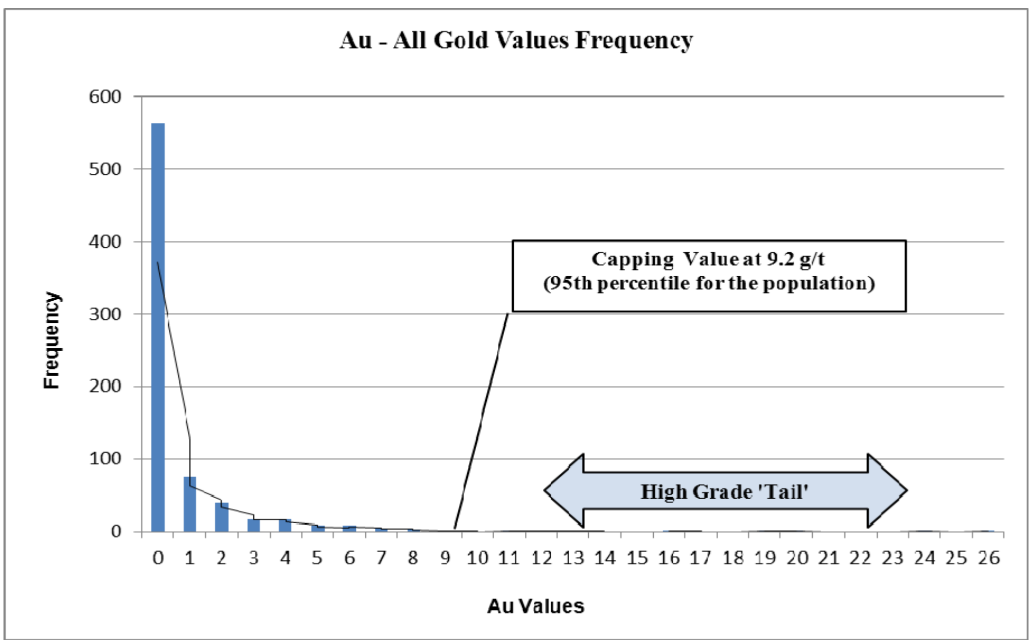

Figure 17.1 Au values for the entire BYP Dataset
Visually this point coincides with the loss of continuity in the data.

The rationale behind capping is the notion that physical abundance of these very high values is not proportional to the influence they exert on the mean value of the sample population and therefore if they are counted at full value, the mean grade of the deposit will be overstated. Base metal populations tend to have smaller and more homogenous ranges of values and are not normally capped.

For the BYP gold assay population values ranged from 0.0 to 27.0 grams / tonne (g/t). The cap was estimated to be 9.2 g/t for the entire gold database and 11.43 g/t for the Zone 3 Gold deposit (Figure 17.2). These capping values represent the 95th percentile for the range of gold values (95% of values are below this capping value). The resource estimate is presented for both capped and uncapped values of Au.

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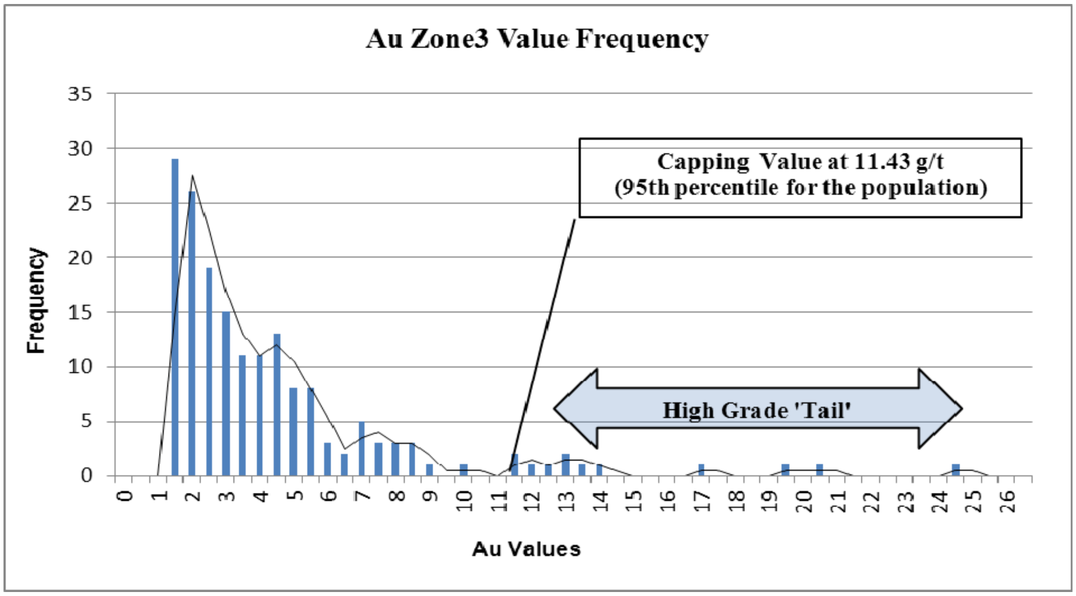

Figure 17.2 Au values for the Zone 3 Gold deposit.

Silver, lead and zinc assays were not capped as the same style of analysis indicated a robust population of sample values to the end of the range with no anomalously high values reported.

17.1.3 Composites

Compositing of samples is done to overcome the influence of sample length on the contribution of sample grade. The sample dataset contains numerous samples containing no data or samples for which extremely low grades were returned. The data sets for Au and Pb, Zn were truncated by removing samples for which no metals were returned and for samples below 0.1 ppm Au or below 0.1% as a total of Pb and Zn in the sample. The sample length varies from less than 1m to greater than 5m with the majority of samples in the 1m range. A 1m composite conforms best to the solid model boundaries so this was chosen as the length for composites. Whereas combining several samples into one composite is thought to reduce the variability of the dataset while making it a more manageable size, splitting a 3m long sample into 3x1m long samples does not have the opposite effect. A statistical analysis of the datasets for Au, Pb and Zn before and after this compositing exercise is presented in tables 17.1. and 17.2.

Table 17.1 Statistics for Raw Data

Area		Count	Min	Max	Mean	+Mean	-Mean	Median	SD	CV
Gold1	Au	24	0.1	6.54	1.41	2.08	0.59	0.84	1.45	1.03
Gold3	Au	222	0.11	24.4	3.32	3.79	2.85	2.23	3.58	1.08
Gold5	Au	25	0.1	6.78	2.03	4.13	1.49	1.88	1.59	0.78
Zone1_2	Pb	186	0.1	7.16	0.69	0.81	0.57	0.39	0.82	1.19
	Zn	316	0.11	19.82	2.32	2.6	2.04	1.52	2.53	1.09
Zone 35	Pb	371	0.11	8.72	0.96	1.07	0.85	0.6	1.11	1.16
	Zn	376	0.1	12.1	1.83	2.01	1.65	1.26	1.78	0.97
Zone910	Pb	264	0.1	14.71	0.96	1.14	0.79	0.57	1.42	1.47
	Zn	312	0.11	34.26	3.4	3.79	3	2.44	3.53	1.04
Zone12	Pb	96	0.15	11.67	1.53	1.9	1.17	0.84	1.81	1.18
	Zn	89	0.11	17.83	2.68	3.3	2.05	1.45	3.01	1.12

Table 17.2 Statistics for Composited Data

Area		Count	Min	Max	Mean	+Mean	-Mean	Median	SD	CV	Cut	Percent	Outlier
Gold1	Au	37	0.13	4.1	1.24	1.57	0.9	0.84	1.04	0.84	9.26	95	0
Gold3	Au	546	0.16	24.4	3.41	3.73	3.1	2.08	3.8	1.11	11.43	95	27
Gold5	Au	68	0.07	6.78	2.07	2.46	1.68	1.34	1.63	0.79	9.26	95	0
Zone1,2	Pb	190	0.1	6.18	0.62	0.72	0.52	0.35	0.7	1.12			
	Zn	318	0.13	16.89	2.23	2.45	2.01	1.63	2	0.9			
Zone3,5	Pb	429	0.11	8.72	1	1.11	0.89	0.62	1.16	1.16			
	Zn	437	0.1	12.1	1.84	1.99	1.68	1.35	1.67	0.91			
Zone9_10	Pb	159	0.13	12.41	1.14	1.37	0.91	0.72	1.47	1.3			
	Zn	157	0.15	29.65	2.98	3.55	2.42	1.81	3.6	1.21			
Zone12	Pb	127	0.11	11.67	1.48	1.76	1.2	0.96	1.61	1.08			
	Zn	117	0.13	16.72	2.48	2.96	2	1.42	2.64	1.07			

Statistics for Gold Zones 1 and 5 are not reliable due to the small size of the datasets. For Zone 3a comparison of the 95% confidence interval for the mean and the CV values for the RAW and Composited data indicates that the datasets have about the same variability before and after compositing, indicating the resource estimate should reflect the RAW data in puts after compositing.

17.2 Variography

The solid models for Au and Pb, Zn mineralized zones have similar strike and dip, lending the data to analysis by variography. In this case the variography was used as an indicator of the search radii that could be used for indicated and inferred resources. Variography measures the spatial continuity of data. The range value derived from variography is an indicator of the distance at which sample values can be used to predict adjacent values. Beyond the range value this relationship breaks down and can only be improved by additional sampling, if at all. Variography was completed on composites for the major Au and Pb, Zn zones of the BYP deposit where the highest density of data was available. Correlograms were generated to determine the spatial continuity of the composited mineralization using omni-directional search parameters. Table 17.3 outlines results for variography on the major gold and Pb Zn deposits at BYP.

Table 17.3 Variography Summary

Zone	Metals	Azimuth	Plunge	Dip	Nugget	Sill	Range
Gold3	Au	306.21	-18.12	67.5	10.44	5.77	59.30
Zone3,5	Pb	110	22	-22.5	0.55	1.05	287.03
	Zn	85.93	20.25	45	1.06	2.14	157.12

Variography indicates that there is good continuity in Au values up to the 50m range and in the Pb, Zn values to the 150m range.

17.3 Bulk Density

An average bulk density value of 2.6 tonnes / meter^3 (t/m^3) was estimated for gold mineralization, on the basis of production experience. The lead-zinc mineralization has an average bulk density of 2.8 t/m^3, which is based on 32 measurements of ‘mineralized limestone’. These estimates have been used in the resource estimate that follows. Silvercorp also provided specific gravity measurements for ‘disseminated lead zinc ore’ (3.5 t/m^3) and ‘massive lead-zinc ore’ (4.4 t/m^3). An x-y plot of specific gravity against zinc and lead grades showed weak to no correlation but nearly perfect correlation with 13 sulphur assays that were included in the specific gravity table.

17.4 Inverse Distance Interpolation

Resource estimation requires combining assay results from discreet points in 3 space (drill hole composited samples, channel samples) with the centroids of a block model constructed of cells of specified dimensions that populate the solid model of the mineralization as compiled from sections and plan views into a computer, using, in this case Surpac® software. The process requires an estimated value to be associated with the centroid of each block for each economic mineral in the deposit. Assay values from drill core are ‘weighted’ according to their proximity to the point in space to be estimated. The weighting estimator (in this case Inverse Distance Squared) employs a specified search ellipse surrounding the centroid of each block. The estimating routine searches for sample results within the range of its search ellipse to use in the estimation of the value at the centroid of each block.

The inverse distance estimator applies a weighted average to each sample with the individual weights computed as an inverse power of distance as follows:

$$Z_j = kj \sum_{i=1}^{n} (1/d_{ij}^2) Z_i$$

Z_j is the weighting for some arbitrary point (block centroid)
Z_i is a known point (assay value location)
d is the distance from the known point to the arbitrary point
n is the total number of points used in the interpolation
k is a factor that ensures all weightings add to 1

In short, samples that are closest to the point to be estimated get the highest weights and therefore highest influence on calculated results. Weighting diminishes with increasing distance from the point to be estimated.

BYP resources were interpolated into Gold and Pb, Zn resources in four passes, two each for Gold and Pb, Zn for each mineralized zone. The first pass used the indicated resource search radius for the target minerals and set the CAT field to indicated for all blocks estimated in that pass. The second pass for each ore type used the inferred resource search radius and set the CAT field to inferred for blocks estimated in that pass. All remaining blocks were not classified.

Table 17.4 Search radii for the indicated and inferred categories of Au and Pb, Zn resources.

Ore type	Estimate Sequence	Category	Search Radius (m)	Vertical Search (m)	Min Number	Max Number	Bearing*	Plunge*	Dip*
Gold1	**1**	**Indicated**	**50**	**25**	**3**	**15**	**152**	**12**	**0**
	2	**Inferred**	**100**	**50**	**1**	**15**			
Gold3	**1**	**Indicated**	**50**	**25**	**3**	**15**	**150**	**18**	**0**
	2	**Inferred**	**100**	**50**	**1**	**15**			
Gold5	**1**	**Indicated**	**50**	**25**	**3**	**15**	**105**	**52**	**0**
	2	**Inferred**	**100**	**50**	**1**	**15**			
Zone1_2	**1**	**Indicated**	**100**	**50**	**3**	**15**	**66**	**34**	**15**
	2	**Inferred**	**200**	**100**	**1**	**15**			
Zone3_5	**1**	**Indicated**	**100**	**50**	**3**	**15**	**110**	**22**	**-22**
	2	**Inferred**	**200**	**100**	**1**	**15**			
Zone9_10	**1**	**Indicated**	**100**	**50**	**3**	**15**	**140**	**22**	**0**
	2	**Inferred**	**200**	**100**	**1**	**15**			
Zone12	**1**	**Indicated**	**100**	**50**	**3**	**15**	**100**	**52**	**0**
	2	**Inferred**	**200**	**100**	**1**	**15**			

*Bearing, plunge and dip of main plane of search ellipse

A nearest neighbor calculation was run in parallel to the ID^2 estimate for Gold Zone 3 to provide a basis for comparison. The nearest neighbor estimator is considered the least biased estimator and provides order of magnitude confirmation for the ID^2 estimation.

17.5 Geological interpretation

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 that occur adjacent to thrust planes. Lead-zinc mineralization is contained within carbonates, both host rocks are of Middle Devonian age. The lead-zinc and gold mineralization are generally stratiform, conformal to stratigraphy and relatively steeply dipping. Both gold and lead-zinc are also spatially related to several intersecting, west and northwest-dipping thrust faults and the genesis and emplacement of both types of mineralization appear to be closely related to these faults. One of these faults, the F2, generally follows the contact between two carbonate units but the other faults of significance to mineralization (here named F4 and F5), are thrust faults that cross-cut stratigraphy. All are inferred to be related to compressional tectonism.

Four lead-zinc zones and three gold zones were modeled. The major lead-zinc zone (Zone 35) is largely stratiform and is contained within or proximal to the F2 fault that strikes northwest and dips about 40 degrees to the southwest. The three other lead-zinc zones are relatively minor and may be related to splays from the F2 fault although there is insufficient evidence to demonstrate this. (Figure 17.2)

The main gold zone (Zone 3) has been modeled as stratiform, but is near horizontal and is inferred to occupy a thrust slice that is separated from the major lead-zinc bearing strata by the F4 fault that is interpreted to be a southwest-directed thrust.

The two other gold zones (Zones 1 and 5) appear to have formed at or near the junction of the F2, F4 and F5 faults. The grades of gold are highest in the area of intersection of these major faults and it is inferred that one or more of these faults was the conduit for mineralizing fluids. 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.

The zones as modeled do not conform to the existing interpretation of the BYP mineralization; the present interpretation assumes that a number of the previously interpreted zones are portions of larger, continuous zones, particularly with respect to the lead-zinc mineralization.

17.7 Resource Block Model

The block model parameters used for the BYP estimate were chosen to create blocks that could best conform to the solid models for the various ore zones. Since the ultimate mining method for each zone has not as yet been decided, this block size should also allow estimation vs recovery for cut and fill or stoping methods.

Table 17.5 Project Limits and Model Cell Block Sizes

Deposit	Axis	Minimum (m)	Maximum (m)	Block Size (m)
BYP	X (east)	29,288	30,733	5
	Y (north)	28,425	29,895	5
	Z (elev.)	-240	490	2

The block model is un-rotated with respect to north and the model origin, located at minimum x, minimum y, maximum z (Gemcom/Surpac convention).

17.8 Mineral Resource Classification

As implied by the name given to the search ellipses, blocks populated during the first pass were classified as Indicated; those populated during the second pass were classified as Inferred. No resources were classified as Measured. The classification for all mineralized zones, except Zone 3 Gold (which has extensive recent sampling supporting an indicated resource classification), are complicated by the lack of confirmation of the collar locations for holes completed pre2010 and the lack of downhole surveys for those holes. Drill rigs available in China at the time the historical programs were conducted were only capable of drilling vertical holes. Considering the average depth of holes at BYP is 345m a 3 degree deviation at the collar results in a 50m diversion from target at depth.

Although it is probable that down hole deviations were small and that collars were surveyed by conventional methods, the NI43-101 reporting standard requires confirmation of these data in order to support an indicated resource estimate. For this reason all resource estimates based solely on pre-2010 drilling and channel sampling have been classified as inferred. Silvercorp's latest drill program will work to confirm results for known mineralized zones from previous programs supporting a future resource estimate that would see most known resources being moved into the indicated category.

17.9 Mineral Resource Tabulation

The ID^2 resource estimates are presented below in Table 17.1 and 17.2. The resource estimate includes indicated resources for Zone 3 Gold only as this zone includes recent channel sampling to confirm drill results. The small resource in Pb-Zn zone 12 has been included for completeness sake. It appears that a small extension of the gold mineralization may project through Pb-Zn zone 12

Table 17.6 Gold Resource Estimate for BYP

			UnCapped Gold			Capped Gold (11.43 g/tAu)		
Category	Zone	Au Cutoff	Tonnes	Au g/t	Oz	Tonnes	Au g/t	Oz
Indicated	gold3	0.5	2,322,320	3.34	249,370	2,289,300	3.11	229,151
		1	**2,175,290**	**3.51**	**245,635**	**2,141,750**	**3.27**	**225,400**
		2	1,653,080	4.16	221,119	1,589,250	3.91	199,653
Inferred	gold1	0.5	771,290	1.14	28,199	771,290	1.14	28,199
		1	425,490	1.38	18,842	425,490	1.38	18,842
		2	1,170	2.22	84	1,170	2.22	84
	gold3	0.5	1,263,730	2.61	106,087	1,263,600	2.60	105,598
		1	1,185,600	2.73	104,002	1,182,480	2.72	103,534
		2	834,990	3.29	88,332	833,820	3.28	87,940
	gold5	0.5	1,123,850	2.08	75,150	1,123,850	2.08	75,150
		1	1,071,070	2.14	73,605	1,071,070	2.14	73,605
		2	376,870	3.57	43,236	376,870	3.57	43,236
	gold10	0.5	104,000	3.20	10,701	104,000	3.20	10,701
		1	104,000	3.20	10,701	104,000	3.20	10,701
		2	104,000	3.20	10,701	104,000	3.20	10,701
	zone12	0.5	38,220	1.11	1,364	38,220	1.11	1,364
		1	36,790	1.11	1,319	36,790	1.11	1,319
		2	520	2.04	34	520	2.04	34
	Total	0.5	3,301,090	2.09	221,500	3,300,960	2.08	221,011
		1	**2,822,950**	**2.30**	**208,469**	**2,819,830**	**2.29**	**208,000**
		2	1,317,550	3.36	142,386	1,316,380	3.35	141,994

. As stated previously all resources for both gold and lead-zinc are inferred with the exception of Zone 3 gold where recent tunneling and channel sampling has produced a density of data sufficient to support an indicated resource estimate.

Table 17.7 Pb-Zn Resource Estimate for BYP

Classification	Zone	% Pb+Zn	Tonnes	Pb %	Zn %	Pb Tonnes	Zn Tonnes
Inferred	zone1_2	0.5	9,590,420	0.23	1.97	22,160	188,890
		1	9,007,320	0.24	2.05	21,748	184,340
		2	5,330,220	0.30	2.51	15,940	133,888
		3	**2,025,380**	**0.41**	**3.03**	**8,339**	**61,377**
		5	51,800	1.09	5.63	564	2,917
	zone3_5	0.5	9,592,100	0.92	1.80	88,031	172,463
		1	9,590,700	0.92	1.80	88,026	172,455
		2	7,209,160	1.00	2.07	72,070	148,878
		3	**2,983,260**	**1.30**	**2.68**	**38,669**	**79,970**
		5	241,220	2.28	3.46	5,495	8,351
	zone9_10	0.5	3,630,340	1.16	2.96	42,217	107,567
		1	3,611,580	1.17	2.98	42,112	107,512
		2	3,193,820	1.26	3.22	40,098	102,961
		3	**1,781,500**	**1.68**	**4.49**	**29,939**	**80,018**
		5	1,189,160	1.97	5.27	23,438	62,681
	zone12	0.5	3,113,040	1.46	2.43	45,358	75,792
		1	3,063,620	1.47	2.47	45,026	75,659
		2	1,835,540	2.08	3.59	38,095	65,843
		3	**1,524,320**	**2.25**	**4.11**	**34,325**	**62,599**
		5	1,231,160	2.39	4.42	29,363	54,368
	Total	0.5	25,925,900	0.76	2.10	197,766	544,712
		1	25,273,220	0.78	2.14	196,912	539,967
		2	17,568,740	0.95	2.57	166,203	451,569
		3	**8,314,460**	**1.34**	**3.42**	**111,272**	**283,964**
		5	2,713,340	2.17	4.73	58,852	128,314

17.10 Block Model Validation

The block model was validated both visually and by calculation. Visual inspection indicates that the block model is well-constrained by the boundary of the geological solid. Sample points have been closely estimated by the ID^2 estimator based on a comparison of block model Au value ranges vs adjacent samples. A comparison of descriptive statistics for the capped gold original samples vs the inverse distance squared estimated values in the final block model and the nearest neighbor check estimate statistics shows a near one to one co-relation, indicating that the estimation process reflects the same population as the original sample data and that the ID^2 estimate is robust (Table 17.3). The range for the mean at the 95% confidence level overlaps indicating the data sets are from the same population.

Table 17.8 Statistics for capped gold block model versus the original data

Statistic	Block Model Au Capped	Au Samples Capped	NN Block Model Au Capped
Mean	2.49	2.66	2.47
Standard Error	0.01	0.16	0.01
Median	2.08	1.62	1.59
Mode	1.20	2.14	1.20
Standard Deviation	1.71	3.06	2.50
Sample Variance	2.92	9.37	6.24
Kurtosis	3.34	13.59	2.70
Skewness	1.67	3.10	1.77
Range	11.03	24.33	11.30
Minimum	0.26	0.07	0.04
Maximum	11.29	24.40	11.34
Sum	107816.58	988.85	105331.74
Count	43322.00	372.00	42667.00
Confidence Level(95.0%)	0.02	0.31	0.02
CV	0.69	1.15	1.01
Interval for the mean	2.47	2.35	2.44
	2.50	2.97	2.49

Lead and zinc metal statistics for the block model estimated values compare well with the original samples.

Table 17.9 Statistics for Pb+Zn for block model vs original samples

Statistic	*Block Model*	*Sample Data*
Mean	2.86	3.09
Standard Error	0.00	0.11
Median	2.35	1.97
Mode	1.14	1.54
Standard Deviation	1.72	3.47
Sample Variance	2.95	12.07
Kurtosis	5.89	41.40
Skewness	2.08	4.78
Range	25.84	48.97
Minimum	0.30	0.00
Maximum	26.14	48.97
Sum	530281.03	2922.24
Count	185186.00	947.00
Confidence Level (95.0%)	0.01	0.22
CV	0.60	1.13
Low Mean	2.86	2.86
High Mean	2.87	3.31

The mean for these two datasets barely overlaps as the markedly larger block model data set mean is extremely tight at the 95% confidence level. The datasets appear to be sufficiently close in mean to have been derived from the same population of samples. The two methods of validation have sufficiently verified the accuracy of the resource estimate for Pb-Zn and the estimate is considered reflective of the base data.

The resource estimates for Au, capped and uncapped as well as for Pb-Zn appear to be sufficiently well supported by statistical analysis to be considered robust and representative of the original sample data.

18.0 OTHER RELEVANT DATA AND INFORMATION

There is no relevant data or information that is not included in the Report.

19.0 INTERPRETATION AND CONCLUSIONS

The BYP property contains gold mineralization hosted by silicified and altered clastic rocks and lead-zinc mineralization hosted by carbonate rocks, both of Middle Devonian age. Lead Zinc mineralization is similar to MVT style mineralization, related to diagenesis and transport of metal ions to deposition sites including pore space, bedding planes, fractures and foliations by brine solutions. The gold mineralization is related to a hydrothermal system similar to that proposed for Carlin style deposits. The age relationship between gold, which is hosted in older sediments and lead zinc, which is hosted in younger carbonates is not clearly defined. Based on the deposition models it appears probable that lead zinc mineralization is relatively early post deposition while gold mineralization is much later and hosted in sediments adjacent to major thrust planes that cut across the stratigraphy, possibly related to basin closing above a subducting plate. Cross cutting relationships will probably become evident as underground exploration and mining expose more of the deposit's internal geology.

A quality control program consisting of internal and external checks was implemented in historical exploration programs. This data has been verified by mining activities since 2006 and Sivercorp's recent sampling program; both of which have served to substantiate the reliability of the historical exploration analytical data. Location data is less well substantiated due to lack of applicable survey information and certificates.

The grade blocks for Au and Pb-Zn are presented in figures 19.1 and 19.2 respectively.

The gold is concentrated within silicified clastic sediment layers associated with through going thrust faults. The potential to find additional gold resources in the area is considered to be high as there is more learned each day as further drilling and tunneling take place as to the location of these faults and their along strike and down dip extents. Yet to be determined definitively is the timing of mineralization as the required cross cutting features have not as yet been exposed by underground workings or by interpretation of drill holes.

The Pb – Zn mineralization has to this point been modeled as planar features, strata bound and early post deposition of the carbonate host rock, possibly as a result of the generation of ore bearing fluids early post deposition and during deformation. As in the case of gold the area appears to have the potential to host additional similar grade and tonnage resources, not as yet identified. The model for this type of mineralization includes the possibility of mineralized vertical structures which will be hard to identify in drill core, may appear during exploration tunneling or development and whose presence would greatly increase tonnage within the current deposit envelope.

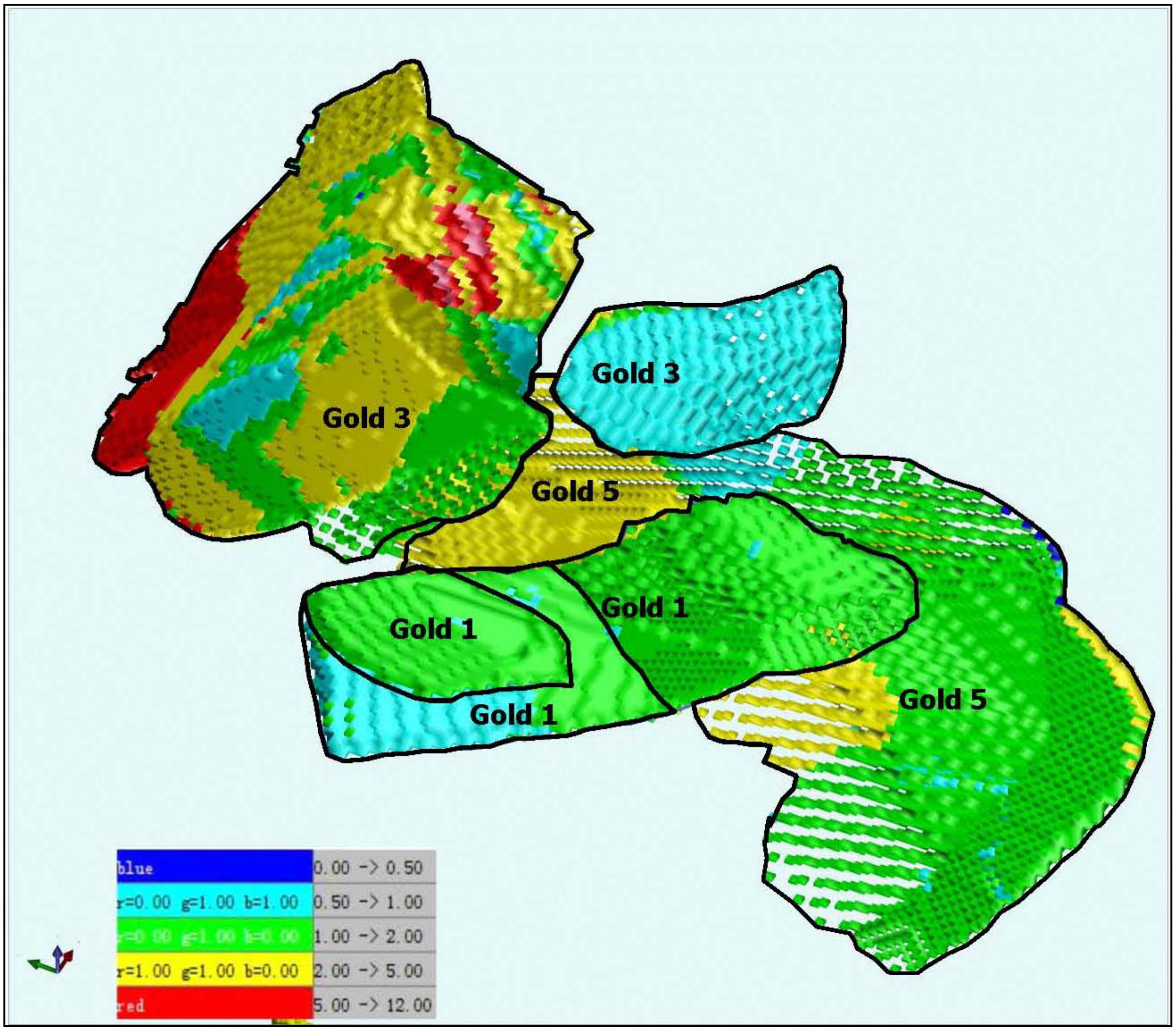

Figure 19.1 Grade coded blocks for Gold Resource

Table 19.1 Legend for Gold Grades

Color	Grade (Au g/t)
Red	5.0 – 12.0
Yellow	2.0 -5.0
Green	1.0 – 2.0
Light Blue	0.5 – 1.0
Blue	0 – 0.5

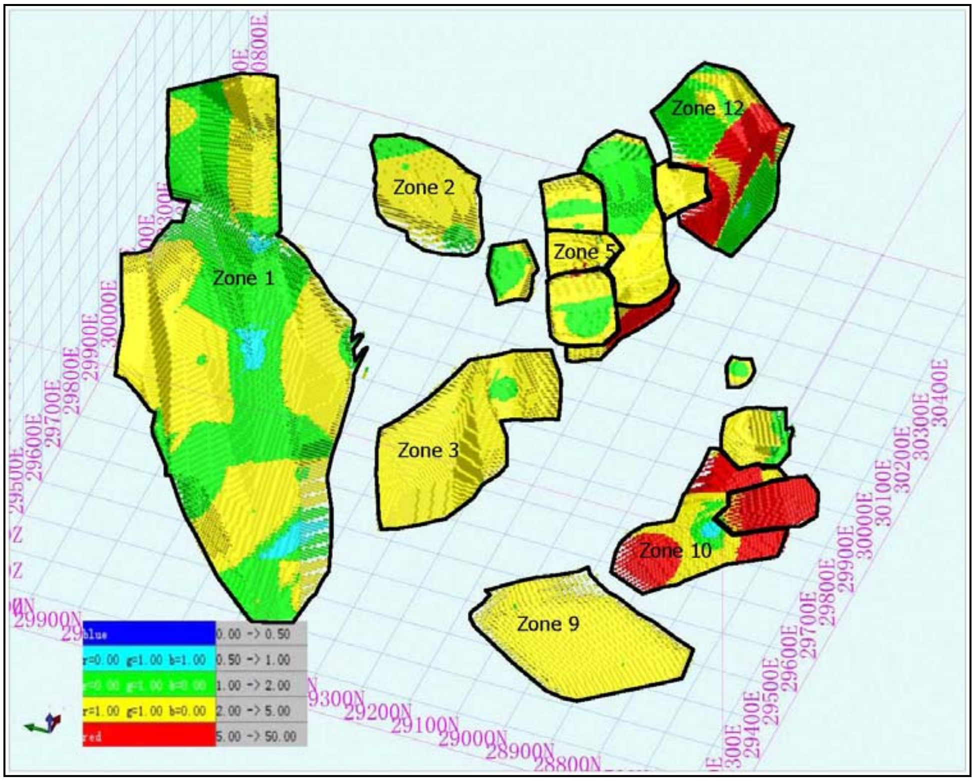

Figure 19.2 Grade Coded Blocks for Pb-Zn mineralization

Table 19.2 Legend for Pb-Zn Grades

Color	**Grade (Zn% + Pb%)**
Red	5.0 – 50.0
Yellow	2.0 -5.0
Green	1.0 – 2.0
Light Blue	0.5 – 1.0
Blue	0 – 0.5

20.0 RECOMMENDATIONS

A comprehensive 30,000m drilling program is underway to better define and to upgrade the resource classification of the majority of the mineralized zones and as well as to investigate the strike and dip extensions of the major structures for additional mineralization. Exploration will focus on the southeast part of the Property where the highest values and greatest concentrations of gold and lead and zinc mineralization have been discovered. In consideration of the near-term economic significance of the available resources, the relative order of priority of the drilling program should be as follows:

1. Infill drilling to expand and upgrade the gold resource of Gold Zone 3 to indicated and measured categories.
2. Step out drilling to test the strike and dip extensions of the major faults and to further define zones of gold and lead-zinc mineralization.
3. Structural geological mapping to further understand the structural controls of the mineralization and to form a basis for further expansion of the know resource.

Underground drilling from currently available underground development is recommended to better define known zones and to probe for deeper mineralization, especially Au related to well defined basal thrust planes.

The estimated budget for the current drilling program is CAD$5,000,000.

20.1 QA/QC

An ongoing program of QA/QC insertions of blanks, standards and duplicates should be implemented to test the processing lab for inaccuracies in analysis.

20.2 Geochemical Sampling

Carlin Style gold deposits are known to have an extensive As halo defined by sediment sampling. Further work in soil and stream sediment sampling should be investigated as a way forward in identifying new target areas within the current property.

21.0 REFERENCES

1. 468 Geological Exploration Team, Geological Bureau of Hunan Province, December 1977
Report on detailed exploration for lead and zinc at BYP area, Xinshao, Hunan Province from December 1971 to October 1977.

2. 418 Geological Exploration Team, Geological Bureau of Hunan Province, December 1992
Report on geological exploration for gold at BYP area, Xinshao County, Hunan Province

3. Gong G.L. et al, August 2007 Tectonic-controlling characteristics and genesis of Daxin gold deposit in Hunan province Geotectonica et Metallogenia, Vol.31, No.3 (2007), pp342-347.

4. Hunan Nonferrous Metals Research Institute, January 2011 Research report on milling flow chart for gold ore at BYP For Guangzhou Fund Mining Co. Ltd., a subsidiary company of Silvercorp

5. Hunan Nonferrous Metals Research Institute, January 2011 Research report on milling flow chart for lead and zinc ore at BYP For Guangzhou Fund Mining Co. Ltd., a subsidiary company of Silvercorp

6. Jiang, Ruijin, P. Geo., Mosher, Greg Z. P. Geo., 2011
Technical Report on the BYP Property, Hunan Province, China
Wardrop Technical Report.

7. Kang R.H., December 2001 Ore-controlling characteristics of the Diaoshuidong micro-grained and disseminated type gold deposit in Hunan province Geology and Resources, Vol.10, No.4 (2001), pp210-214

8. Kang, R.H., January 2002 Analysis of 0065ploration perspectives of gold-antimony deposits in Baimashan-Longshan EW-striking structural zone, Hunan Province Geology and Mineral resources of South China, No.1, 2002, pp57-61

9. Lefebure, David V., Brown Derek A., and Ray, Gerald E. 1999
The British Columbia Sediment Hosted Gold Project, British Columbia Geological Survey Geological Field Work 1998, Paper 1999-1

10. Panteleyev, A., 1996,
Epithermal Au-Ag
In: Selected British Columbia Mineral Deposit Profiles, Vol. 2, Metallic Deposits Lefebure, D.V. and Hoy, T. Editors British Columbia Ministry of Employment and Investment Open File 1996-13

11. Paradis, S., Hannigan, P., and Dewing, K., 2007
Mississippi Valley-type lead-zinc deposits, *in* Goodfellow, W.D., ed., Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods: Geological Association of Canada, Mineral Deposits Division, Special Publication No. 5, p. 185-203.

12. Wang, Qiang, et al, October 3, 2010
Report on a comprehensive investigation of the BYP Pb-Zn-Au deposit of Yunxiang Mining,

Xinshao County, Hunan ProvinceFor Guangdong Fund Mining Co. Ltd

22.0 Date and Signature Page

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Issued By:

Silvercorp Metals Inc.

Signed June 24, 2011

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Randal Cullen, MSc, MBA, P. Geo.
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23.0 CERTIFICATE OF QUALIFIED PERSON

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I, Randal Cullen, P.Geo., am a Professional Geoscientist.

I am a member of the Association of Professional Engineers and Geoscientists of British Columbia. I graduated from the University of Ottawa with a Master of Science degree in Geology in 1988.

I have practiced my profession continuously since 1988 and have been involved in: mineral exploration for gold, diamonds, base metals, titanium, nickel (lateritic and volcanic hosted) and oil sands in Canada, several countries in Africa, Greenland and northern Europe and deposit modeling and resource estimation for gold, zinc, lead, silver, diamonds and oil sands in Canada, South Africa, Namibia and Madagascar.

As a result of my experience and qualifications, I am a Qualified Person as defined in NI43-101.

This technical report titled “Technical Report on the BYP Property, Hunan Province, China” for Silvercorp Metals Inc., effective June 15, 2011(the “Technical Report”) was prepared under my direct supervision. I visited the BYP Property on May 12, 2011. For the Technical Report’s preparation I relied on support from Mr. Li, a resource estimation Geologist employed by Silvercorp. The results of his resource calculations are found in section 17 of the Technical Report.

I am not aware of any material fact or material change with respect to the subject matter of this Technical Report that is not reflected in this Technical Report and that the omission to disclose would make this Technical Report misleading.

I am not independent of Silvercorp Metals Inc. applying the test in NI 43-101.

I have read National Instrument 43-101 and Form 43-101FI, and this Technical Report has been prepared in compliance with same.

Dated at Vancouver, British Columbia, this 24 day of June, 2011.

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Randal Cullen, P.Geo.

24.0 APPENDICES

Appendix 1: Resource and Reserve Standards Adopted in China

The system is in a period of transition that commenced in 1999. The traditional system for the categorizing mineral resources and ore reserves in China derived from the former Soviet system and it used five categories based on decreasing levels of geological confidence - Categories A, B, C, D and E. The current system promulgated by the Ministry of Land and Resources ("MLR") in 1999 uses three-dimensional matrices, based on economic, feasibility/mine design and geological degrees of confidence. These are categorized by a three number code of the form "123". This new system is derived from the United Nations Framework Classification proposed for international use. Al new projects in China must comply with the new system. However, estimates and feasibility studies carried out before 1999 wil have used the old system.

Data from the old systems has been quoted in this report, because most of the exploration programs and resource estimates were carried out in 1970s and early 1990s. For reference purpose to the readers of this report, Wardrop adopted a broad comparison guide between the Chinese traditional and current systems and NI43-101 standards in resource and reserve categories as shown in the following table.

NI 43-101 Standards for			Chinese "Resource/Reserve" Category
Resource / Reserve categories		Previous System	Current system
Resource categories	Measured	A	
		B	331
	Indicated	C	332
	Inferred	D	333
Reserve categories	Non-equivalent	E	334
	Proven		111+111b
	Probable		121+122+(2M11+2M21+2M22)

Relationship between NI 43-101 standards and the Chinese Resource/Reserves System

However, Wardrop doesn't mean to imply that historical data on resource/reserve estimate from the Chinese exploration report is directly classified as "mineral resources/reserves" as defined in the NI 43-101 Standards of Discloser for Mineral Projects.

In China, the methods used to estimate the resources and reserves are generally prescribed by the relevant Government authority, and are based on the level of knowledge for that particular geological style of deposit. The parameters and computational methods prescribed by the relevant authority include cut-off grades, minimum thickness of mineralization, maximum thickness of internal waste, and average minimum 'industrial' or 'economic' grades required. The resource classification categories are assigned largely on the basis of the spacing of sampling, trenching, underground tunnels and drill holes.

In the pre-1999 system, Category A generally included the highest level of detail, such as grade control information. However, the content of each category B, C & D may vary from deposit to deposit in China, and therefore must be carefully reviewed before assigning to an equivalent "NI43-101" or "JORC Code"

type category. The traditional
Categories B, C and D are broadly equivalent to the 'Measured', 'Indicated', and 'Inferred' categories that are provided by the NI 43-101 and JORC Code systems used widely elsewhere in the world. In the NI 43-101 and JORC Code system the 'Measured Resource' category has the most confidence and the 'Inferred' category has the least confidence, based on increasing levels of geological knowledge and continuity of mineralization.

According to the new Chinese Category Scheme, as shown in the following table, the three numbers refer to economic, feasibility/mine design and geological degrees of confidence.

Definition of the new Chinese Resource Category Scheme

Category	Denoted	Comments
Economic	1	Economic
	2	Marginal economic and Sub-marginal economic
	3	Intrinsic economic
Feasibility	1	Feasibility study conducted
	2	Pre-feasibility study conducted
	3	Scoping study conducted
Geological control	1	Detailed geological control with highest confidence
	2	Moderate geological control with closely-spaced data density
	3	Systematic surface mapping, sampling and limited trenching, test drilling showing potential for more detailed exploration
	4	Limited surface mapping and sampling

Appendix 2: Mining & Exploration Permits of the BYP Property

中华人民共和国

采矿许可证

(副本)

证号：4300000810016

采矿权人 新邵县云翔矿业有限公司

地　　址 新邵县巨口铺镇白云铺村

矿山名称 湖南省新邵县白云铺铅锌矿

经济类型 有限责任公司

开采矿种 铅矿、锌

开采方式 地下开采

生产规模 9.00万吨/年

矿区面积 3.6648平方公里

有效期限：伍年　自2008年1月 至2013年1月

发证机关

(采矿登记专用章)

二〇〇八　年　月　日

中华人民共和国国土资源部印制

矿区范围拐点坐标：

点号　X坐标　Y坐标

1, 3030193.80, 37528851
2, 3030199.80, 37531324
3, 3029100, 37531328
4, 3029100, 37530700
5, 3028700, 37530700
6, 3028300, 37529300
7, 3028850, 37529300
8, 3028850, 37528854

开采深度：由490米至-220米标高　共有8个拐点圈定

Appendix 3: Assay Data of Check Samples (BYP 1971-1977)

primary assay							internal audit				
drill hole	SampID	Assay	date	pb%	zn%	cu%	Assay	date	pb%	zn%	cu%
ZK2002	79	7400217	5/24/1974	0.30	0.40		193		0.31	0.42	
ZK2002	80	218		0.89	0.71		193		0.95	0.83	
ZK2002	81	219		0.46	0.46		193		0.55	0.48	
ZK2002	86	224		0.92	2.40		193		0.99	2.52	
ZK2002	87	225		1.25	3.36		193		1.44	3.37	
ZK2002	133	271		0.59	0.70		193		0.61	0.75	
ZK2002	134	272		2.28	0.45		193		2.43	0.45	
ZK2002	135	273		0.33	0.55		193		0.36	0.54	
ZK2002	136	274		3.76	0.55		193		4.14	0.55	
ZK2004	58	7000998	3/24/1975	0.51	0.83		75011	3/24/1975	0.49	0.92	0.070
ZK2102	6	2802		0.31	0.23	0.017	75011		0.34	0.28	0.016
ZK2102	51	2847		0.37	0.50	0.033	75011		0.39	0.62	0.014
ZK2201	15	7402012		1.31	8.10	0.029	75011		1.37	8.45	0.013
ZK2201	16	2013		0.27	0.64	0.026	75011		0.28	0.68	0.000
ZK2201	37	2034		1.12	0.27	0.019	75011		1.10	0.28	0.000
ZK2201	38	2035		0.00	0.10	0.000	75011		0.10	0.03	0.000
ZK2201	54	2051		0.55	2.29	0.014	75011		0.47	2.36	0.007
ZK2201	55	2052		0.20	0.44	0.000	75011		0.20	0.42	0.007
ZK2201	58	2055		2.94	8.19	0.020	75011		2.99	8.47	0.011
ZK2201	59	2056		0.13	0.34	0.000	75011		0.14	0.35	0.000
ZK2201	117	2114		0.44	1.91	0.009	75011		0.54	1.87	0.000
ZK2201	118	2115		0.17	0.20	0.040	75011		0.24	0.24	0.023
ZK2201	119	2116	3/24/1975	1.12	0.57	0.107	75011		1.15	0.61	0.106
ZK2201	120	2117		0.35	0.41	0.027	75011		0.43	0.52	0.027
ZK2202	17	740409	3/24/1975	0.18	0.44		75011		0.20	0.47	0.000
ZK2202	19	410		0.68	1.06		75011		0.16	0.68	0.000
ZK2202	25	417		0.39	1.22		75011		0.45	1.29	0.007
ZK2202	26	418		0.27	0.58		75011		0.32	0.63	0.009
ZK2202	27	419		0.19	0.70		75011		0.26	0.77	0.005
ZK2204	42	7500775		0.27	0.39	0.009	75029		0.22	0.41	0.017
ZK2204	43	776	7/7/1975	0.29	0.50	0.019	75029		0.26	0.55	0.016
ZK2204	60	793		0.19	0.28	0.265	75029		0.11	0.22	0.253
ZK2204	61	794		0.43	0.52	0.344	75029		0.33	0.46	0.338
ZK2204	62	795		0.21	0.16	0.127	75029		0.17	0.17	0.119

primary assay							internal audit				
drill hole	SampID	Assay	date	pb%	zn%	cu%	Assay	date	pb%	zn%	cu%
ZK2302	50	7404602	3/24/1975	0.39	0.18	0.059	75011		0.54	0.19	0.034
ZK2302	51	2603		1.49	0.14	0.171	75011		1.16	0.19	0.142
ZK2302	52	2604		2.51	0.11	0.172	75011		2.86	0.12	0.133
ZK2302	53	2605		4.71	0.57	0.169	75011		4.86	0.62	0.139
ZK2302	62	2614		0.06	0.39	0.019	75011		0.08	0.36	0.000
ZK2401	7	7403131	3/24/1975	0.11	0.56	0.014	75011		0.16	0.53	0.000
ZK2401	8	3132		0.08	0.50	0.030	75011		0.09	0.46	0.001
ZK2401	9	3133		0.13	0.75	0.019	75011		0.11	0.68	0.010
ZK2401	49	3173		0.48	0.22	0.000	75011		0.49	0.22	0.000
ZK2401	50	3174		0.87	0.09	0.033	75011		0.95	0.15	0.023
ZK2402	26	7401603		0.46	0.95	0.007	75011		0.45	1.03	0.010
ZK2402	27	1604		0.17	0.92	0.001	75011		0.19	0.98	0.010
ZK2402	71	1647		0.00	0.04	0.114	75011		0.09	0.08	0.092
ZK2402	72	1648		0.00	0.07	0.267	75011		0.05	0.10	0.231
ZK2403	7	7500590		0.61	0.31	0.000	75029		0.57	0.35	0.000
ZK2403	8	591		0.50	0.06	0.000	75029		0.45	0.05	0.016
ZK2403	28	611		0.40	0.08	0.106	75029		0.41	0.03	0.066
ZK2403	31	614		0.00	0.05	0.114	75029		0.00	0.02	0.100
ZK2602	19	7403051	3/24/1975	1.32	0.04	0.097	75011		1.19	0.09	0.098
ZK2602	20	3062		0.25	0.04	0.157	75011		0.24	0.08	0.116
ZK2605	15	7500381	7/7/1975	0.30	0.07	0.000	75029		0.31	0.09	0.019
ZK2605	16	382		0.27	0.49	0.000	75029		0.26	0.47	0.015
ZK2605	49	415		0.30	0.43	0.000	75029		0.27	0.46	0.019
ZK2605	51	417		0.32	0.49	0.000	75029		0.30	0.53	0.016
ZK2605	52	418		0.47	1.10	0.011	75029		0.45	1.22	0.026
ZK2605	54	420		0.17	0.60	0.000	75029		0.21	0.65	0.012
ZK2605	55	421		0.21	0.56	0.000	75029		0.19	0.61	0.013
ZK2605	71	437		0.16	0.34	0.030	75029		0.14	0.31	0.014
ZK2605	79	445		0.44	1.94	0.000	75029		0.47	1.95	0.017
ZK2605	119	485		0.13	0.55	0.038	75029		0.10	0.58	0.031
ZK2605	124	490		1.78	11.37	0.167	75029		1.78	11.30	0.145
ZK2605	125	491		1.62	11.19	0.177	75029		1.68	10.99	0.141
ZK2605	126	7500492		1.49	7.58	0.164	75029		1.59	7.46	0.131
ZK2605	127	493		1.02	6.04	0.164	75029		1.05	5.90	0.136
ZK2605	128	494		0.58	4.26	0.174	75029		0.54	4.45	0.141
ZK2605	129	495		0.94	5.43	0.169	75029		0.97	5.56	0.136
ZK2605	143	509	7/7/1975	0.42	1.05	0.072	75029		0.46	1.07	0.045
ZK2605	144	510		0.37	0.78	0.069	75029		0.31	0.85	0.047
ZK2605	145	511		0.22	0.44	0.030	75029		0.23	0.47	0.022

primary assay							internal audit				
drill hole	**SampID**	**Assay**	**date**	**pb%**	**zn%**	**cu%**	**Assay**	**date**	**pb%**	**zn%**	**cu%**
ZK2802	34	7500212		0.54	0.53	0.000	75029		0.56	0.50	0.014
ZK2802	35	213		0.13	0.30	0.038	75029		0.12	0.34	0.031
ZK2802	36	214		0.45	1.77	0.039	75029	3/24/1975	0.45	1.74	0.020
ZK2802	39	217		0.29	0.56	0.000	75029		0.32	0.57	0.013
ZK2803	23	554		0.93	4.78	0.020	75029		0.83	4.90	0.000
ZK2803	32	563		0.30	0.46	0.000	75029		0.25	0.44	0.000
ZK2803	33	564		0.20	0.19	0.000	75029		0.16	0.15	0.000
ZK2805	32	7402740	3/24/1975	2.17	0.11	0.362	75011		2.62	0.15	0.325
ZK2805	33	741		0.29	0.24	0.018	75011		0.36	0.28	0.017
ZK2805	34	2		0.62	0.15	0.033	75011		0.73	0.18	0.017
ZK2805	35	3		0.65	0.06	0.022	75011		0.78	0.09	0.015
ZK2805	36	4		0.40	0.04	0.019	75011		0.44	0.06	0.000
ZK2805	37	5		0.51	0.01	0.027	75011		0.53	0.05	0.008
ZK2805	38	6		0.42	0.01	0.022	75011		0.48	0.04	0.000
ZK2805	39	7		0.48	0.01	0.027	75011		0.52	0.05	0.000
ZK2805	45	7402753		0.04	0.05	0.338	75011		0.13	0.13	0.290
ZK2805	46	4		0.00	0.02	0.109	75011		0.03	0.07	0.099
ZK2806	2	7403065	3/24/1975	0.30	1.21	0.022	75011		0.24	1.23	0.010
ZK2806	3	3066		0.08	0.58	0.014	75011		0.17	0.61	0.000
ZK2806	4	3067		0.08	0.19	0.000	75011		0.10	0.20	0.000
ZK2806	5	3068		0.19	1.42	0.029	75011		0.19	1.47	0.000
ZK2806	6	3069		0.22	0.58	0.000	75011		0.19	0.58	0.010
ZK2806	7	3070		0.65	0.55	0.032	75011		0.61	0.60	0.013
ZK2806	8	3071		0.27	0.91	0.041	75011		0.30	0.88	0.000
ZK2806	13	3076		0.28	0.58	0.022	75011		0.26	0.43	0.000
ZK2806	14	3077		7.93	22.88	0.109	75011		8.20	23.56	0.093
ZK2806	45	3109		0.84	2.17	0.342	75011		0.96	2.02	0.253
ZK2806	47	3110		0.68	2.05	0.454	75011		0.58	2.00	0.379
ZK2806	48	3111		1.73	9.97	0.130	75011		1.79	10.41	0.100
ZK2806	49	3112		1.16	7.14	0.053	75011		1.18	6.94	0.056
ZK2806	50	3113		14.71	34.26	0.124	75011		14.71	36.82	0.105
ZK3002	19	760063		0.05	0.65		7641		0.06	0.69	
ZK3002	20	64		0.11	0.70		7641		0.10	0.65	
ZK3002	21	65		0.08	0.48		7641		0.15	0.50	
ZK3002	39	83		0.44	0.92		7641		0.41	0.95	
ZK3002	40	84		0.45	0.92		7641		0.44	0.91	
ZK3002	54	7600445		0.67	0.07		7641		0.61	0.09	
ZK3002	55	7600446		0.28	0.02		7641		0.27	0.03	
ZK3002	56	447		0.64	0.03		7641		0.63	0.05	

primary assay							internal audit				
drill hole	SampID	Assay	date	pb%	zn%	cu%	Assay	date	pb%	zn%	cu%
ZK3002	69	460		0.17	0.35		7641		0.13	0.33	
ZK3002	70	461		0.14	0.37		7641		0.13	0.37	
ZK3002	71	462		0.11	4.09		7641		0.06	4.09	
ZK3002	72	463		0.57	0.65		7641		0.57	0.57	
ZK3002	73	464		0.18	1.45		7641	7/10/1976	0.11	1.38	
ZK203	94	7501506	5/24/1974	0.00	1.02		7641		0.07	1.12	
ZK203	95	7		0.00	0.98		7641		0.05	1.08	
ZK203	96	8		0.00	0.73		7641		0.04	0.91	
ZK206	72	1656		0.86	0.36		7641		0.96	0.39	
ZK206	73	7		0.30	0.44		7641		0.29	0.45	
ZK306	9	7301453	5/24/1974	0.63	0.78		193		0.56	0.76	
ZK306	11	1455		0.19	0.43		193		0.40	0.59	
ZK306	12	1456		0.60	0.83		193		0.57	0.83	
ZK310	34	7600374		0.42	0.12		5836		0.42	0.10	
ZK505	7	874		0.00	0.08		7641		0.06	0.77	
ZK507	17	760107		0.02	0.04		7641		0.07	0.03	
ZK507	18	108		0.04	0.06		7641		0.03	0.03	
ZK507	19	109		0.04	0.17		7641		0.03	0.15	
ZK507	20	110		0.04	0.38		7641		0.05	0.38	
ZK507	21	760111		0.04	0.54		7641		0.06	0.54	
ZK605	67	7301180	5/24/1974	0.07	1.00		193		0.10	0.97	
ZK605	68	7301181		0.03	0.56		193		0.05	0.57	
ZK605	69	7301182		0.03	0.92		193		0.08	0.86	
ZK605	70	7301183		0.13	0.57		193		0.14	0.61	
ZK605	71	7301184		0.03	0.96		193		0.12	0.91	
ZK605	72	7301185		0.14	1.19		193		0.19	1.20	
ZK608	73	7301809		0.07	0.52		193		0.02	0.49	
ZK608	38	7301810		0.18	3.50		193		0.19	3.23	
ZK608	39	7301811		0.13	6.20		193		0.12	5.82	
ZK608	40	7301812		0.05	3.34		193		0.05	3.07	
ZK610	12	760160		0.08	0.18		7641		0.09	0.19	
ZK610	13	760161		0.06	0.15		7641		0.08	0.14	
ZK610	30	760178		0.04	0.21		7641		0.06	0.17	
ZK610	31	760179		0.03	0.27		7641		0.04	0.18	
ZK704	4	7500970		0.21	0.43		7641		0.20	0.34	
ZK704	5	7500971		0.23	0.99		7641		0.23	0.86	
ZK704	6	7500972		0.19	0.38		7641		0.21	0.35	
ZK704	7	7500973		0.18	0.36		7641		0.14	0.31	
ZK704	8	7500974		0.19	0.41		7641		0.16	0.42	

primary assay							internal audit				
drill hole	SampID	Assay	date	pb%	zn%	cu%	Assay	date	pb%	zn%	cu%
ZK704	25	7500991		0.00	0.90		7641		0.09	0.92	
ZK704	26	7500992		0.00	0.35		7641		0.09	0.36	
ZK704	60	7501026		0.00	0.49		7641		0.04	0.41	
ZK706	16	7501211		0.09	0.44		7641		0.05	0.45	
ZK706	17	7501212		0.05	0.48		7641		0.05	0.49	
ZK706	36	7501231		0.00	0.34		7641		0.04	0.35	
ZK706	40	7501235		0.09	0.67		7641		0.08	0.63	
ZK802	15	7501361		0.44	0.36		7641		0.48	0.33	
ZK802	34	7501380		0.00	0.40		7641		0.04	0.38	
ZK802	35	7501381		0.00	0.49		7641		0.07	0.49	
ZK804	7	7501388		0.05	0.47		7641		0.07	0.49	
ZK6403	3	7500708	7/7/1975	0.00	0.00	0.115	75029	7/7/1975	0.00	0.02	0.081
ZK6403	7	7500712	7/7/1975	0.00	0.01	0.306	75029		0.00	0.02	0.241
ZK6403	8	7500713	7/7/1975	0.00	0.01	0.100	75029		0.00	0.02	0.097
ZK6404	56	7500033	7/7/1975	0.09	0.00	0.223	75029		0.00	0.02	0.216
ZK6404	57	7500034	7/7/1975	0.07	0.00	0.169	75029		0.00	0.02	0.153
ZK6405	3	7500679	7/7/1975	0.44	0.94	0.012	75029		0.51	0.94	0.000
ZK6405	6	7500700	7/7/1975	0.24	0.72	0.000	75029		0.02	0.72	0.000
ZK6405	7	7500701	7/7/1975	0.44	0.87	0.000	75029		0.39	0.90	0.000
ZK6405	11	7500705	7/7/1975	0.36	0.75	0.013	75029		0.37	0.82	0.000
ZK6501	1	7500351	7/7/1975	0.00	0.00	0.120	75029		0.02	0.03	0.092
ZK6501	2	7500352	7/7/1975	0.00	0.00	0.120	75029		0.00	0.02	0.090
ZK6501	3	7500353	7/7/1975	0.00	0.01	0.245	75029		0.00	0.03	0.201
PD2	29	7300758		0.02	0.06		193	5/24/1975	0.04	0.56	
PD2	30	759		0.03	0.82		193		0.04	0.83	
PD2	31	760		0.02	0.64		193		0.05	0.59	
PD2	35	764		0.03	1.36		193		0.07	1.23	
PD2	36	765		0.49	4.00		193		0.49	3.80	
PD2	37	766		0.56	2.50		193		0.53	2.64	

primary assay							external audit				
drill hole	**SampID**	**Assay**	**Date**	**pb%**	**zn%**	**cu%**	**Assay**	**Date**	**pb%**	**zn%**	**cu%**
PD2	759	63		0.04	0.83		4662		0.02	0.85	
PD2	760	64		0.05	0.59		4662		0.02	0.63	
PD2	764	65		0.07	1.23		4662		0.03	12.95	
PD2	765	66		0.49	3.80		4662		0.46	4.03	
PD2	766	67		0.53	2.64		4662		0.51	2.69	
PD2	7300758	248062		0.04	0.56		4662		0.02	0.59	
PD3	905	126506		0.49	10.20	0.010	2867		0.49	9.65	0.009
PD3	909	7		3.01	19.41	0.000	2867		3.27	18.59	0.027
TC6	917	8			5.41	0.000	2867		0.09	4.95	0.006
TC6	924	9		1.22	2.50	0.047	2867		1.36	2.32	0.050
TC6	927	10		0.87	0.62	0.022	2867		0.86	0.55	0.045
TC6	933	11		1.26	2.90	0.067	2867		1.39	2.54	0.086
ZK203	96	7501508		0.000	0.73		5836		0.03	0.91	
ZK2102	6	7500245		0.31	0.23	0.017	5046		0.28	0.29	0.028
ZK2201	15	247		1.31	8.10	0.029	5046		1.40	7.27	0.017
ZK2201	37	249		1.12	0.27	0.019	5046		1.09	0.34	0.017
ZK2201	54	251		0.55	2.29	0.014	5046		0.48	2.05	0.012
ZK2201	58	253		2.940	8.19	0.020	5046		2.80	7.12	0.024
ZK2201	117	255		0.440	1.91	0.009	5046		0.46	1.67	0.016
ZK2201	119	257		1.120	0.57	0.107	5046		1.15	0.62	0.120
ZK2202	17	259		0.180	0.44		5046		0.12	0.47	0.008
ZK2202	25	261		0.390	1.22		5046		0.44	1.24	0.012
ZK2202	27	263		0.190	0.70		5046		0.20	0.79	0.010
ZK2302	51	265		1.490	0.14	0.171	5046		1.71	0.19	0.133
ZK2302	53	267		4.700	0.57	0.169	5046		4.70	0.59	0.142
ZK2401	7	269		0.110	0.56	0.014	5046		0.11	0.57	0.016
ZK2401	9	271		0.130	0.75	0.019	5046		0.06	0.68	0.013
ZK2401	50	273		0.870	0.09	0.033	5046		0.82	0.16	0.036
ZK2402	27	275	3/31/1975	0.170	0.92	0.001	5046	3/31/1975	0.17	0.87	0.010
ZK2402	72	277		0.000	0.07	0.267	5046		0.02	0.09	0.275
ZK2602	20	279		0.250	0.04	0.157	5046		0.18	0.07	0.152
ZK2805	33	281		0.290	0.24	0.018	5046		0.34	0.28	0.024
ZK2805	35	283		0.695	0.06	0.022	5046		0.80	0.10	0.021
ZK2805	37	285		0.510	0.01	0.022	5046		0.55	0.07	0.018
ZK2805	39	287		0.480	0.01	0.027	5046		0.51	0.04	0.018
ZK2805	46	7500289		0.000	0.02	0.109	5046		0.01	0.07	0.134

primary assay							external audit				
drill hole	SampID	Assay	Date	pb%	zn%	cu%	Assay	Date	pb%	zn%	cu%
ZK2806	3	291		0.080	0.58	0.014	5046		0.05	0.57	0.007
ZK2806	5	293		0.190	1.42	0.029	5046		0.18	1.29	0.010
ZK2806	7	295		0.650	0.55	0.032	5046		0.63	0.55	0.017
ZK2806	13	297		0.280	0.58	0.022	5046		0.22	0.42	0.010
ZK2806	46	299		0.840	2.17	0.342	5046		0.88	1.99	0.328
ZK2806	48	301		1.730	9.97	0.130	5046		1.76	8.78	0.123
ZK3002	21	760065		0.080	0.48		5836		0.08	0.50	
ZK3002	39	83		0.440	0.92		5836		0.42	0.97	
ZK3002	40	84		0.450	0.92		5836		0.44	0.88	
ZK3002	54	445		0.670	0.07		5836		0.61	0.08	
ZK3002	55	446		0.280	0.02		5836		0.27	0.03	
ZK3002	69	460		0.170	0.35		5836		0.14	0.33	
ZK3002											
ZK301	18			0.470	5.47		5836		0.44	5.21	
ZK301	19			0.150	5.34		5836		0.11	5.01	
ZK306	9	7301453	5/24/1974	0.560	0.76		4662		0.60	0.81	
ZK306	11	1455		0.400	0.59		4662		0.42	0.63	
ZK306	12	1456		0.570	0.83		4662		0.56	0.84	
ZK310	34	7600374		0.420	0.12		5836		0.46	0.11	
ZK506	7	7500874		0.000	0.80		5836		0.05	0.83	
ZK507	19	760109		0.040	0.17		5836		0.03	0.16	
ZK507	20	110		0.040	0.38		5836		0.04	0.38	
ZK507	21	111		0.040	0.54		5836		0.04	0.58	
ZK604	241			0.158	0.83				0.25	0.91	
ZK604	242			0.126	1.83				0.14	1.86	
ZK605	67	7301180	5/24/1975	0.100	0.97		4662		0.08	1.07	
ZK605	68	1181		0.050	0.57		4662		0.05	0.65	
ZK605	69	2		0.080	0.86		4662		0.05	0.96	
ZK605	70	3		0.14	0.61		4662		0.12	0.64	
ZK605	71	4		0.12	0.91		4662		0.05	0.93	
ZK605	72	5		0.19	1.20		4662		0.16	1.25	
ZK608	37	7301809		0.02	0.49		4662		0.01	0.63	
ZK608	38	10		0.19	3.32		4662		0.15	3.44	
ZK608	39	11		0.12	5.82		4662		0.09	5.95	
ZK608	40	12		0.05	3.07		4662		0.02	3.20	
ZK610	12	760160		0.08	0.18		5836		0.08	0.20	
ZK704	4	750970		0.21	0.43		5836		0.17	0.33	
ZK704	5	7500971		0.23	0.99		5836		0.23	0.91	
ZK704	8	974		0.19	0.41		5836		0.17	0.36	

primary assay							external audit				
drill hole	**SampID**	**Assay**	**Date**	**pb%**	**zn%**	**cu%**	**Assay**	**Date**	**pb%**	**zn%**	**cu%**
ZK704	25	991		0.00	0.90		5836		0.07	0.86	
ZK706	17	7501212		0.05	0.49		5836		0.05	0.48	
ZK706	36	7501231		0.00	0.34		5836		0.02	0.35	
ZK802	34	1380		0.00	0.40		5836		0.04	0.41	
ZK802	35	1381		0.00	0.49		5836		0.03	0.51	
ZK804	7	1388		0.05	0.47		5836	8/3/1976	0.05	0.49	

Appendix 4: Measurement of Specific Gravity

工程编号	样品编号	矿体号	采样方法	样品重量（克）			体重	分析结果			矿石结构	测定方法	备注
				在空气中ω	在水中ω1	抹干后ω2		Pb	Zn	S			
ZK608	1	I	劈心	6635	4223		2.75	0.00	0.05			中块体重不封蜡排水法	
ZK608	11	I	劈心	2810	1815		2.82	0.12	0.04				
ZK608	26	I	劈心	7105	4380		2.61	0.30	0.24				
ZK608	27	I	劈心	6700	4225		2.74	0.06	0.10				
ZK608	28	I	劈心	5330	3400		2.76	0.07	0.19				
ZK608	30	I	劈心	7580	4795		2.72	0.11	0.20				
ZK608	33	I	劈心	6225	3965		2.75	0.14	0.49				
ZK608	34	I	劈心	7270	4640		2.76	0.20	1.52				选用
ZK608	35	I	劈心	7750	4940		2.76	0.20	1.64				选用
ZK608	36	I	劈心	8445	5425		2.80	0.25	1.52				选用
ZK608	38	I	劈心	5460	3465		2.74	0.18	3.50				选用
ZK608	39	I	劈心	8550	5060		2.77	0.13	6.20				选用
ZK608	40	I	劈心	8860	5680		2.79	0.05	3.34				选用
ZK608	41	I	劈心	6520	4180		2.79	0.17	1.49				选用
ZK608	42	I	劈心	6020	3875		2.81	0.07	3.38				选用
ZK608	43	I	劈心	7390	4780		2.83	0.34	6.69				选用
ZK608	44	I	劈心	7145	4650		2.86	0.05	7.09				选用
ZK2201	42		劈心	9.4	6.2	9.4	2.94	0.13	0.27	0.00	黄铁铅锌矿化灰岩		
ZK2201	43		劈心	12.9	8.8	12.9	3.10	0.27	0.70	0.00	侵染状矿石		
ZK2201	44		劈心	9.8	6.7	9.8	3.11	0.14	0.41	0.00	矿化灰岩		
ZK2201	45		劈心	7.6	5.1	7.6	2.94	0.17	0.25	0.00	矿化灰岩		
ZK2201	46		劈心	8.0	5.3	8.0	2.96	0.17	0.23	0.00	矿化灰岩		
ZK2201	47		劈心	12.3	8.1	12.3	2.89	0.17	0.16	0.00	矿化灰岩		
ZK2201	48		劈心	9.3	6.2	9.3	3.03	0.23	0.12	0.00	矿化灰岩		
ZK2201	49		劈心	7.3	4.7	7.3	2.84	0.09	0.06	0.00	矿化灰岩		
ZK2201	50		劈心	5.3	5.5	5.3	2.95	0.09	0.22	0.00	矿化灰岩		
ZK2201	51		劈心	9.1	6.1	9.1	2.95	0.21	0.39	0.00	矿化灰岩		
ZK2201	52		劈心	4.4	2.9	4.4	2.84	0.12	0.13	0.00	矿化灰岩		
ZK2201	53		劈心	13.6	8.8	13.6	2.85	0.22	0.40	0.00	矿化灰岩		
ZK2201	54		劈心	13.1	9.5	13.1	3.59	0.55	2.29	0.00	侵染状矿石		选用
ZK2201	55		劈心	13.2	8.5	13.2	2.80	0.20	0.44	0.00	侵染状矿石		
ZK2201	56		劈心	10.8	7.0	10.8	2.78	0.10	0.21	0.00	矿化灰岩		
ZK2201	57		劈心	10.9	7.0	10.9	2.77	0.07	0.08	0.40	矿化灰岩		
ZK2201	58	V	劈心	11.9	9.0	11.9	4.09	2.94	8.19	32.45	侵染状矿石		
ZK2201	59		劈心	9.7	6.4	9.7	2.90	0.13	0.34	1.65	侵染状矿石		
ZK2201	90	VI	劈心	12.9	9.4	12.9	3.63	0.70	1.69	23.48	黄铁铅锌侵染矿石		选用
ZK2201	91		劈心	10.5	7.9	10.5	3.96	0.74	0.60	31.22	黄铁铅锌侵染矿石		
ZK2201	92		劈心	24.6	19.2	24.6	4.43	0.53	0.96	41.79	致密块状矿石		
ZK2201	93		劈心	15.4	11.3	15.4	3.77	0.62	1.27	29.20	侵染状矿石		选用
ZK2201	95		劈心	22.5	17.6	22.5	4.55	0.25	0.48	42.97	致密块状矿石		
ZK2201	96	VI	劈心	13.8	10.6	13.8	4.37	2.50	2.12	41.60	致密块状		
ZK2201	97	VI	劈心	16.8	13.1	16.8	4.47	0.44	1.07	42.63	致密块状		
ZK2201	98	VI	劈心	15.8	12.2	15.8	4.39	0.32	0.57	43.17	致密块状		
ZK2201	99	VI	劈心	13.3	10.2	13.3	4.34	0.65	0.53	42.58	致密块状		
ZK2201	100	VI	劈心	10.7	7.6	10.7	3.49	0.69	1.96	24.33	侵染状矿石		选用
ZK2201	101	VI	劈心	16.0	11.5	16.0	3.86	0.77	1.12	30.39	侵染状矿石		选用
PD2	1	II	捡块	64.1	42.5		2.97	0.08	1.39			小块体重不封	
PD2	2	II	捡块	127.0	85.0		3.02	0.10	4.83				选用
PD2	3	II	捡块	285.0	175.0		2.75	0.03	0.91				

工程编号	样品编号	矿体号	采样方法	样品重量（克）			体重	分析结果			矿石结构	测定方法	备注
				在空气中ω	在水中ω1	抹干后ω2		Pb	Zn	S			
ZK201	4	Ⅱ	捡块	154.0	95.0		2.61	0.46	0.06			蜡排水法	
ZK301	5	Ⅱ	捡块	324.0	203.0		2.68	0.04	0.86				
ZK301	6	Ⅱ	捡块	220.0	125.0		2.59	0.01	2.27				
ZK301	7	Ⅱ	捡块	178.0	113.0		2.74	0.28	4.08				选用
ZK301	8	Ⅱ	捡块	215.0	140.0		2.87	0.00	3.29				
ZK604	9	Ⅰ	捡块	205.0	130.0		2.73	0.00	0.12				
ZK604	10	Ⅰ	捡块	174.0	113.0		2.85	0.09	0.64				
ZK604	11	Ⅰ	捡块	289.0	190.0		2.92	0.09	1.64				选用
ZK604	12	Ⅰ	捡块	207.0	132.0		2.76	0.00	1.02				
ZK604	13	Ⅰ	捡块	125.0	80.0		2.78	0.02	0.08				
海棠岭矿段体重（蓝色）平均值							2.815						
白云冲矿段体重（红色）平均值							3.629						