## TECHNICAL REPORT BLENDE ZINC - LEAD - SILVER DEPOSIT

Beaver River Area, Nash Creek Map Area, Yukon Territory Mapsheet 106D 07

Latitude: 64° 24' 39" N/Longitude: 134° 40' 21" W

for:

## SHOSHONE SILVER MINING COMPANY

P.O. Box 2011 Coeur d'Alene, ID 83816 Office Telephone: 208-666-4070 Office Fax: 208-676-1629

by

BJ. PRICE GEOLOGICAL CONSULTANTS INC.

Ste 1028 - 470 Granville St. , Vancouver , BC., V6C 1V5 Barry Price, M.Sc., P.Geo. Consulting Geologist

Phone: 604-682-1501 Fax: 604-642-4217 bpricegeol@telus.net

August 15, 2004
C:\Documents and Settlngs\Barry\Desktop\Blende 4Report2004.wpd



## SUMMARY The Blende Silver–Lead–Zinc Project SHOSHONE SILVER MINING COMPANY

In early 2004, Shoshone acquired an option to acquire a 60 percent interest in the Blende Silver–Lead–Zinc project from Eagle Plains Resources. The Blende property is located in the Yukon Territory and includes a carbonate–hosted polymetallic deposit on the south edge of the Mackenzie Platform, hosted by Middle Proterozoic Gillespie Group dolomite. The deposits of lead, zinc and silver have some characteristics of Mississippi Valley type deposits but are mainly fault fillings and breccias with strong structural control.

The property includes 72 claims staked under the Yukon Quartz Mining Act covering approximately 1587 hectares.

Prior exploration by Billiton Metals Canada in the early 1990s delineated two mineralized zones, the West zone and the East zone on the property, and a lesser explored Far East zone. The deposit is outlined at surface by an open-ended three mile long soil anomaly with zinc values of up to one percent.

Billiton drilled 77 holes on the property totaling over 46,000 feet along over two miles of strike length, reporting numerous high-grade intercepts at relatively shallow depths. Subsequent step-out drilling by NDU Resources confirmed the continuation of good grade mineralization westward, with the addition of significant copper values. Some geophysical methods such as Induced Polarization (IP) and Very Low Frequency Electromagnetic (VLF-EM) effective in previous exploration efforts at Blende due to the inert nature of the host dolomite.

Defined on the basis of diamond drilling and surface trenching, The West and East zones have a combined resource as follows:

RESOURCE ESTIMATE FOR BLENDE DEPOSITS
(Billiton Metals Canada Inc.)

ZONE	RESOURCE tonnes	ZINC %	LEAD %	SILVER grams/tonne*
West Zone	15,300,000	3.04	3.23	67.5
East Zone	4,300,000	3.05	1.31	15.1
TOTALS	19,600,000 =21,500,000 tons	3.04	2.80	56.0

<sup>\*</sup> 34 g/t = 1 oz/ton silver

(Note: Mineralization estimates are considered reliable and relevant, but were prepared prior to the institution of National Instrument 43–101 standards.) The resource calculations have been examined in detail by the writer and conform with the definition of an Inferred Mineral Resource

Although initially explored as an open pit target, Shoshone and Eagle Plains management believe that there is excellent potential to develop the deposit as an underground operation, which would allow mining of a smaller but higher grade. By adjusting the cutoff grade of the blocks calculated previously, the resource could be reduced in tonnage, but increased in grade, to 4.1 million tonnes grading 6.7% lead, 4.6 % zinc and 3.1 oz/ton silver. Previous drilling highlights at Blende include, amongst others of lower value:

SELECTED DRILL INTERCEPTS - BLENDE DEPOSIT

				1	
FROM m	TO m	WIDTH m	PB %	ZN %	AG opt
4.3	29	24.7	3.5	3.2	1.7
	90.5	86.2	5.3	3.0	3.1
	135.9	132.2	3.7	1.8	2.6
		24.26	7.6	2.4	3.15
		11.91	7.1	8.2	3.46
		69.86	5.1	2.3	3.82
			4.99	4.31	1.54
			4.89	3.39	1.86
			1.95	6.80	1.50
	1997-0-1996		.44	.08	14.62
				3.02	0.69
			4.0	5.06	1.32
_	4.3 4.3 4.3 3.7 68.73 15 34.99 73.50 57 145.56 261.41 25.25 105	4.3294.390.53.7135.968.7392.991526.9134.99104.8573.5093.355772145.56189261.41269.3025.2581.30	4.3       29       24.7         4.3       90.5       86.2         3.7       135.9       132.2         68.73       92.99       24.26         15       26.91       11.91         34.99       104.85       69.86         73.50       93.35       19.85         57       72       15         145.56       189       43.44         261.41       269.30       7.89         25.25       81.30       56.05	FROM M       10 M       Wall M         4.3       29       24.7       3.5         4.3       90.5       86.2       5.3         3.7       135.9       132.2       3.7         68.73       92.99       24.26       7.6         15       26.91       11.91       7.1         34.99       104.85       69.86       5.1         73.50       93.35       19.85       4.99         57       72       15       4.89         145.56       189       43.44       1.95         261.41       269.30       7.89       .44         25.25       81.30       56.05       2.41	FROM III       10 III       Width         4.3       29       24.7       3.5       3.2         4.3       90.5       86.2       5.3       3.0         3.7       135.9       132.2       3.7       1.8         68.73       92.99       24.26       7.6       2.4         15       26.91       11.91       7.1       8.2         34.99       104.85       69.86       5.1       2.3         73.50       93.35       19.85       4.99       4.31         57       72       15       4.89       3.39         145.56       189       43.44       1.95       6.80         261.41       269.30       7.89       .44       .08         25.25       81.30       56.05       2.41       3.02

Copied from Billiton and Archer Cathro reports.

Prior work also established that the deposit is non-acid generating and could be mined by open pit methods, with a stripping ratio of 2.1:1. Preliminary metallurgical studies indicate no significant concentrations of deleterious elements, although oxide lead and zinc interfere to some extent with recoveries, requiring a more complicated processing flow-sheet.

The Blende property is 100 percent owned by Eagle Plains, subject to a 1.0 percent net smelter royalty (NSR). Upon signing of a formal option agreement, Shoshone will pay Eagle Plains \$25,000 cash and 100,000 shares of Shoshone stock. The proposed deal requires Shoshone to issue 1,000,000 additional shares of its stock to Eagle Plains and expend \$5,000,000 on exploration at Blende by December 31, 2008 to complete its 60 percent earn—in on the project.

The writer has proposed a two stage program. The initial stage in 2004 will be preparatory for a substantial drill program in 2005. The estimated budget for the two programs is Can \$ 300,000 in phase I (part of which was completed in August) and \$1,300,000 in the drill program of phase II.

respectfully submitted

B. J. PRICE GEOLOGICAL CONSULTANTS INC.

per:

Barry J. Price, M.Sc., P.Geo PROVINCE OF Qualified Person

August 15, 2004.

B. J. PRIC #19810

B. J. PRICE #19810 BRITISH COLUMBIA

SCIEN

## TABLE OF CONTENTS

NTRODUCTION AND TERMS OF REFERENCE	
DISCLAIMER	
THE COMPANY 1	ı
THE AGREEMENT	2
PROPERTY DESCRIPTION AND LOCATION	
ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY Access Local Resources and Infrastructure Physiography. Climate	3 3
HISTORY	
EXPLORATION EXPENDITURES	5
GEOLOGICAL SETTING Overview Regional Geology Stratigraphy Intrusive rocks Structure	6 6 7
MINERAL DEPOSIT TYPES	
LOCAL GEOLOGY  Gillespie Lake Group  Pinguicula Group  Paleozoic Carbonates  Intrusive Rocks	8 9 9
MINERALIZATION	10 10 11
EXPLORATION	
DRILLING	
SAMPLING METHOD AND APPROACH	17
SAMPLE PREPARATION, ANALYSES AND SECURITY	
DATA VERIFICATION	17

ADJACENT PROPERTIES  Keno Hill Carpenter Ridge  Gayna  Prairie Creek (Cadillac)	20 20
MINERAL PROCESSING AND METALLURGICAL TESTING	24
MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES  1990 Estimate 1991 Resource Estimate East Zone	
	30 30 31 31
INTERPRETATION AND CONCLUSIONS	32
RECOMMENDATIONS	
REFERENCES	36
CERTIFICATE OF BARRY J. PRICE, P. GEO	39
LETTER OF AUTHORIZATION	40
APPENDIX I RESOURCE AND RESERVE DEFINITIONS	
APPENDIX II DUE DILIGENCE	
APPENDIX III ZINC	57
PHOTOGRAPHS	

## LIST OF FIGURES

FIGURE 1 FIGURE 2 FIGURE 3 FIGURE 4 FIGURE 5 FIGURE 6 FIGURE 7 FIGURE 8 FIGURE 10 FIGURE 11 FIGURE 12 FIGURE 12 FIGURE 13 FIGURE 14 FIGURE 15 FIGURE 16 FIGURE 17 FIGURE 17 FIGURE 18 FIGURE 19 FIGURE 20 FIGURE 21	LOCATION MAP YUKON LOCATION MAP MAYO AREA CLAIM MAP MIX AND TRIX CLAIMS, BLENDE PROPERTY CLAIM SKETCH FOR TRIX 47–56 CLAIMS SKETCH OF REGIONAL GEOLOGY STRATIGRAPHIC COLUMN MARG DEPOSIT GEOLOGY REGIONAL GEOLOGY PLAN DRILL HOLE PLAN – WEST ZONE DRILL HOLE PLAN WEST ZONE SILVER DRILL SECTION WITH SILVER VALUES GEOLOGICAL SECTION OF WEST ZONE TYPICAL DRILL SECTION AT BLENDE DRILL HOLE PLAN EAST ZONE GEOLOGICAL SECTION EAST ZONE DRILL PLAN 1994 DRILLING SKETCH OF GAYNA ZINC DEPOSIT SKETCHES OF PRAIRIE CREEK DEPOSIT MINERAL DEPOSITS IN MAYO AREA HYPOTHETICAL PIT PLAN, WEST ZONE HYPOTHETICAL PIT SECTION WEST ZONE
FIGURE 21 FIGURE 22	NATIVE LAND STATUS MAP

## TECHNICAL REPORT

## Beaver River Area, Yukon Territory SHOSHONE SILVER MINING COMPANY

## INTRODUCTION AND TERMS OF REFERENCE

The writer has been requested by the directors of Shoshone Silver Mining Company ("Shoshone") and Eagle Plains Resources Ltd. ("Eagle Plains") to visit the Blende zinc-lead-silver property in the central Yukon and to prepare a Technical Report in compliance with the provisions of National Instrument 431–101 and associated documents. The writer visited the property on June 21 accompanied by James Williams, Eur. Ing., B.Sc., M.Sc., DIC, FIMM, C.Eng, C.Geol (UK), representing Shoshone, Tim Termuende, P.Geo., representing Eagle Plains, and Mike Burke, Staff Geologist of the Yukon Geological Survey, Yukon Energy Mines and Resources. A large database held by Eagle Plains was inspected previously and copies of relevant reports and data were obtained.

The writer would like to thank Eagle Plains for their hospitality during the data and property inspection and staff of the Yukon Geological Survey for their kind assistance in obtaining publications and maps and reviewing core archived in their storage and inspection facilities.

### DISCLAIMER

In preparation of this report, the writer has relied on numerous reports prepared by Douglas, Eaton, Rob Carne, Grant Abbott, Robert Cathro and others for Archer Cathro and Associates, Jeff Franzen, P.Eng. for NDU Resources Ltd. and G. Lutes and other personnel from Billiton Metals Canada Inc. The writer is not responsible for data collected and prepared by others but is solely responsible for the conclusions and recommendations contained herein. The writer has read National Instrument 43–101 and its forms and regulations and this report has been prepared in compliance with the provisions of NI 43–101.

## THE COMPANY

Shoshone Silver Mining Company was founded in 1969 as a silver exploration, development and production company centered on its Lakeview Mine and Mill, south of Lake Pend d'Oreille in northern Idaho. Shoshone has acquired several formerly producing precious and base metal properties in northern Idaho in preparation for a return to production at Lakeview. Shoshone also maintains a diverse portfolio of mineral exploration projects across the western United States and Mexico. Shoshone stock trades on the OTC Market under the symbol "SHSH". Company Directors and Officers are: Lex Smith, President and Director, Carol Stephan, Secretary, Treasurer and Director, Steve Noort, Land Manager. Consulting Engineer for the company is J. Williams, Eur. Ing., B.Sc., M.Sc., DIC, FIMM, C.Eng, C.Geol. Authorized Capital is 20 million shares, of which approximately 15 million shares are outstanding.



## LOCATION MAP - YUKON

Showing Major Pb-Zn-Ag Deposits

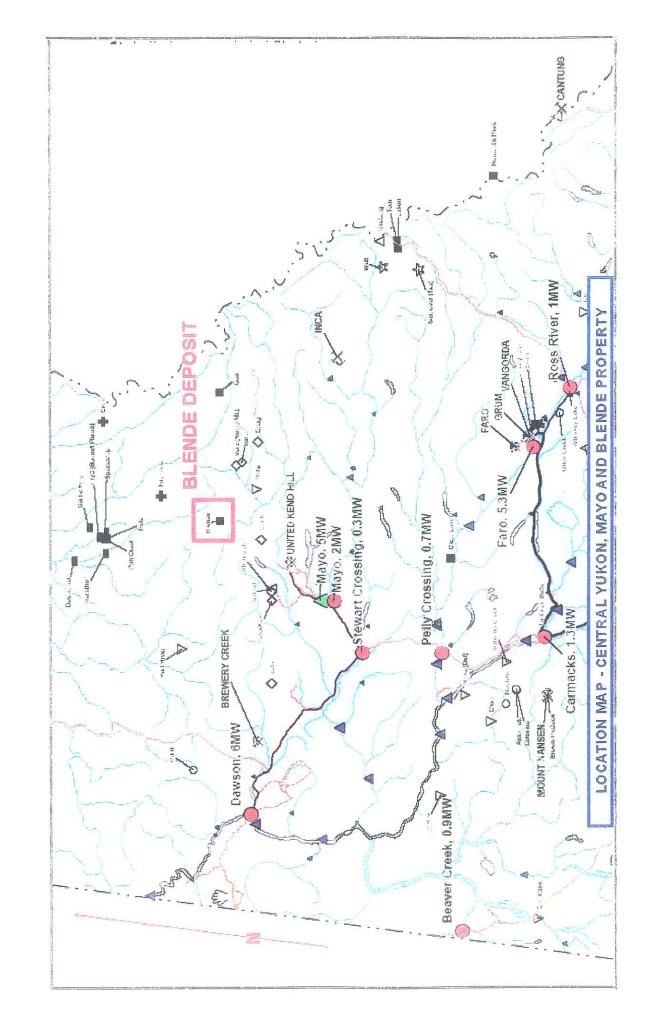


FIGURE 3

CLAIM MAP OF BLENDE PROPERTY

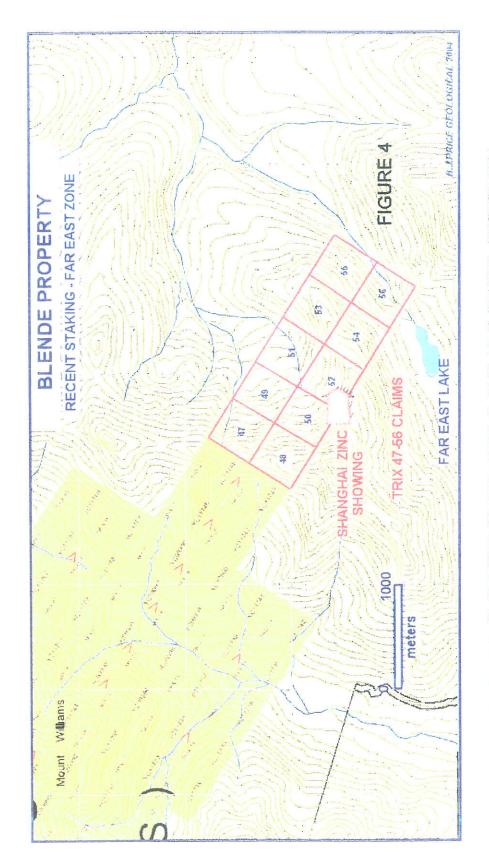


FIGURE 4 CLAIM SKETCH FOR TRIX 47-56 CLAIMS STAKED AUGUST 2004

## THE AGREEMENT

Shoshone Silver Mining Company executed a formal option agreement with Eagle Plains Resources Ltd. ("EPL") whereby Shoshone may earn a 60% interest from EPL in the Blende silver/base-metal deposit. The property is currently owned 100% by Eagle Plains (subject to a 1% NSR to Bernard Kreft and comprises 16 claims. Subsequent to completion of the formal agreement, Shoshone has paid to EPL \$US 25,000 cash and issued 100,000 common shares. To complete its earn-in, Shoshone will carry out \$US 5,000,000 in exploration expenditures (\$US 100,000 during 2004) and issue a total of 1,000,000 voting-class common shares to Eagle Plains by December 31st, 2008. Eagle Plains will remain operator of the project up to the completion of \$US 800,000 in expenditures. A 10% finders fee has been reserved for B. Kreft, and will be paid by the vendor.

## PROPERTY DESCRIPTION AND LOCATION

Description

(Figures 1-4)

The property consists of 72 Quart Mining Claims, of which 16 (Mix) claims represent the central part of the original Blende property. The balance were staked by Eagle Plains in 2004. Under the Yukon Quartz Mining Act, claim tags have to be placed on the posts within a year and Assessment work in the amount of \$100 per claim must be completed. This determines that \$4,600 in work must be accomplished before the expiry dates. The claims and expiry dates are listed below: Claims are maximum 1,500 feet square, but, depending on the position of the posts mat be of a lesser size.

## Table of Claims and Data

	OI CIUII			
West,	Central	and	East Zone	
Claim	Names		Grant	

Claim Names	Grant Number			
Mix 1-16	YC099985-100			
Trix 1-46	YC 11723-768			

Expiry Date
March 28, 2008
April 21, 2005

62 claims

Approx 1294 hectares

Far East Zone

Trix 47-56

Grants pending

August 2005

10 claims

Total all claims

72 claims

Approx 1587 hectares

The claims are shown in the accompanying Figures. The original claims were staked by prospector Bernie Kreft and were transferred to Eagle Plains under terms of a purchase agreement and Bill of Sale. Registered owner is Eagle Plains Resources Ltd. The claims are staked under the Yukon Quartz Mining Act, and are a maximum of 1500 feet by 1500 feet (20.9 hectares or 51.65 acres. The writer examined one set of four posts and viewed others, and is of the opinion that the claims were staked in accordance with the Act. Under the Act, yearly assessment work required is \$100. As noted above, the Mix 1–16 claims are in good standing until March 28, 2008, but the 46 Trix claims must have work performed in the current year to remain valid. The Trix 47–56 claims were staked adjoining theother claims on the southeast and cover the Far East mineralized zone; claim numbers have not yet been assigned and grants are pending. The claims have not been surveyed, but this should be done when the claim tags are placed later this year. The Blende property is 100 percent owned by Eagle Plains, subject to a 1.0 percent net smelter royalty (NSR) to Bernie Kreft. Additional staking has recently been done to cover the Far East Zone.

## Location (Figures 1,2)

The Blende property is situated surrounding Mt. Williams, 64 kilometers north of Elsa, Y.T. Mt Williams is on the continental divide which separates Beaver River and Stewart River (Yukon River drainage) from Wind

River (Mackenzie River drainage) just to the south and east of Braine Pass. This is at  $64\ 24\ North$  Latitude and  $134\ 40$  west Longitude in Mapsheet 106-D-7 in the north central Yukon. In terms of UTM coordinates the center of the property is roughly  $516500\ East/7142500\ North$ . There is some concern about which peak in the area is actually Mt. Williams, but for the purposes of this report Mt. Williams is taken to be the peak nearest the Main Zone. Location of the property is shown in the accompanying Figures.

## ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

## Access (Figures 1,2)

The Wind River bulldozer trail or "winter road" passes within 11 kilometers of the property between Elsa and Wind River. This trail passes McQuesten Lake, Beaver River and Braine Creek and through Braine Pass toward coal deposits in the Bonnet Plume River area, copper and cobalt deposits near Fairchild Lake and iron deposits at Wind River. The road was last used in 1981 by Prism Resources. The most practical access is by helicopter from Mayo, on the Stewart River. Mayo is accessed by good highway 450 kilometers from Whitehorse, by float plane or by wheeled Fixed Wing aircraft. Helicopters are available in Mayo or in Whitehorse.

## Local Resources and Infrastructure

Essential supplies are available in Mayo, but most supplies are generally brought in from the much larger Territorial capital, Whitehorse, which is the business and government center of the Yukon. Whitehorse has daily flights from Vancouver. The nearest town of Mayo has essential facilities such as fuel, food and lodging, telephone, post office and basic groceries and supplies. It has a gravel airstrip and float plane facilities. Power from the Yukon grid extends from Mayo along the gravel access road to the Elsa and the Keno Hill mine (now held by a receiver). Although a gravel road extends northward from Elsa to McQuesten Lake, no other infrastructure is available. A good pool of trained labour is available in the Yukon. Major supplies and equipment are generally purchased in Whitehorse or in Dawson City, about two hors by road from Mayo.

## Physiography.

The Blende property is on the southern flank of the Wernecke mountains, characterized by rugged ridges and numerous glacial cirques. To the south is the Yukon River drainage and to the north is the At Mt. Williams, elevations range from 1,200 meters to 1860 meters.. Treeline is at approximately 1,300 meters (4,300 ft). The property has sparse grass and lichen vegetation. Outcrop is most common on steep, north facing cirque walls, creek gullies and ridges, whereas south facing exposures are less precipitous and are covered by talus and scree.

## Climate

The area has long cold winters and short moderately warm summers. Exploration is practically restricted to the months of June to September, but snow can occur at any time. Permafrost exists in the area.

### HISTORY

As early as 1905, Camsell and Keele, of the Geological Survey of Canada ascended Stewart and Beaver Rivers as far as the mouth of Braine Creek, just northwest of the Blende deposits at Mt. Williams.

Silver and lead deposits were discovered in 1922 on McKay hill in the Upper Beaver River area shortly after the discovery of the rich silver deposits at Keno Hill. A`stampede ocurred and many claims were staked

(Cockfield 1924). Further exploration led to discovery of deposits on Silver Hill, Carpenter Hill and Grey Copper Hill (1923). Some of the first prospectors in the area were J. Carpenter, J. McCluskey, E. Ervin, J.McLean, R. Fisher, L.B. Erickson, W.F. McKay and C. Beck.

Basic geological mapping was accomplished by Cockfield in 1924 (GSC Summary Report 1924 Pt`A"). Considerable activity in the area was initiated by the development of the Keno Hill mines, and the activity led to the discovery of numerous other showings in the area.

- Mineralization at the Blende was originally noted by the Geological Survey of Canada in 1961.
- 1975 The property was staked in 1975 by Cyprus Anvil Mining Corp. as the Will claims. Cyprus Anvil completed geological mapping, sampling, and detailed silt and soil geochemical sampling later in
- Archer Cathro & Associates (1981) Ltd. restaked the property in April 1981 and conducted trenching and rock sampling from 1981 to 1984. Expenditures from 1981 to 1983 are said to be \$22,500 1981 (Franzen 1988)
- Archer Cathro and Associates (1981) Limited and Norvista Development Ltd. completed geological mapping, hand trenching and detailed trench sampling in 1984 (Cathro and Carne, 1984) with total 1984 expenditures of \$33,000
- Inco Exploration Ltd optioned the property, tied on more Blende claims (YA77655) in Oct/84 and explored with mapping and sampling in 1985 before dropping the option. Their expenditures are 1985
- NDU Resources Ltd. purchased the property outright in 1987. A comprehensive report was written in 1988 by Jeff Franzen, P.Eng. In 1988, NDU explored the property by mapping and hand trenching 1987 and later drilled 3 holes from one location totaling 718 meters. The results were favourable with long intercepts of silver-lead-zinc mineralization and Franzen noted ""...The Blende property has potential to host a major lead-zinc-silver deposit. Based on the results (which are described in a subsequent section of this report) Franzen proposed a two stage comprehensive exploration program which was budgetedat approximately \$7 million for both stages.
- In 1989 NDU carried out further mapping, road construction, soil sampling, magnetic and VLF-EM 1989
- 1989 Billiton Resources (Canada) Inc. ("Billiton") optioned the property from NDU Resources in September 1989. The agreement allowed Billiton to earn a 50% equity in the property by expending an aggregate of \$4.3 million in option payments and work by December 31, 1991.
- Billiton as project operator drilled 15 holes on the main "West" zone, totaling 3659.7 meters. This work led to the calculation of a preliminary diluted in-situ open-pit mineral resource of 11.5 million tonnes averaging 3% lead, 2.20 % zinc, and 1.46 oz//tonne silver (50 grams/tonne)<sup>1</sup>
- In 1991, Billiton completed the following work: 1991
- soil geochemical and geophysical coverage,
- drill-testing of the deposit over a 3.3 km strike length, and
- preliminary metallurgical tests.

The 1991 drilling consisted of 62 holes totaling 11,525m, including 15 holes in the West Zone, 34 holes in the East Zone and 13 holes in the central area between the two zones.

Billiton elected in 1993 to convert its 50% equity interest to a 10% net profits royalty. It is assumed by the writer that the earn in was completed. Control of the property in terms of operation returned to NDU.

This resource was calculated in 1990 by Roscoe Postle and Associates prior to the introduction of NI 43-101 and does not conform to present CIM definitions and should not be relied on. The resource number is superseded by later studies.

- 1994 In 1994 NDU drilled 7 step-out holes (596 meters) which successfully extended the West Zone 150m further westward (the West Zone remains open in this direction). This activity is the last recorded exploration of the property.
- 1998 In March, 1998 NDU merged with United Keno Hill Mines Ltd. (UKHM) and the property came under the control of UKHM, which subsequently went into receivership.
- 2002 The property was staked by prospector Bernie Kreft.

## EXPLORATION EXPENDITURES

The writer has compiled available data and expenditures by all parties since 1983, and has estimated the total expenditures from 1984-2004 to be about\$4.2 million. The actual expenditures are much higher than the documented expenditures, as not all of Billiton Canada's expenditures are documented, and in many cases when expenditures were filed by Archer Cathro, not all expenditures were listed or applied.

## <u>Drilling expenditures alone</u> are estimated (in terms of today's drilling costs at: ESTIMATED DRILLING EXPENDITURES – BLENDE PROPERTY

YEAR	COMPANY	NUMBER OF HOLES	TOTAL meters	COST* (Estimated and rounded)
1988	NDU Res, Archer Cathro	3	718	\$72,000
1990	Billiton Canada	15	3660	\$366,000
1991	Billiton Canada	62	11525	\$1,152,500
1994	NDU Resources	7	796	\$80,000
	TOTALS	87	16699	\$1,670,500

<sup>\*</sup> Present day costs conservatively estimated at \$100/meter. The estimate does not include camp costs, mobilization or helicopter support. More detailed cost estimates are in an Appendix.

## GEOLOGICAL SETTING (Figure 5) Overview

The Blende is a large vein/fault hosted or possible Mississippi Valley type Zn-Pb-Ag deposit on the south edge of the Mackenzie Platform, hosted by Middle Proterozoic Gillespie Group dolomite. The deposit is tabular and dips steeply, cutting bedding approximately at right angles. Mineralization occurs intermittently along a shear zone about 6 km long and up to 200 m wide. Mineralization is mostly epigenetic and forms the matrix in a series of parallel breccia zones which strike east-west and dip steeply south. These mineralized breccia zones occur in the core of a large anticline and are parallel to a strongly developed axial plane cleavage which strikes ENE and dips steeply to the north and south.

The mineralization consists mostly of yellow sphalerite, which is difficult to distinguish from the host dolomite. Other sulphide minerals include galena, pyrite and minor chalcopyrite and tetrahedrite. Some syngenetic or early diagenetic mineralization has been found associated with oolites and dewatering structures. Studies by C. Godwin indicate a lead isotopic age of 1.54 Ga, not much younger than the host dolomite.

On surface, the deposit is outlined by soil anomalies up to 10 000 ppm Zn. Most geophysical methods

including IP, VLF and Max-Min EM work exceptionally well due to the inert nature of the host dolomite. Billiton's 1991 drilling established that the east zone and west zones are separate and that mineralization in the west zone is regular and extends more than 400 m continuously downdip, while mineralization in the east zone is more irregular but extends continuously downdip for more than 200 m.

## Regional Geology

(Figure 5)

The following discussion of regional geology has been adapted from several of the property reports.

The Blende area is situated on the "Mackenzie Platform" or "Yukon Block", part of the relatively stable craton overlain by Proterozoic to Paleozoic sedimentary units with minor volcanic components. The Mackenzie Platform is separated from the Selwyn Basin by the Dawson Thrust Fault, an east—west trending and south dipping fault with Proterozoic and Paleozoic history. Father to the south are additional south dipping Tombstone and Robert Service thrust faults. To the south of the thrst failts, on the south side of the Selwyn Basin, is the regional Tintina strike slip fault with considerable lateral displacement.

The Yukon block was an independant crustal block which remained relatively "high" since late Proterozoic time, faulted against the deeper Selwyn Basin, in which deeper water sediments of late Proterozoic to Middle Devonian were deposited in a miogeocline.

The Dawson thrust, situated south of the Blende deposit, separates two Proterozoic successions mapped by Abbott (1997) as Sequence A (primarily the Wernecke Supergroup of 1.7 to 1.2 Billion years age, and Sequence B, (primarily the Pinguicula Group – 1.2 billion to about 800 million years age). An unconformity exists (seen at Blende) between the two sequences.

## Stratigraphy

(Figure 6)

The southern Wernecke Mountains are underlain by a Middle and Late Proterozoic assemblage of shelf or platformal sediments called the *Wernecke Supergroup*. These extends northward and westward beneath lower Paleozoic rocks of the Mackenzie Platform. The Wernecke Surpergroup is regionally exposed in erosional "windows" or inliers.

The upper two groups of the Wernecke Supergroup are the *Quartet Group* and *Gillespie Lake Group*) and these are overlain by a unit referred to by Mustard et al.(1990) as "Unit 4". Unit 4 is tentatively correlated with the *Pinguicula Group*, which occurs to the north of the Blende area.

- The Quartet Group consists of a turbiditic succession of dark brown and black siltstone, argillite and minor sandstone (Roots, 1990). Beds are normally graded and separated by thin white laminae. The base of the unit is not observed and the top is gradational with the Gillespie Lake Group (Roots, 1990). Locally, this contact is reportedly an angular unconformity and the underlying Quartet Group is folded and cleaved.
- The Gillespie Lake Group is mapped in two divisions by Roots (1990). The Lower Division is turbiditic and comprises 1–5m thick fining upward successions of graded dolomitic sandstone-siltstone with argillaceous tops. The Upper Division consists of thickly bedded dololutite with abundant stromatolitic sections, and commonly contains oolites, dissolution structures, mudcracks and intraclasts which are indicative of shallow water and emergent conditions. The Gillespie Lake Group is pervasively dolomitized locally obliterating original sedimentary structures and is host to the Blende mineralization.
- Unit 4, 4 kilometers east of Mt. Williams, comprises pebble to cobble conglomerate disconformably overlying the Gillespie Lake Group. On the Blende property, dark siliceous fine sandstone and siltstone overlie the Gillespie Lake Group (Roots, 1990). This succession contains thin beds of fine cross-laminated dolostone which passes upward into light-coloured platy siltstone and is overlain by a light pink dolostone characterized by fine algal laminae and small budding stromatolite heads

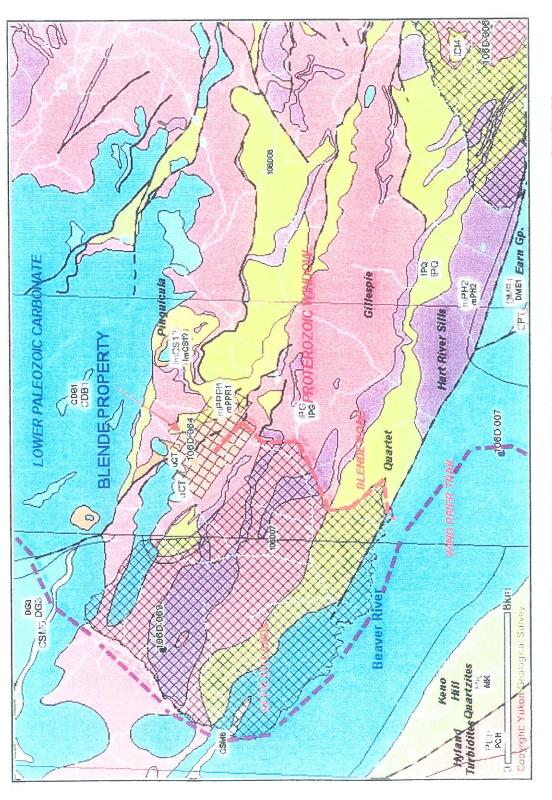


FIGURE 5 SKETCH OF REGIONAL GEOLOGY AT THE BLENDE PROPERTY http://www.mapsyukon.gov.yk.ca/webmaps/geoscience/bedrockgeology/viewer.htm) (From a Yukon Geological Survey Website)

## LEGEND A FOR REGIONAL GEOLOGY MAP

## MIDDLE TO UPPER PROTEROZOIC

## muPPFu

## mupppeu: PINGUICULA/FIFTEEN MILE (UPPER)

siliclastic-carbonate assemblage comprising two regionally correlated units (1) and (2)

- cryptalgal laminate, chert, teepee and molartooth structure, hematitic quartzite and dolostone; thin bedded particulate rusty weathering black shale with limestone laminates and stromatolite bioherms; dolostone with mudcracks and limestone (Pinguicula Gp. (upper: units D-F))
- light-grey, finely crystalline dolomite; shale; pebbly mudstone; gritty mudstone; stromatolitic limestone; quartz sandstone (Fifteen Mile Gp. (upper)) N

## MIDDLE PROTEROZOIC



## **MPPFI: PINGUICULA/FIFTEEN MILE (LOWER)**

dominantly carbonate assemblage with basal clastics comprising two regionally correlated units (1) and (2); includes possible other correlative carbonate, clastic and volcanic rocks (3) and (4)

- basal siliclastic red laminates; thin bedded laminated and flasered limestone; laminated dolosifitie; massive white dolostone with wavy cryptalgal lamination, cross bedding, tepee structures, extensive dolomite veinlets and chert (Pinguicula Gp.(lower: units A-C))
- medium-bedded dolostone with mudstone interbeds; dolostone breccia, oolitic packstone and uncommon stromatolitic basal shale to slifty dolomite; medium to thick bedded dolomitic mudstone and dolostone breccia, massive dolostone; dolostone (Fifteen Mile Gp. (lower)) N
- greyish black shale; limestone; dolomite; diabase sills and dykes; undivided (Lower Tindir Gp.) 3
- red, green and grey slaty argillite, fine grained, light grey quartzite; dolomite, assignment tentative, may include Gillespie ake and upper Pinguicula groups

## LEGEND "C" FOR REGIONAL GEOLOGY MAP

## LOWER PROTEROZOIC

PG

IPG: GILLESPIE LAKE

dolostone and sifty dolostone, locally stromatolitic, locally with chert nodules and sparry karst infilings, interbedded with lesser black siltstone and shale, laminated mudstone, and quartzose sandstone, local dolomite boulder conglomerate (Gillespie Lake Gp.)

## LOWER PROTEROZOIC

PO

IPQ: QUARTET

black weathering shale, finely laminated dark grey weathering sitstone, and thin to thickly interbedded planar to cross laminated light grey weathering sitstone and fine grained sandstone; minor interbeds of orange weathering dolostone in upper part (Quartet Gp.)

## LOWER PROTEROZOIC

PFL

IPFL: FAIRCHILD LAKE

lower: greenish grey weathering calcareous laminated sittstone, grey weathering fine grained sandstone, and minor brown weathering carbonate, ripple cross-laminated, upper: sittstone, dolomitic sittstone, and dolostone (Fairchild Lake Gp.)

## LEGEND "B" FOR REGIONAL GEOLOGY MAP

## MIDDLE PROTEROZOIC

mPH

MPH: HART RIVER

mafic volcanic flows (1) and (3) and their possible intrusive equivalents (2)

- 1. mafic volcanic flows, generally massive and fine-grained, locally pillowed (Hart River Volcanics)
- resistant dark weathering diorite and gabbro sills and dikes (Hart River Sills)
- basic to intermediate volcanic flows and aquagene tuffs (Khose Creek Volcanics)

## MIDDLE PROTEROZOIC



**MPW: WERNECKE BRECCIAS** 

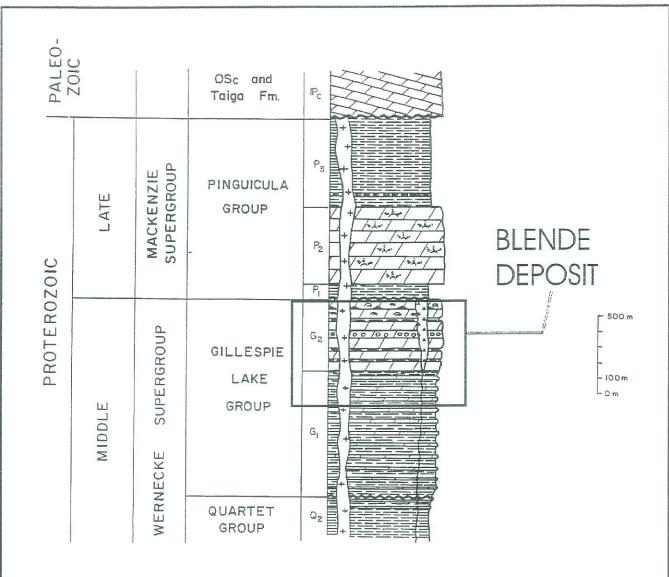
and carbonate clasts (Wernicke Supergroup) and minor dyke rock; breccia and metasomatites enriched in Cu, Co. U, Ag and Au (Wernicke Breccias) hematific and dolomitic breccia and related metasomatized country rock; breccia contains variably aftered rotated siliceous

## LOWER PROTEROZOIC



IPG: GILLESPIE LAKE

dotostone and sifty dolostone, locally stromatolitic, locally with chert nodules and sparry karst infillings, interbedded with lesser black sittstone and shale, laminated mudstone, and quartzose sandstone; local dolomite boulder conglomerate (Gillespie Lake Gp.)



unconformity

\_\_\_\_\_ dolomite, dolomitic sandstone and mudstone

=== shale and siltstone

domail and columnar stromatolites

\* fine 'budding' stromatolites

ooo oolites

conglomerate

-- chert

mineralized breccia

diorite or gabbro

FIGURE 6

STRATIGRAPHIC COLUMN

BLENDE PROPERTY

atop large columns (units P1-P3). Stratigraphy is illustrated in a diagrammatic section.

### Intrusive rocks

Sills, plugs and dykes of brown weathering hornblende gabbro intrude the Gillespie Lake Group in the Blende area and form broad bands and rugged ridges that trend southeast across the area. These intrusions, named by Abbott as the Hart River sills, are reported to cut "Unit 4" rocks (Roots, 1990). Age of the sills was calculated from three samples taken at Hart River, Carpenter Ridge and Mt Williams (near Blende) as follows:

AGE OF HART RIVER SILLS

LOCATION	TYPE	AGE
Blende	zircon	1380.2+/-4.0 Ma
Carpenter Ridge 1	zircon	1385.8+/-1.9 Ma
Hart River Carpenter composite	zircon	1383+/- 5.9 Ma

Source: Abbott 1997.

The sills occur everywhere in the region and are visible as dark zones against the generally orange—weathering Gillespie Group dolomites. Many sills were intercepted in drilling at Blende. Other sets of sills are of two different ages; The Hart River sills are Middle Proterozoic but the sills intruding the Hyland Group to the south of the Dawson Fault are Cambrian–Ordovician, and unnamed late Paleozoic sills intrude the Road River group on both sides of the Dawson fault. All the sills are diabasic and similar, and the Hart River sills resemble sills intruding the Middle Proterozoic Belt supergroup in Idaho (1378.7+/- 1.2 Ma).

### Structure

As noted before the Blende area is characterized by open folds exposing windows of Wernecke Supergroup rocks surrounded by larger areas of Paleozoic sediments. Deformation is primarily Mesozoic in age (Abbott 1997), with north directed (south-dipping)thrust faults with associated folds and axial plane cleavage. In the Blende area, the Gillespie Lake group host rocks are fault bound slices exposed in north facing dolomite scarps, 500 meters high thrust over top of the siliclastic rocks of Unit 4, with the thrust faults following shaly layers in Unit 4 and the nQuartet Group. Regional and local structure is presented in the accompanying sketch maps.

## MINERAL DEPOSIT TYPES

Numerous silver-lead-zinc deposits occur north and northeast of Mayo. The most significant are described briefly below and their locations are shown on Figure 3. The writer has no affiliation with any of the properties listed below and they do not form part of the Blende property, but are described for comparative purposes.

The best known deposits are the numerous veins in the <u>Keno Hill camp</u>, which have produced 6,784,000 kg of silver since 1921. The veins contain galena, sphalerite and pyrite with siderite and quartz, plus a variety of primary and secondary silver minerals, the most important of which is freibergite. They cut quartzites and schists of the Keno Hill Quartzite, which was previously mapped as Cretaceous but is now assigned a Mississippian age.

This same unit also hosts the Marg polymetallic massive sulphide deposit, 40 km northeast of Keno Hill. The Marg deposit occurs in metamorphosed pelitic and volcanic rocks and contains indicated and inferred

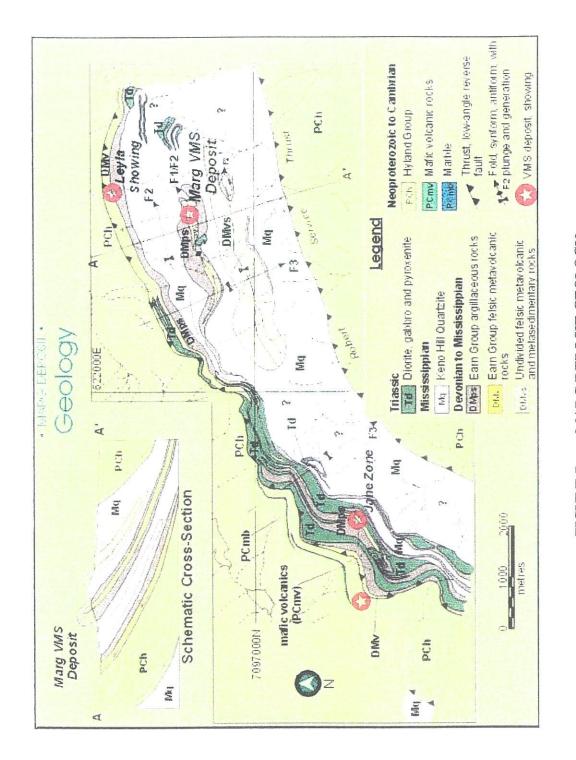


FIGURE 7 MARG DEPOSIT GEOLOGY (From Atna Resources Website 2004)

reserves totaling 3.4 million tonnes grading 1.8% Cu, 2.7% Pb, 5.0% Zn, 65.1 g/t Ag and 1.2 g/t Au<sup>2</sup>.

Numerous lead-zinc prospects with varying amounts of silver occur on the north side of the Kathleen Lakes (Robert Service) Fault Zone. The Pinguicula Group and Paleozoic carbonates host stratabound mineralization while the Gillespie Lake Group contains stratiform and structurally controlled deposits.

Hart River is the best documented stratiform occurrence and reportedly contains a historic mineral resource of 1.1 million tonnes grading 1.4% Cu, 0.9% Pb, 3.6% Zn, 49.7 g/t Ag and 1.4 g/t Au. The mineralization consists of finely layered pyrite, pyrrhotite, sphalerite, and galena in a 19 m thick lens at a facies boundary between Gillespie Lake Group dolomite and shale. The deposit is unconformably overlain by Pinguicula Group strata and is cut by numerous mafic sills and dykes.

Other stratiform occurrences within the Gillespie Lake Group (such as <u>Cord and Jolly</u>) have received relatively little exploration and contain pyrite, sphalerite and minor galena in horizons up to 2 m thick in dolomitic

shale sequences within Unit G2.

Structurally controlled deposits (which include Blende and the Vera and and Val properties (owned by International Prism Exploration Ltd.) consist of tabular, steeply-dipping vein, stockwork and breccia zones cutting upper Gillespie Lake Group dolomite (Unit G2). The Vera deposit has estimated resources of 1.4 million tonnes averaging about 3.7% Pb + Zn with 306 g/t Ag, while Val contains indicated resources of 60,000 tonnes grading 1,030 g/t Ag. Lead isotope studies and structural and stratigraphic relationships indicate that Blende is Helikian age but the Prism deposits are much younger, probably Cretaceous.

Most mineral deposits in the area are zinc-lead-silver deposits of various types, mainly

Vein/fault fillings in sedimentary or metasedimentary host rocks. (example: United Keno Hill)

possible "Mississippi Valley Type" (MVT) Deposits. (The Blende deposits are sometimes given as examples, but currently, the Yukon Geological Survey tends, because of a lack of replacement textures, to doubt this categorization). Other examples occur in the 106D mapsheet.

Although initially the Blende was identified as a Missippi Valley type deposit, current thinking lies more along the lines of shear or fault-hosted breccias and veins more comparable to the Keno Hill deposits. Descriptions of both types of deposits are provided for reference in an Appendix.

Other mineral deposit types present in the general Mayo-Wind River-Mackenzie Mountains area are:

Gold placer deposits (Keno Hill area)

- Volcanogenic massive sulphide deposits (Hart River, Marg)
- Tungsten lode and placer deposits (Potato Hills, Dublin Gulch)
- Breccia hosted copper-cobalt deposits (Fairchild Lake area) Iron ore - copper-Gold deposits (Upper Hart River)

Sedimentary Iron deposits (Crest)

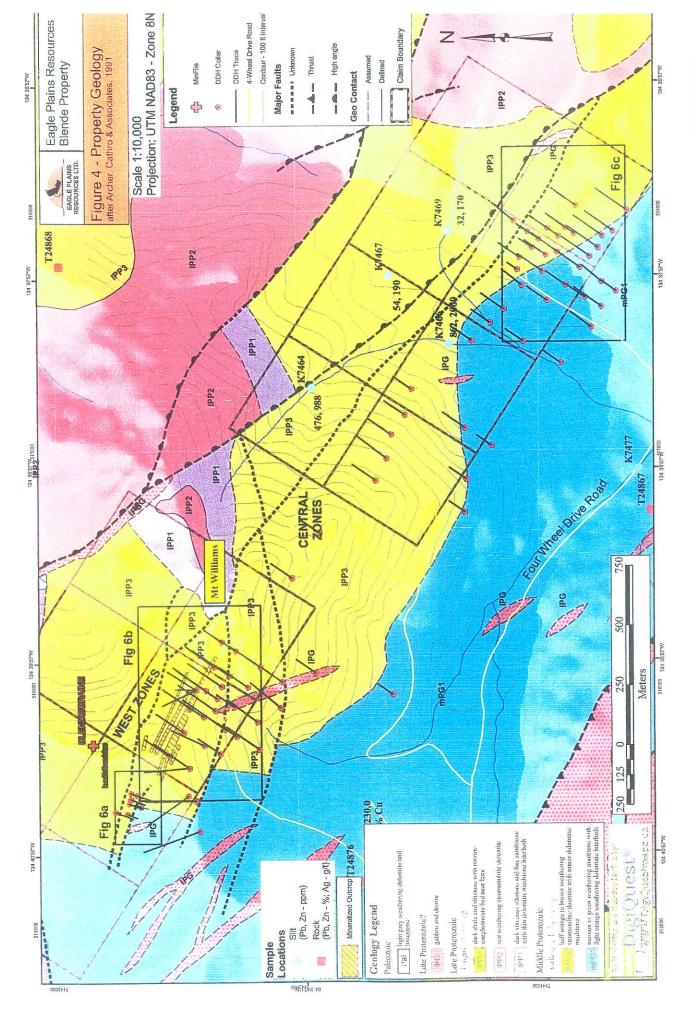
Disseminated gold deposits (MacQuesten area)

## LOCAL GEOLOGY

The following account of the geology of the property is modified from Lister and Eaton (1989) with additions from later reports The text has been edited somewhat for this report but is essentially that as wriitten..

The geology as described below is based on work done by Archer, Cathro geologists, supplemented with several traverses in the area by C. Roots of the GSC and his colleagues P. Mustard and J. Donaldson of Carleton University. Additional geological has been taken over the years from earlier Archer, Cathro reports, GSC publications and DIAND mapping, listed in the references.

This resource is historical and has not been verified by the writer, and may not conform to NI 43-101



Sedimentary rocks on the Blende property are mainly those of the Middle Proterozoic Wernecke Supergroup, cut by younger mafic sills and dykes.

The sedimentary rocks have been subdivided by Lister and Eaton (1989) into seven sedimentary units and one intrusive unit, as described below. The accompanying Figures XX and XX are a simplified stratigraphic column and geological cross section, respectively. The rock units are described from the base upward. Reference should be made to the Stratigraphic Table.

Quartet Group

Only the top 200 m of the Quartet Group succession is seen on the Blende property. This unit, designated Q2, is a monotonous sequence of black slate, phyllite and argillite with minor interbedded quartzite. The Q2 rocks exhibit a pervasive micaceous cleavage which fractures to create long indurated splinters in talus. The upper contact of the unit has previously been considered transitional into Gillespie Lake Group sediments (Delaney, 1981); however, mapping suggests the Quartet Group is more deformed than succeeding units. No contacts were observed in the immediate vicinity of Blende but Roots has observed angular relationships between the two at locales 100 km west of the property.

Gillespie Lake Group

The Gillespie Lake Group is subdivided into two units:

a deep water clastic sequence; and, 1.

a shallow water predominately carbonate package. 2.

The lower unit (G1) is about 450 m thick and consists of repeated 1 to 5 m thick cycles containing maroon or green weathering mudstone and shale beds alternated with light orange weathering dolomitic sandstone horizons. The rocks have a striped appearance in outcrop and break to form flat, rhomb-shaped talus.

The upper unit (G2) is approximately 250 m thick and hosts the main zones of silver-lead-zinc mineralization on the Blende property. It mainly consists of thick bedded grey dolomite and dolomitic mudstone containing abundant domal and columnar stromatolite beds up to 4 m thick. Fine interbeds of sandstone, shale, mudstone and chert also occur throughout the section. A thin oolitic bed found in two separate locations near the middle of the section on the property and a thin green volcanic layer noted just above the G1-G2 contact in localities off the property may be useful marker horizons. G2 rocks generally weather buff-orange to brown and break into irregularly shaped boulders.

Pinguicula Group

Regionally, Roots (in press) observed that no single stratigraphic section of the Pinguicula Group is representative and did not further subdivide the unit. However, on the property, three distinct sequences were noted.

- Unit P1 (formerly Unit G2b of Cathro and Carne, 1984) is a 50 m thick sequence of dark siliceous siltstone and fine sandstone with thin dolomitic mudstone interbeds. The unit discontinuously overlies G2 and was probably deposited in localized basins.
- Unit P2 (formerly Unit G3 of Cathro and Carne, 1984) conformably overlies P1 or unconformably overlies G2. It is about 250 m thick and consists of red-brown weathering massive grey dolomite containing fine hair-like stromatolites with diagnostic small budding heads atop larger columns (Mustard et al., in press).
- Unit P3 is a 300 m thick section of dark grey weathering interbedded shale and siltstone. A narrow conglomerate horizon containing boulder- to pebble-sized clasts of gabbro and shale occurs near the base of the unit.

Several features of the Pinguicula Group pelitic rocks distinguish them from similar Quartet Group strata, including greater colour variation and presence of thin carbonate interbeds in the younger group. Pinguicula Group rocks also tend to break into small chips rather than the splintery talus characteristic of the older unit

## Paleozoic Carbonates

Approximately 150 m of light grey weathering carbonate strata (IPc) unconformably caps the darker coloured Proterozoic assemblage in the Blende area. The base of the Paleozoic unit is marked in some areas by a thin bedded dolomite sequence tentatively correlated to the Cambrian Taiga Formation (Norris, 1982).

These rocks are occasionally brecciated and exhibit siderite replacement along laminae and in fractures. Most of the Paleozoic sequence is comprised of relatively massive, fine-grained dolomite with abundant open spaces that are occasionally filled with quartz. These rocks are believed to range from Cambrian to Devonian in age and are analogous to GSC units CDb or OSc elsewhere in the Wernecke Mountains.

## Intrusive Rocks

Dioritic to gabbroic dykes and plugs intrude the Proterozoic sediments in the Blende area. They are dark green, medium grained and contain about equal amounts of felsic (plagioclase with minor quartz) and mafic (clinopyroxene with minor hornblende) minerals. Most are red-brown on weathered surfaces, but some are light green and show remnant grain textures. The thicker intrusions form prominent cliffs while the thinner bodies normally do not outcrop. Bleached dedolomitization halos are often developed where the intrusions cut Gillespie Lake Group dolomites. These zones are 1 to 30 m wide and contain secondary calcite and talc with rare gem quality axinite.

MINERALIZATION

(Figures 8, 19)

West Zone

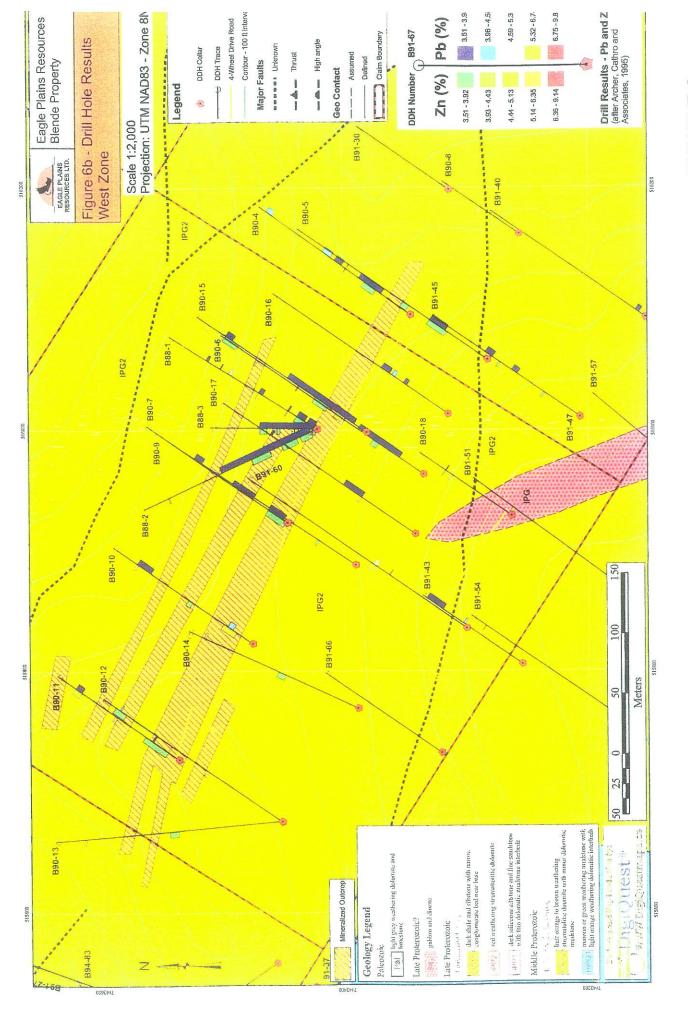
(Figures 8, 9,10,11, 12)

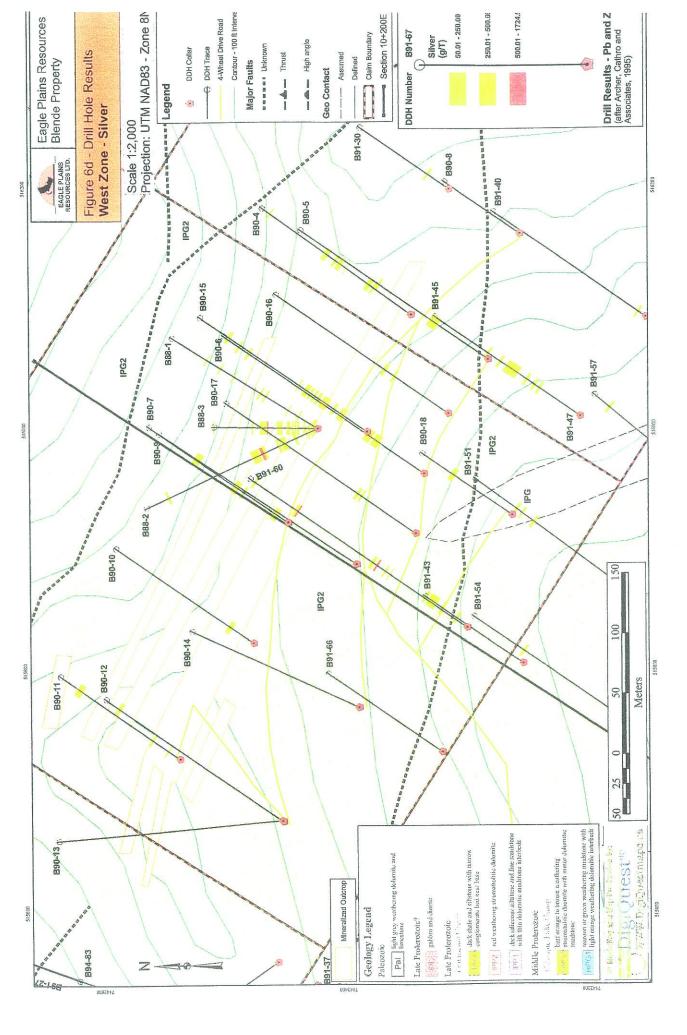
The "West" zone is the main mineralized zone at the Blende property and was discovered as a result of pronounced rusty gossanous material in surface exposures and cliff faces. The West zone incorporates the zones numbered in 1988 by Franzen as Zones 1,2,5, 6,7, and 9. (Franzen's Zone 3 became the Middle Zone and Zone 8 became the East Zone) In 1988 the West zone was mapped as approximately 900 meters long and from 50 to 350 meters in width. Within this zone, Franzen's zone 5 is the strongest and best explored.

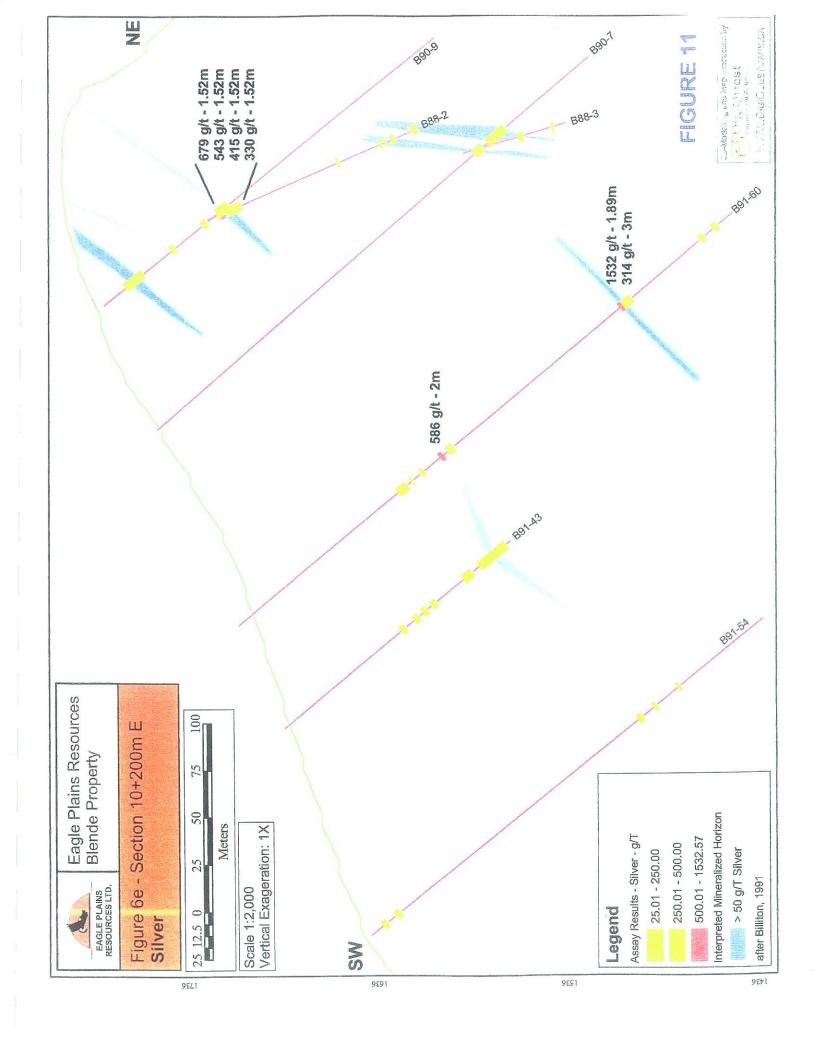
In 1984, systematic chip sampling of outcrops and hand trenches over a 750 meter strike length averaged 2.2% Pb, 3.1 % Zn and 44.8 g/t Silver over an average of 27.5 meters. In 1988, three drill holes were collared in the No 9 subzone of the west zone, and this drilling led to Franzen's observation that: "The mineralized intercepts are up to 138 meters long and indicate that the Blende property has potential to host a major lead-zinc-silver deposit".

Mineralization occurs within and marginal to generally steeply dipping shear zones which are correlated both between drill intersections and with partially exposed and heavily oxidized shear zones at surface. Southeast plunging (30-400) S- and Z-buckle folds, terminated by high angle east-west striking shear zones occur periodically across the property in the vicinity of the West Zone. These shear zones appear to have regional extent, and are host to the mineralization. Similar parasitic buckle folds are common in drill core in the hangingwall to mineralized zones. The mineralized shear zones in the West Zone strike at about 110 degrees across the top of Mt Williams over about 900 meters from 9+600E - 10+500E at an elevation of about 1800 meters.

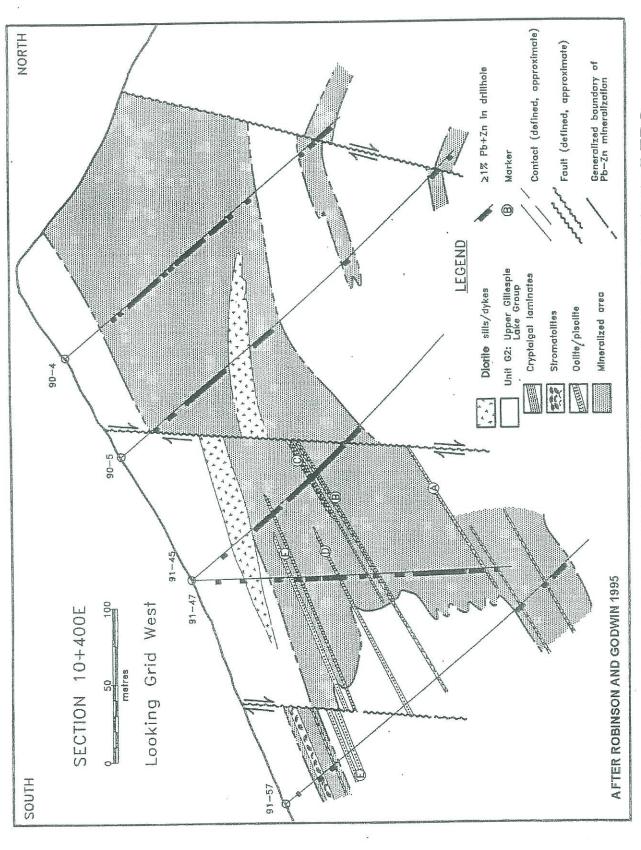
In general the West Zone consists of three mineralized en echelon shear systems (Upper, Middle, Lower) of varying extent and tenacity. They are poorly exposed lying below scree and talus. All dip to the southwest

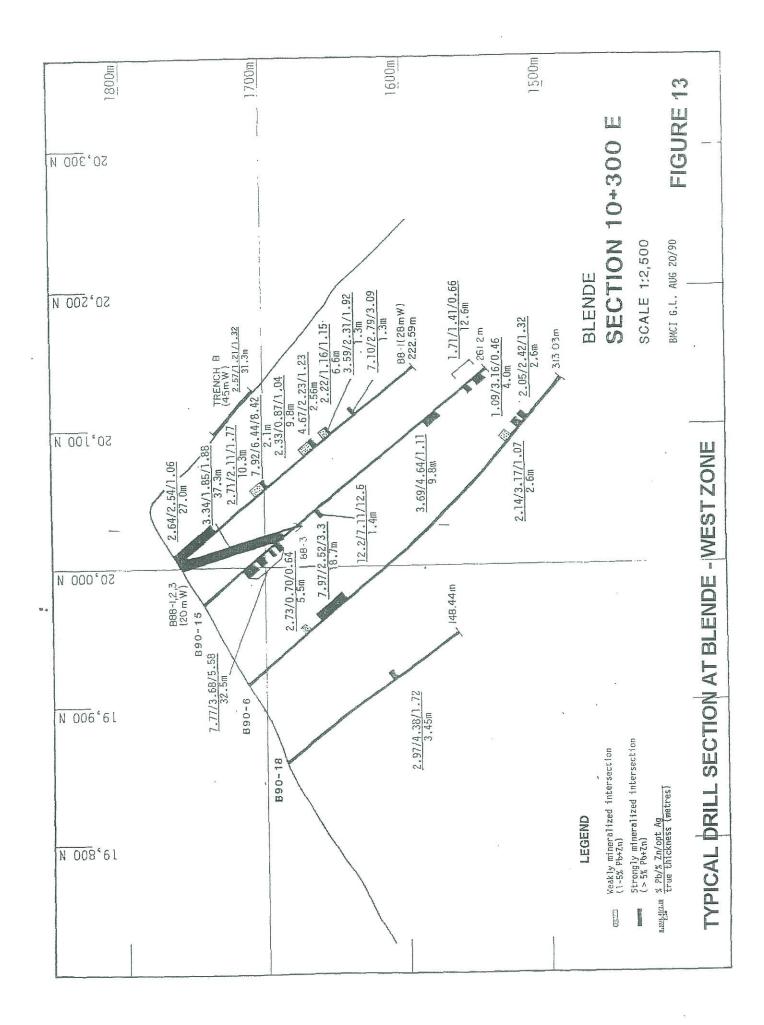






# BLENDE DEPOSIT WEST ZONE SHOWING MARKER BEDS





from about 45 to 75 degrees and have been partially tested by drilling to a maximum depth of about the 1450 level.

The Lower Zone (LZ) is most extensive, occurs near the footwall along the north face of the mountain and has been successfully hand trenched from about 9+600E to about 10+400E. A strong well defined fault occurs along the footwall to the LZ and continues west of the last exposed mineralization at 9+600E. This fault appears to horsetail out to the east where it is represented by a few non-mineralized siderite veinlets in brittle fractures within the unconformably overlying unit Pi to the east. Drill sections for the West Zone show a relatively constant dip of about 75 degrees for the LZ.

A relatively narrow Middle Zone (MZ) can be identified from about 10+000E to about 10+200E on the drill sections and is characterized by generally higher than average grade and high Zn/Zn+Pb ratios. It appears to bottom at about the 1750 level and merges with a broad zone of diffuse near surface stockwork mineralization along strike between 10+200E and 10+400E. Correlations with surface mapped talus trains are imprecise.

The Upper Zone (UZ) extends from about 9+900E to 10+500E and accounts for the bulk of the West Zone tonnage potential from about 10+200E to 10+400E. This zone varies from west to east from a relatively steep dip to a relatively –shallow dip of about 40 degrees. The zone appears to pinch out along strike to the west in graphitic dolostones of the G1 unit between 9+700E and 9+800E and to the east at about 10+600E.

Mineralization in the West zone is a variably oxidized assemblage of galena and honey-coloured sphalerite with minor pyrite and rare chalcopyrite and tetrahedrite contained in siderite- and dolomite-bearing veins, veinlets and stockworks. These stockworks are controlled by a steep southwest dipping pressure solution cleavage or strain slip cleavage. The sequence of mineralization infilling the veins was noted by Billiton to be: 1> Pyrite 2> Sphalerite 3> Galena although early siderite-galena veins and veinlets and late pyritic veinlets occur. Sphalerite and galena are often intimately intergrown suggesting generally contemporaneous deposition.

West Zone mineralization generally comprises semi-massive to massive sulphidic vein-breccias which occur within hydraulic shear fractures generated within and contained by the main thoroughgoing structure commonly associated with the shear zones. These return the highest grades (>10% Pb+Zn) over narrow widths ( $\pm$ 1 m). Marginal to these, generally on the hangingwall side of the main structure, are secondary shear controlled vein-swarms with individual veins up to +5cm width at regular spacings of about 0.5-1.0m. These are characterized by sheared and/or shear controlled margins at core angles similar to those of the main structure. Vein width, spacing and grade tend to decrease into the hangingwall with respect to the main structure. Overall, intersections of vein-swarms tend to assay at >5% Pb+Zn. Marginal to, and generally transgressive with vein-swarms are stockwork mineralization, which comprises variably mineralized siderite veinlets varying in width from wispy veinlets to 1-2 cm veins. These show less structural control, tend to follow pressure solution or strain slip cleavage, are more widely and erratically spaced and return grades of <5% Pb+Zn.

Alteration is restricted to narrow bleached selvages on veins and is only rarely more extensive (10's of cm) in areas of dense stockworks or at the margins of semi-massive to massive vein breccias (5-10cm).

## Central Zone (Figure 8)

The "Central" zone is situated between the West and East Zones (ie between sections 10+600East and 11+800East). In the 1989 report, the Central zones were defined as "Zones 3,4,8 and 10", although the zone numbering system is perhaps not as useful now as it was during exploration. The zones are a series of subparallel sphalerite-galena veins up to 1 meter wide.

The terrain is largely bedrock and coarse talus, and this makes access to the zone more difficult. (In contrast the West Zone is relatively poorly exposed, weathers recessively and is overlain by 1–2 meters of fine talus and scree which is easier to excavate for roads and drill stations). The lack of strong geochemical–geophysical anomalies through the Central Zone further indicates a paucity of the necessary structural preparation of the host rock as a precursor to mineralization. A composite sample of Zone 10 had 1457 g/t silver, with copper staining, perhaps indicating the presence of narrow but high grade tetrahedrite veins.

Drilling of 13 holes in 1991 returned only scattered intercepts of weak mineralization through the central area, although additional examination of the area is certainly warranted.

East Zone

(Figures 8, 14,15)

The East Zone includes several zones of mineralization between about 12+100E and 12+900E and generally between 1200m and 1300m elevation (#19 Zone, #20 Zone, #23 Zone and #24 Zone). The mineralization is generally sphalerite-rich with minor galena and pyrite and is very little oxidized. Mineralized veins tend to show more replacement features than the West Zone mineralization (embayed vein margins), and tend to be dispersed within broad ductile shear zones. Veins show a strong tendency to follow the strain slip cleavage or shearing. Ductile shearing tends to increase in intensity and frequency towards a low angle footwall thrust fault which seems to cut off the mineralization. The footwall lithology encountered on sections 12+600 and 12+700 is a distinctive talcose dolostone and does not contain mineralization. Interpreted cleavage angles are from about -70 near surface, deflecting to about -30 in proximity to this low angle fault. It appears to represent a basal thrust at the root to the mineralized system. The intercepts of this footwall fault between 12+600 and 12+700 are at the same elevation indicating strike parallel to the baseline and appears to be inclined at about 30-35 degrees toward grid south (215 degrees true).

A resource has been calculated for the East zone, which is at lower elevation and is more easily explored than the other zones.

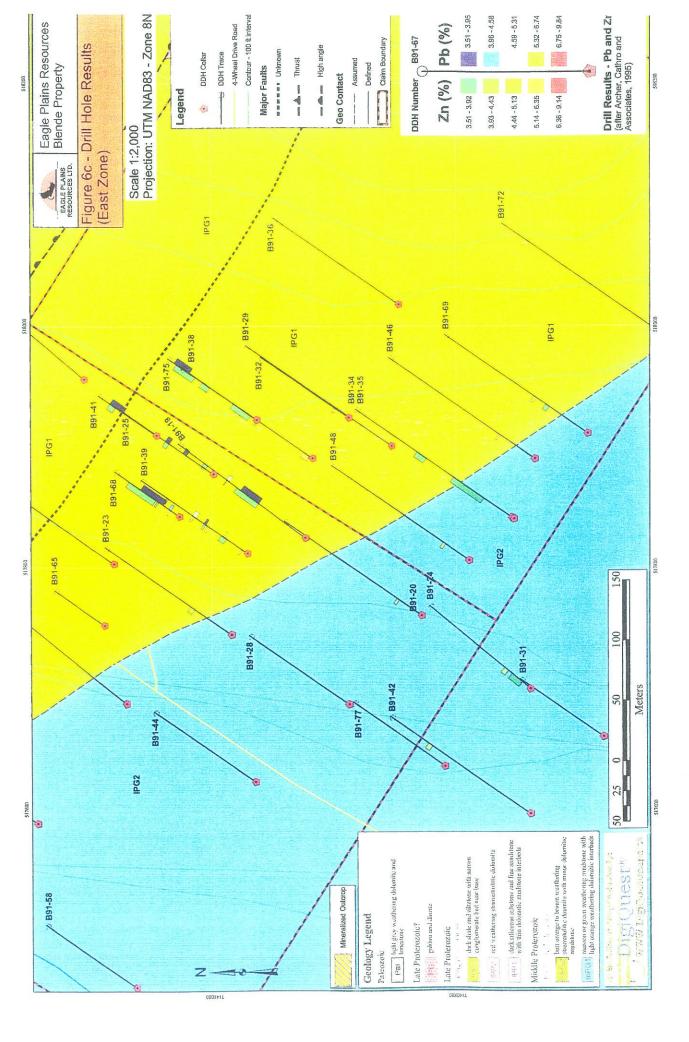
Far East Zone (Figure 4)

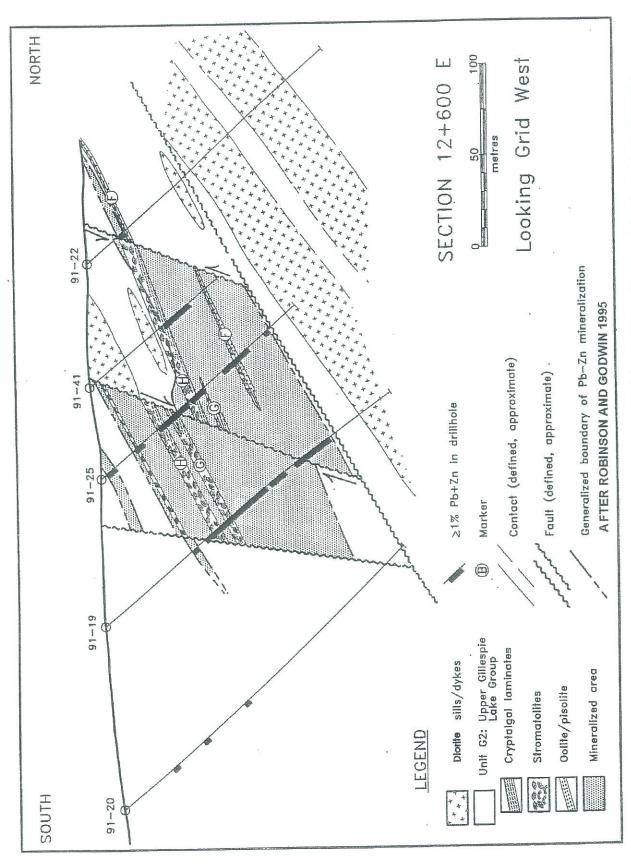
Less is known about the Far East zone, which was outlined by geochemistry, but never drilled. The zone is separated from the East Zone by a prominent mountain. Mineralization is present in float trains and talus blocks down a ridge trending to a small lake. Specimens taken in 1990 assayed up to 8.7% lead, 17.6% zinc and 31.5 g/t silver. Straem sediment values in the area are particularly high.

Eagle Plains, on behalf of Shoshone, has just completed a successful field program on the Far East Zone, located east of Blende. A crew spent nine man-days in camp, and accomplished the following:

- · Tags were placed on all claim posts covering known mineralization in the Blende area
- · 10 new claims were staked, extending the Blende property 2.5km eastward
- 90 soil samples, 10 rock and 7 stream-sediment samples were collected
- the area of the new claims was mapped
- prospecting was completed in the area of the new claims

The prospecting program located in outcrop high-grade zinc mineralization, which was likely the source of the regional geochemical and local zinc in soil anomaly. This has been named the the "Shanghai" showing. Mineralization consists of strong sphalerite mineralization found over .5 meters in a shear zone, with some mineralized brecciation extending into the wallrock for 2 to 3m. The strata-parallel zone was traceable for over 50 meters before extending under talus cover. The mineralized band is stronger mineralization than that seen at the west zone, but is much narrower. Some copper-rich float material (estimated 1–2% copper was also found.)





BLENDE DEPOSIT - EAST ZONE SHOWING GEOLOGY AND MARKERS

#### **EXPLORATION**

Shoshone and Eagle plains have not carried out significant exploration on their own as yet, aside from that done in August 20004 while claim staking. The following accounts of past exploration are modified from past reports.

Geochemistry (A profile is in an Appendix)

The following account of geochemistry is summarized with some editing from Lister and Eaton (1989) In 1976 and 1977 the GSC conducted reconnaissance stream sediment sampling in the Blende area as part of a geochemical baseline survey of the Wernecke Mountains. Results of the survey were published as GSC Open File 518. Streams draining the property returned moderate to extremely anomalous values for lead and zinc while other streams within the property's 265 sq km area of interest returned near background values. This regional survey provided considerable encouragement for further exploration in the area.

In 1989 grid soil sampling was done by Archer Cathro for NDU over approximately 9.2 sq km in the central part of the property and a few reconnaissance prospecting and sampling traverses were conducted around the periphery. Grid sample locations were plotted on a number of large grid maps and a compilation map, all of which are too bulky to include in this summary.

The grid soil samples were taken along compass and chain controlled, slope corrected lines spaced 100 m apart. The lines were run at right angles between four theodolite–EDM surveyed baselines that are orientated at 125°, sub–parallel to the fault complex. The baselines were marked at approximately 50 m intervals by 1 m high wood lath pickets bearing aluminum tags inscribed with grid coordinates. Similarly marked 0.5 m high pickets were placed every 20 m along the sample lines. Soil samples were taken at 40 m intervals from "B" or "C" horizon material and the sample number was inscribed on the aluminum tag at the appropriate station picket. Many of the soil pickets are still legible. Soil was easily obtained even within the coarsest dolomite talus but was scarce on shale scree slopes. Cliffs on north– and west–facing slopes prevented sampling over part of the West Zones.

A total of 2,632 soil samples were taken from the grid, while 105 stream sediment and soil samples were collected peripheral to it. All samples were shipped to Chemex Labs Ltd. in North Vancouver, B.C. where they were dried and sieved through a -80 mesh screen. If the samples contained insufficient fine-grained material, they were sieved again through a -35 mesh screen and then pulverized to -150 mesh. In a few extreme cases, the entire sample was pulverized. All samples were analyzed for 32 elements by the induced coupled plasma (ICP) technique using a nitric aqua regia digestion. Ninety-nine samples selected from various parts of the grid were also analyzed for gold by neutron activation.

The reconnaissance sampling showed that the highest stream sediment values (up to 565 ppm lead and 2910 ppm zinc) are from streams draining areas of known mineralization and anomalous grid response. Samples taken in 1989 to the northwest and southeast of the property returned moderately to strongly anomalous values and the claim block was expanded to cover these areas. All other drainages returned near background values.

A profile of one line is provided in an Appendix. .

Based on the regional sampling results and Archer, Cathro's experience elsewhere in the Wernecke Mountains, typical background values and anomalous thresholds for the Blende area are as follows (all values are in ppm).

# Table of 1989 Geochemical Parameters (Archer Cathro 1989)

		(MICHEL	Jatino 1000		
Threshold	Pb ppm	Zn ppm	Ag ppm	Cu ppm	As ppm
Background	10-50	50-150	0.1-0.5	10-50	10-30
Weakly Anomalous	100	400	1.0	50	50
Moderately Anomalous	200	800	2.0	100	100
Strongly Anomalous	500	2000	5.0	200	200

Note: 1000 ppb = 1 ppm = 1 gram/tonne. 10,000 ppm = 1%

## Geophysics

The following discussion of geophysics has been adapted from the 1991 Billiton report; the writer has not examined the geophysical data in great detail but has relied on the Billiton interpretation.

Geophysical coverage in 1989 completed by NDU Resources, prior to Billiton's involvement in the Blende Project comprised grid coverage with VLF-EM using two EDA Omni Plus VLF/magnetometer/gradiometer systems coupled with an Omni Plus base station magnetometer. Surveys were conducted along grid lines with readings at 10 meter intervals.

The VLF coverage included the entire grid; however, the magnetic readings were discontinued after about 20 kilometers of readings due to:

- a perceived lack of contrast, and
- no noticeable response from known mineralization.

VLF data were Fraser Filtered<sup>3</sup> and produced as a contoured map. This survey data was re-examined after the 1990 drill campaign. VLF anomalies found to lie within about 500 meters of the Blende Structural Zone were ranked with respect to their spatial association to soil geochemical anomalies and mineralized float (see accompzanying Table). A Hjelt (mathematical) filter was applied to the VLF data. This provided resistivity pseudosections across the Blende Structural Zones to aid in interpretation. Three of the highest ranked anomalies (E-2,3 and 5) show a close association with mineralized float located by the 1990 geological mapping program. These VLF anomalies were targeted for earliest drilling in 1991 prior to the planned follow-up geophysics (figure 5). These anomalies are all associated with the East Zone mineralization discovered in 1991.

The 1991 geophysical program was designed to further evaluate the relationship of the existing VLF data to known mineralization, to determine the most suitable, cost effective geophysical method for the direct detection of mineralization and to extend coverage of this method over as much of the Blende Structural Zone as possible on the existing grid.

Additional VLF and Mag coverage was attempted further to the east of the existing gridded area in order to cover prospecting discoveries in this direction. The results of this work are contained in a report by G. Hendrickson P.Geo. of Delta Geoscience Ltd. of Vancouver. This data was reviewed and interpreted for Billiton by J. Roth of Stratagex Ltd., of Toronto.

Due to the extremely rugged terrain east of the existing grid, only 8 kilometers of VLF/magnetic surveying was possible. The results show the continuation of VLF conductors to the east, but additional geophysical follow-up, although planned for 1991, was physically impossible. The approximate location and extent of surveys for each of the geophysical methods used is shown in the accompanying figure.

<sup>&</sup>lt;sup>3</sup> Fraser Filter is a mathematical treatment to provide contourable results.

#### Induced Polarization

Initial dipole-dipole I. P. coverage was obtained over the East Zone where early drilling of VLF anomalies showed substantial near surface thicknesses of mineralization (which confirmed the value of the VLF surveys as a method for the direct detection of mineralization).

The East Zone was surveyed using a gradient Induced Polarization (IP) array which proved adequate for the detection of near surface mineralization. Some testing of Horizontal Loop EM (HLEM) was conducted but terrain problems were found to affect the HLEM work more than the gradient I.P. As a lower cost method, gradient I.P. was therefore used across the existing grid to the full extent that the rugged topography would allow and was used to provide drill targets through the West, Central and East Zones. Extensive areas of graphitic dolostone provided some complications in interpretation and many of the stronger geophysical targets through the area between the Central and East Zones proved to be graphitic conductors.

#### DRILLING

Total drilling done on the property in 1988, 1990, 1991 and 1994 is 87 holes totalling 16,700 meters (rounded). The initial three holeswere drilled in 1988. The largest program, in 1991, was conducted by E. Caron Diamond Drilling Ltd. of Whitehorse using two Longyear 38 drills using NQ size core-barrels. Each drill was manned by two crews of two men, each working twelve hour shifts. Drill stations inaccessible to the bulldozer were prepared by hand and drilled with a helicopter transportable underground drill (Crelius) using thin wall rods (BWT).

The following drill intercepts are from the 1988 drill program

Table of 1988 Drill Intercepts

		Table 0	II 1900 DIIII IIIL	ercepts		
HOLE No	FROM m	TO m	WIDTH m	PB %	ZN %	AG oz/ton
88-1	4.3	29	24.7	3.5	3.2	1.7
incl	4.3	13.7	9.4	4.1	3.9	1.7
incl	27.4	29	1.6	17.1	13.7	6.17
88-2	4.3	90.5	86.2	5.3	3.0	3.1
incl	4.3	14.9	10.6	8.3	6.4	3.6
and	28.7	31.2	3.0	12.2	10.3	4.8
and	40.8	54.9	14.1	4.0	2.9	2.6
and	70.7	90.5	19.8	12.3	4.4	8.3
88-3	3.7	135.9	132.2	3.7	1.8	1.9
incl	17.4	18.9	1.5	24.60	11.80	10.22
incl	82.9	95.1	12.2	6.20	2.62	4.32
and	118	135.9	17.9	10.13	3.70	9.33

From 1988 Drill Report (Franzen 1988)

Surveying

Drill collar locations and azimuths were surveyed by Lamerton and Associates of Whitehorse approximately

every three weeks and at the completion of the program in August. The writer has verified that the surveyed drill collar locations are incorporated in the drill database.

Core Recovery\_

Core recoveries are were generally greater than 90%, although recovery was less in altered and broken ground. The drillers were contractually obliged to maximize core recovery.

#### Core Treatment

Drill core from all programs was selected for assay based on the presence of visible mineralization. High grade sections and geologically interesting features were diamond sawed, the remainder of the mineralized intervals were split, at  $\pm 3$ m sections, and sent to Chemex Labs in Vancouver where samples were routinely assayed for Pb(total), Pb(non-sulphide), Zn(total), Zn(non-sulphide) and Ag.

Drill logs with assay results are in posession of Eagle Plains and Shoshone. Downhole surveys for azimuth and dip were carried out using a Tropari instrument, and these measurements are recorded on the drill logs.

The dip of the hole at the collar was measured using a Brunton compass.

Only selected drill core was photographed by Billiton for geological purposes, but all of the B91–19 (East Zone discovery hole) mineralized interval was photographed. No systematic RQD measurements were taken 1988 drill core was stored at the Wernecke House of Archer Cathro at Keno Hill. 1990–1991 core is stacked, bound with plywood and steel strapping, covered and stored on the property. Some of the core was examined during the property inspection. Core hole numbers and depths are generally recovereable, and the core is in good condition.

### 1990 Drill Program

The 1990 Work Program included diamond drilling in the West Zone (Main Zone) over a strike length of about 500 meters (10+000E to 10+500E) to test several closely spaced en echelon zones of Pb, Zn, Ag mineralization. These zones had been sporadically trenched over a strike of about 1000 meters and down a dip slope of about 150 meters demonstrating the volume potential to host a significant base metal deposit. Fifteen drill holes totalling 3,660 meters (table 1) drilled in 1990 successfully outlined mineralization estimated to contain a diluted in–situ drill indicated geological resource, as discussed in a subsequent section, within a preliminary pit design floored at the 1650 level, of 11.5 million tonnes (Mt) grading 3.01% Pb, 2.20% Zn and 1.46 opt Ag. The preliminary pit design demonstrated physical extractability at a stripping ratio of about 2:1.

Drill core from the 1990 drilling campaign was split generally into 3 meter intervals and core from the entire hole was submitted to the Chemex Labs in Vancouver for routine assay determination for lead, zinc, silver and copper. Selected intervals were later tested for the presence of non-sulphide lead and zinc. Subsequently all of the significantly mineralized intervals were assayed for non sulphide lead and zinc.

#### 1991 Drill Program

The 1991 drill program at the Blende property was conducted between May 28 and August 19. It consisted of 62 holes totalling 11,525.1 m. The drilling was contracted to E. Caron Diamond Drilling Ltd. of Whitehorse and was done with two, bulldozer supported Longyear 38 drills which used NQ equipment and a helicopter supported Craelius Diamec 350 drill which used thin-wall BQ equipment.

The core was logged on site by geologists G. Lutes and G. Evancio and geological students M. Robinson and G. MacIntosh. The mineralized intervals were split using a mechanical knife core splitter or sawn in half. All samples were sent to Chemex Labs in North Vancouver where they were assayed for total and non-sulphide lead, total and non-sulphide zinc and silver. The remaining core is stored on the property.

Only eleven drill holes (DDH91-33, 40, 46, 49, 65, 68, 69, 72, 75, 77 and 78) were used to file for

assessment credit in a Statement of Expenditures dated November 26, 1991. The amount filed was Filed \$151,165.57 Thus the complete cost of the program is unknown, but as 62 drill holes in total were drilled we can estimate the cost at roughly (\$151,166)\*(62/11) =at least \$850,000, and from other substantial work done the real cost was likely in excess of \$2 million.

#### 1994 Drilling

In 1994, NDU, having regained 100% of the property equity, drilled seven holes totalling 596 meters. These holes were drilled on three section lines spaced approximately 50 m apart in an area west of the previous drilling. The first six holes all intersected significant mineralization while the seventh may have stopped short of the target. The mineralization is hosted in strongly fractured and locally brecciated dolomite beds cemented by secondary dolomite or siderite. Surface oxidation is minimal.

The 1994 drilling successfully extended the West Zone about 150 m along strike; however, the drill area was located on a steep slope making it unsuitable for open pit mining. Although some of the intersections returned significantly higher copper and silver assays than are found elsewhere in the deposit, these metals appear to be erratically distributed. Average grades in some of the intersections were interpreted in 1994 as approaching values that would be suitable for underground mining. Further drilling was proposed to test downdip and further to the northwest.

The 1994 drill results have not been factored into the resource estimation. All drill intercepts used in the resource calculation are included in an Appendix, as well as a list of some significant intercepts.

### SAMPLING METHOD AND APPROACH

Neither Eagle Plains nor Shoshone Silver have completed any sampling program aside from the 2004 prospecting at the Far East Zone. No samples were taken by the writer during his property inspection, as the Blende deposit is well documented and surface exposures are poor and unrepresentative of the tenor of the deposit. The presence and tenor of the deposit is not in question.

Past sampling methods were examined by the writer from the yearly exploration reports and were found to be done according to industry standards. Initially, the West zone was sampled by surface trenches dug across the zone. Later, diamond drilling was done and the core sampled by standard splitting techniques. The drill core is well preserved and is stored on the property where it is available for inspection.

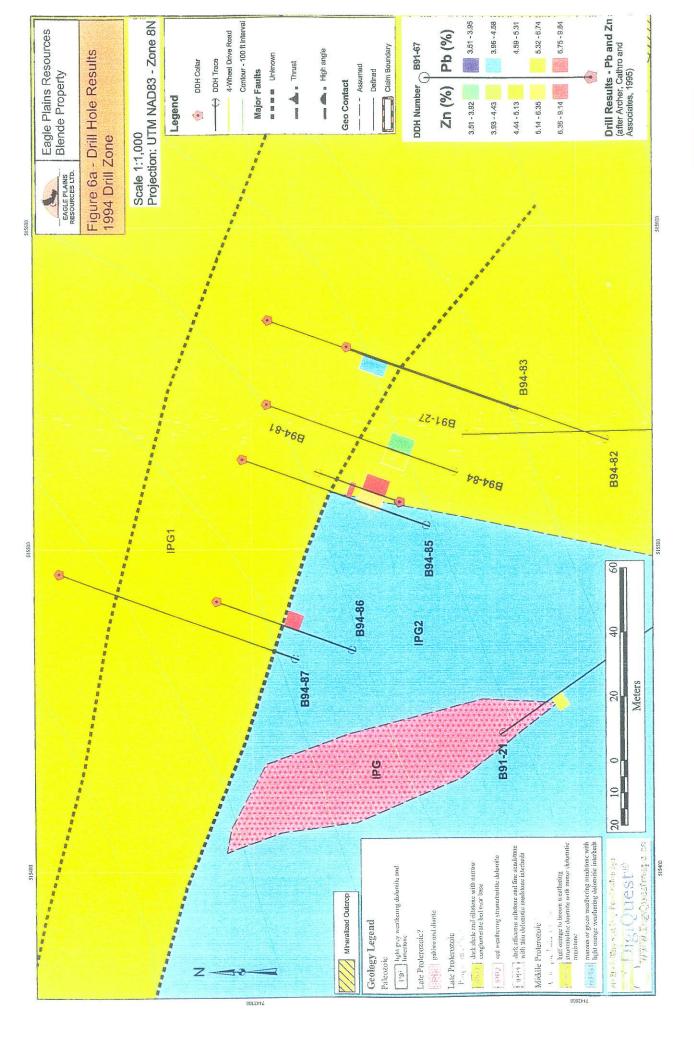
# SAMPLE PREPARATION, ANALYSES AND SECURITY

Samples were prepared by standard methods. It is fortunate that most of the samples in the entire history of Blende were taken by Archer Cathro personnel, prepared and analysed by Chemex Laboratories (Now ALS Chemex Ltd, in North Vancouver). Standard methods of analyses were used.

#### DATA VERIFICATION

In this technical report the writer has:

- · Viewed the 6 boxes of data held by Eagle Plains Resources Ltd. In their Cranbrook Office.
- · Copied critical files for review in Vancouver.
- Retabulated drill hole locations and some of the drill hole intercepts.
- Reviewed a digital database prepared by Chris Gallagher and printed the data on a hole by hole basis.
- · Visited the property on June 21 accompanied by Tim Termuende (Eagle Plains) and Mike Burke, Regional Geologist for the Yukon Geological Survey.
- Compiled the existing geological and exploration data to provide a review if all work done.
- Compiled and estimated total expenditures by all parties on the project



- Reviewed resource calculations and methods.
- Retabulated the resources and checked them mathematically.

# ADJACENT PROPERTIES

The following information is provided as background material for the reader. The writer has not been able to independently verify the information contained although he has no reason to doubt the accuracy of the descriptions. The information is not necessarily indicative of the mineralization on the properties that are the subject of this technical report. The source of the information is without exception publically available documents gained from the USDGS website, from Company websites and press releases or from descriptions contained in academic papers or their abstracts published in geological or mining journals or on the Internet. The writer has not verified any resource or reserve figures, which are from the literature, and these may not comply with Canadian regulatory policies and thus should not be relied on. The writer has no affiliation with any of the properties or companies mentioned.

# Keno Hill (Figure 19)

The nearest past productive mine to the Blende deposit is the Keno Hill property comprising a number of mineralized veins in metasediments.

The following table summarizes the production history of the Keno Hill camp, which is Canada's second largest producer of silver. Almost 50% of the total has come from the Elsa, N Keno (No. 9), Lucky Queen, Silver King, Sadie-Ladue and Husky Mines.

Years 1921-1941 1953-1956 1953-1954 1941-1982 1946-1988 1921-1988	Company Treadwell Galkeno Bellekeno Others United Keno Total Grade (recov	Tonnes milled 588,503 102,409 10,500 842 <u>4,170,169</u> 4, 872, 423 vered)	1,533,087,282 117, 818, 551 27 961 517 8 314 145 5 081 831 991 6, 769 ,013, 486 1,389 g/t	Lead (kg) 44,008,249 5,396, 968. 1,573,419 480,322.0 222,163,088.0 273,622,047 2.80%	Zinc (kg)  2,816,255 166,552 6,322 150 209 254 153, 198 ,383 1.57%
	Grade (recov	erea)	(40.5 opt)		

Over 1.8 million kg of cadmium and nearly 100, 000 grams of gold have also been recovered. Recovery of zinc was discontinued from 1979 to 1985 due to low assays and high treatment costs.

# Resources at Keno Hill

A 1996 engineering study, considered to be relevant, estimated that the project contains over 28 million ounces of silver, 50,300 tons of lead and 45,400 tons of zinc in five of the known deposits:

Category	Tons	Silver	t Ounces	Lead %	Tons	Zinc %	Tons
Measured	45,401	33.2	1,509,152	3.1	1,390	2.9	1.312
Indicated	702,195	29.9	21,015,654	5.2	36,550	4.1	28,997
Inferred	209,196	28.9	6,054,887	5.9	12,385	7.3	15,183

The resource is an estimated mineral resource only as outlined in the engineering report and does not instill a confidence level nor economic assumptions that can be construed as a "mineral resource" as defined by the Guidelines and Canadian National Instrument 43–101.

At January 1, 1998, total mineral resources were 459,254 tons aver 35.57 opt silver, 7.21 % lead & 5.33% zinc. In addition, there were significant, but low-grade resources in tailings. (Canadian Mines Handbook, 2000-2001)

Recent History of United Keno Hill

In 1998, NDU Resources Ltd merged with United Keno Hill Mines Ltd, with NDU shareholders receiving 1.35 United Keno shares for each share of NDU The authorized capital: Unlimited shs; outstanding at Dec 31, 1999:47,137,097. A Major Shareholder as of Dec 31, 1999 was Energold Minerals Inc which company held 6,500,000 shares. Subsidiaries (wholly owned) were: UKH Minerals Limited, United Keno Hill Mines Inc. Financial Data: Dec 31, 1999: Working cap deficit was \$8 million. Total assets were \$45 million. Shareholder's equity was \$21.7 million.

In 1999, United Keno Hill owned 100% interest in 292 cls, 674 leases, 2 crown grants, totalling 33,000 acres as the Elsa Properties, including the former producing Elsa mines, Galena, Keno & Sourdough Hill areas, Mayo dist, YT (Lat 63° 55' N/Long 135° 25' W). Operations began in 1947. Commercial production was suspended Jan 1989 due to low silver price. In 1994-96, exploration programs were completed. In 1996, the company completed detailed mine planning and a feasibility study. In January 1998, the company received a Type A water licence. The company in 2000 planned to resume production when project financing could be arranged. In addition to the United Keno Hill properties, the company also held the Blende property and the Clear Creek zinc lead-silver property situated about 65 miles east of Pelly Crossing on the Klondike Highway.

August 6, 1998

Dynatec Corporation ("Dynatec") announced that the company will not proceed to execute a Joint Venture Agreement with United Keno Hill Mines Limited ("United Keno") for the rehabilitation, development and operation of the mines near Elsa in central Yukon.

April 12, 2001

REDCORP VENTURES LTD. announced that it had reached agreement with the Keno Hill property lien holders to purchase a 100% interest in the property, subject to court and regulatory approval and satisfaction of a number of conditions. The purchase agreement calls for a staged total payment of \$2.8 million. This sum is comprised of an initial payment of \$1.7 million on the date for completion (which is approximately 7 months after Court approval of the agreement) subject to satisfactory pre-feasibility assessment and due diligence review, at the sole discretion of Redcorp. This initial payment will be comprised of \$850,000 in cash and \$850,000 in cash or shares (or any combination thereof at Redcorp's election). The remaining \$1.1 million plus interest is payable in cash as part of production financing on arrangement of suitable terms or, failing which, the balance will be paid out of proceeds of production. If commercial production has not commenced by December 31 2005, payment will be made at the rate of \$100,000 per year thereafter until payout or production commencement. The Company also commenced discussions with the Nacho Nyak Dun Development Corporation, the business arm of the Nacho Nyak Dun First Nation who have settled land claims in the vicinity of the property, to form a joint venture for the re-development of the Keno Hill property on completion of the purchase.

May 9, 2001

Redcorp Ventures Ltd. (RDV) ("Redcorp") announced that, further to its release of April 12,2001, Redcorp's agreement with a group of lien holders under the Yukon lien legislation to purchase the assets of United Keno Hill Mines (the "UKHM Assets") was not approved by the Yukon Supreme Court in a hearing on that matter held Tuesday, May 8, 2001 due to the existence of one competing bid for the UKHM Assets, which the Court deemed to be a superior proposal. Redcorp does not intend to pursue the acquisition of the UKHM Assets further and will resume its review of other promising advanced mineral projects. The opportunity for third parties to make competing bids

for the UKHM Assets was ordered by the Court as part of its judicial review of the proposed sale.

May 17, 2001

The BC Securities Commission issued a cease trade order agains United Keno Hill Mines for failure to file financial statements for year end December 1999 and quarterly staements to June 2000.

2002

Nevada Pacific Gold, a Vancouver-based junior company made an offer to purchase the assets of United Keno Hill, subject to a 6 month due diligence period. However, on May 30th, Nevada Pacific Gold gave notice to the Supreme Court that it would not proceed with the acquisition of the United Keno Hill property. The company was released from their site management obligations on June 12, 2003.

June 13, 2003 Interim care and maintenance of the United Keno Hill mine site is being taken over by the Yukon government in the absence of an owner and Nevada Pacific Gold 's withdrawal from the property. The Yukon Government announced they were developing an agreement with Nacho Nyak Dun to have the First Nation continue site care and maintenance. The agreement will include maintaining the water treatment facilities, site inspections and caretaking, to be undertaken in conjunction with Access Consulting Group of Whitehorse. The United Keno Hill site is a Type II site under the terms of the Devolution Transfer Agreement.

Carpenter Ridge

(Figure 19)

At Carpenter Ridge, a few kilometers west of the Blende property, within the Native Land selection, Big Creek Resources in 1991 drilled 610 meters in five holes. Results from trenching returned several intersections, including five meters of 9.5% combined lead and zinc, and 9.3 meters of 4.5% lead-zinc. (Source: Northern Miner Dec 23, 1991) Present status of the property is not known.

Gayna

(Figure 17)

The Gayna River deposit is a true Mississippi Valley type deposit located near the headwaters of the Gayna River on the eastern slope of the MacKenzie Mountains, 170 km west of Norman Wells, NWT. and about 150 km from the Blende Deposit. The 49 unit (2500 acre) property contains a number of zinc deposits outlined by Rio Tinto Canadian Exploration during the mid–1970s. Mineralization in the area consists of carbonate-hosted silver–lead–zinc similar to that mined at Pine Point from 1970 to 1990. The deposits are in stromatolitc algal dolomite "reefs" within the Proterozoic Little Dal carbonate unit.Rio Tinto completed some 27,000m of diamond drilling on the property, and suggested an aggregate resource of over 50,000,000 tons grading 4.7% zinc from numerous individual orebodies, making it one of Canada's largest undeveloped zinc deposits<sup>4</sup>.

The best drill intersection reported by Rio Tinto included a 6.0m interval which graded 20% combined lead-zinc. When Rio Tinto last worked the property in 1978, company geologists suggested that further exploration would result in additional discoveries hosted by favourable stratigraphy mapped within the property area.

Eagle Plains has acquired all pertinent Rio Tinto data and has begun to compile a GIS database on the Gayna river area.

<sup>&</sup>lt;sup>4</sup> The writer has not verified this resource estimate, which is not in compliance with NI 43-101 and should not be relied on.

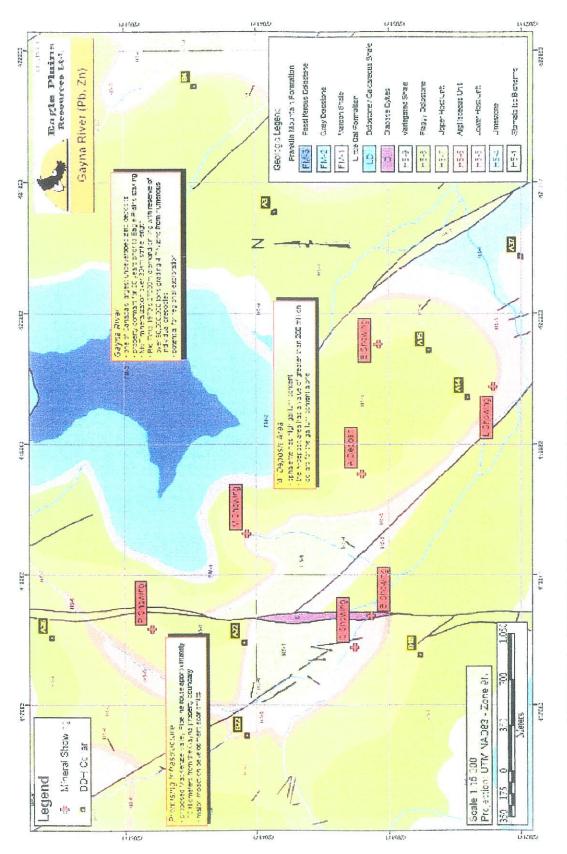


FIGURE 16 SKETCH OF GAYNA ZINC MISSISSIPPI VALEY TYPE DEPOSIT NWT.

Prairie Creek (Cadillac)

(Figure 18)

The Prairie Creek Zn-Pb-Ag deposit is situated in the Nahanni Butte area of the southwestern part of the Northwest Territories. It is operated by Canadian Zinc Corportation. Canadian Zinc Corporation owns 100% of the Project which comprises eight mining leases covering an area of 8,750 acres and five additional mineral claims covering 10,204 acres. Canadian Zinc Corporation has a 60% interest in the plant and equipment located at the Project site, with an agreement that the remaining 40% will be transferred to it upon the payment of a total of Cdn\$8.2 million under a 2% net smelter royalty agreement ("NSR") with Titan Pacific Resources Ltd.

The rocks in the area are composed mainly of Lower Ordovician age dolostones of the Whittaker Formation, which are overlain by Silurian aged Road River Formation cherty shales and thinly bedded dolostone of the Cadillac Formation. Lower to Middle Devonian Arnica and Funeral Formation dolostones and limestones overlie this unit at the north end of the property. Faulting and folding trends are approximately north—south, and expose "windows" of Road River and Whittaker Formations. Most of the Prairie Creek numbered zones occur within the shale members of the Road River Formation.

Mineralization on the property is of three types. Vein-style mineralization occurs over a ten-kilometre section of the north-south trending Prairie Creek fault; twelve separate zones of appreciable vein style mineralization have been located. Mineralization within these veins consists of zinc-lead-copper, with significant associated silver grades. The most extensive of the vein style mineralization is known as Zone 3, and has been the focus of most of the surface and underground work to date.

Stratabound mineralization occurs within the Upper Whittaker Formation and is closely associated with the higher grade vein-style mineralization. The main economic minerals in the stratiform style of mineralization are zinc, lead, and iron, with moderate amounts of copper, and silver. This style of mineralization occurs in Zones 3, 4, 5, and 6 over a strike length of three kilometres and has a reported thickness of 28 metres locally.

The third style of mineralization is a Mississippi Valley Type of mineralization. Cavity fillings of low-grade zinc mineralization have been found, in drilling and on surface, over the ten-kilometre strike length of the mineralized trend.

MRDI Canada has completed a resource estimation for San Andreas' Prairie Creek Property Zone 3 in the Northwest Territories<sup>5</sup>. All geological and assay data were supplied to MRDI by San Andreas. These data supplied were reviewed for completeness and overall integrity for inclusion in the model of the deposit. Inconsistencies within the raw data set were rectified from additional data supplied by San Andreas Resources. The geological resource has been classified into measured, indicated and inferred resources, based upon the level of confidence according to the Australasian Code for Reporting of Identified Mineral Resources and Ore Reserves, using the drilling grid spacing and continuity of mineralization as determined through the geostatistical review of the data. MRDI staff visited the property site and feel that the data and the interpreted model represents the Prairie Creek deposit.

Based on the geological model of the deposit, MRDI estimates the resources of Zone 3 to be:

 $<sup>^{5}</sup>$  The writer has not verified this resource estimate, which is not in compliance with NI 43-101 and should not be relied on.

DIAGRAMMATIC SECTIONS OF THE PRAIRIE CREEK SILVER-LEAD-ZINC DEPOSIT FIGURE X



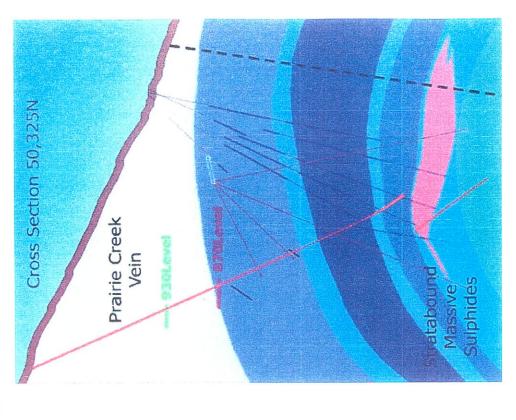
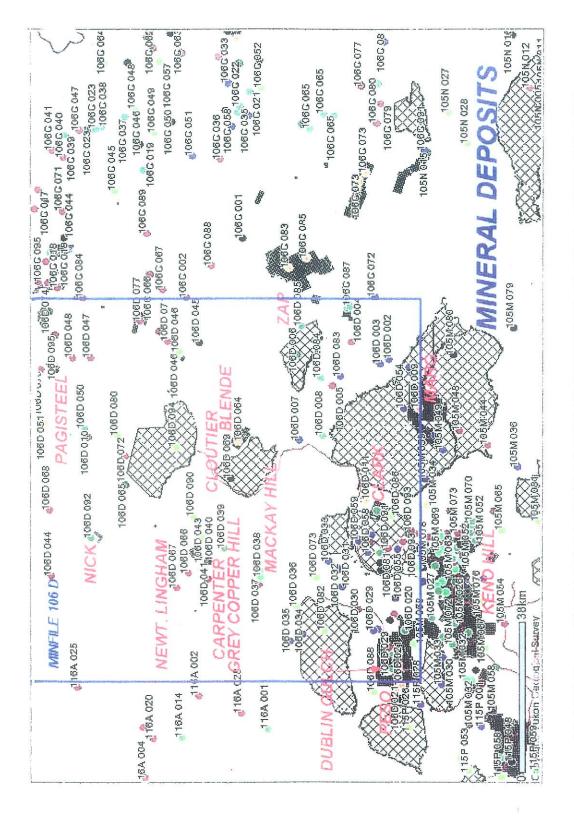


FIGURE 18 Relationship of veins and Replacement Mantos at depth (Source Canadian Zinc Website 2004)



MINERAL DEPOSITS MENTIONED IN REPORT, BLENDE - MAYO AREA YT. FIGURE 19

# Zone 3 Geological Mineral Resources

CATEGORY Measured Indicated	Tonnes 000s 1,121 2,447	12.9 11.3	<u>Lead %</u> 9.8 9.7	Silver g/t 138 142 169
Inferred	8,278	12.8	10.3	169

In addition to the resource delineated in Zone 3, San Andreas has estimated Zones 7 and 8 to contain over 300,000 tonnes of similar high grade zinc, lead and silver.

	\(\)	HVP	DECOLIBCE	GRADE ZN	GRADE PB %	GRADE AG	GRADE	Grade Cu
DEPOSIT	COMPANY	Т	tonnes			grams/t	AU G/T	%
		O WAY	000002	12 66	1.55	370.90	1.76	1.33
Wolverine YT	Expatriate	V IVIS	0,530,000					
l odan VT	Expatriate	Dissem.	13,080,000	5.10		23.70		
7. Never 7. Never N	Teck Cominco	VMS	13,720,000	00.9	1.61	139.20	1.38	.90
Nuuz ze nayan i i				0 40	3 10	00 06	2.00	.10
GP4F YT	Teck Cominco	VMS	0,00,005,1	0.40	2 - 1			
Yava, Nunavut	Expatriate	VMS	1,130,000	4.96	1.60	117	ĸ.	1.03
(2.2)		-/1	1 + N O D	4.7	0.2			
Gayna River NWT	Eagle Plains	WIISS VAI	20 M tollifes					
Bear-Twit		Carb	9,070,000	5.42	2.60			
		hosted						
lason		Sedex	15,500,000	7.09	6.57	79.9		
To the second		Sedex	10,800,000	7.54	6.37	73.7		
				L			•	
Howards Pass	US Steel	Sedex	>59,000,000	5.4	7.1			
Xinan Appendix	are tabulated in	an Annendix						
Additional deposits	מוב ומחמומובת ווו	all Appendix						

The writer has not verified these resource estimates, which may not be not in compliance with NI 43-101 and should not be relied on. (Some of the deposits are shown in Figure 1)

# MINERAL PROCESSING AND METALLURGICAL TESTING

A number of processing and metallurgical tests were completed on the Blende deposits by Billiton and the following summary is made from the 1991 final report. At least seven separate metallurgical reports are present in the files hheld by Shoshone and Eagle Plains

Upon completion of the 1990 drill program it was realized that potentially significant proportions of the West Zone mineralization are oxidized. It was decided to undertake some preliminary grind and flotation tests on composite drill core rejects. This work was conducted by Bacon, Donaldson Ltd. of Vancouver, Canada. Two samples were selected:

- B90-6 representing Pb (lead) rich mineralization
- B90-11 representing zinc-rich mineralization respectively

Each contained what was considered to be representative (>20%) assayed amounts of "oxide" Pb and Zn.

The initial tests showed that a high proportion of the zinc floated in the lead circuit, due to fine intergrowths of galena and sphalerite. This was later confirmed by petrography. Overall recoveries of both lead and zinc were low due largely to the presence of "oxide" (or nonsulphide) lead and zinc.

Two additional tests were conducted using a finer primary grind, additions of zinc depressants, addition of a lead oxide flotation stage, and re-grinding of the zinc rougher concentrates prior to cleaning. With these adjustments, a zinc concentrate grade of 56.8% was produced from both samples at rougher recoveries of only 33% and 37% and cleaner recoveries of 23% and 31% respectively. The lead oxide float was effective in recovering additional silver and lead. It was concluded from this work that silver and lead distributions correlate well, and optimization of lead recovery should therefore also optimize silver recovery. Two problems remained unresolved from this work: there was still excessive zinc reporting to the final lead concentrate (18%) and all of the non-sulphide zinc from these samples reports to the final tails.

In 1991, due to the significant proportion of non-sulphide zinc in the West Zone, Billiton decided to continue with the metallurgical work including tests of several new commercially available reagents for recovery of non-sulphide zinc.

For this work, three drill core composites were used from the West Zone representing:

- least oxidized (composite C),
- intermediate oxidized (composite B), and
- most oxidized (composite A).

A fourth composite (D) from the unoxidized East Zone was included in this work immediately after its discovery in May, 1991. This work was also conducted by Bacon, Donaldson Ltd.

The flowsheet incorporated a bulk sulphide flotation stage followed by flotation of the non-sulphide lead and zinc. The majority of testwork was conducted on the intermediate composite B with subsequent testing on the other composites. The initial test on composite B showed similar results to the 1990 work – almost half of the zinc recovered reported to the lead rougher. This suggested that production of a bulk lead–zinc concentrate might be more practical, with subsequent separation of lead and zinc concentrates.

The bulk sulphide recovery tests on the four composites confirm the previous results – that sulphide lead and zinc recovery decrease with increasing degrees of oxidation. Sulphide zinc is severely affected by oxidation, and high losses are reportedly due to inclusions of sphalerite within non–sulphide (smithsonite) particles. Rougher recovery of total zinc from West Zone composites ranges from 28.6% (most oxidized) to 76.5% (least oxidized). The East Zone composite, by comparison returned 82.4% of total zinc to the bulk

sulphide rougher.

For separation of lead and zinc concentrates it was found that zinc grade and recovery is strongly affected by the presence of sphalerite-galena intergrowths and the degree of lead and zinc oxidation in the feed. It was also found that the recovery of nonsulphide lead was sufficiently effective so that the overall recovery of total lead is independent of the degree of oxidation. Iron rejection was effected through the use of lime and cyanide. Attempts to recover the non-sulphide zinc were not successful and while rougher recoveries close to 60% ZnO could be achieved, attempts to upgrade this material result in high losses to the cleaner tails.

Lead rougher recoveries approaching 90% were demonstrated from all composites due to the production of separate oxide and sulphide concentrates. These contain from 12-16% Zn(total) at recoveries of 7-17% Zn(total) with the exception of the most oxidized sample (A) which contains only about 3% total Zn at a recovery of 3% Zn (total). PbS concentrate grades for the four composites range from about 58%-80% Pb with combined recoveries to the PbS and PbO concentrates at 73%-77%.

Concentrate grades for the ZnS concentrates for the West Zone range from 35% to 48% from the most oxidized to the least oxidized composites at recoveries ranging from 29% to 56% respectively. The composite from the East Zone yields a zinc concentrate grade of >50% Zn(total) but with recoveries to the bulk concentrate of only 62.5% and to the 2nd and 3rd cleaner tails of only 20% and 12% respectively and with approximately an equal recovery of Zn to the lead concentrate. This is due to three combined factors: initially low Zn grades (0.96% - 2.59% ZnS; A-D respectively) combined with fine intergrowths of galena and sphalerite and further compounded by alteration of sphalerite to smithsonite. Composite B is the closest of the composites to the average grade of the West Zone mineralization.

For run F17, from a bulk rougher recovery of 78.62% ZnS for this sample, the total ZnS recovered to the ZnS concentrate is 52.46% of total ZnS with 4.95% of total ZnS reporting to the PbS third cleaner concentrate, 4% to the PbO rougher, 11% to the ZnO concentrate and about 6% of total ZnS to the final tails. In the absence of additional improvements in the metallurgical flowsheet, the recovery of ZnS to a potential ZnS concentrate from the West Zone would probably average about 50% and if a better separation of lead and zinc sulphide concentrates could be effected, a concentrate grade of 50% would be expected.

#### East Zone

Only one composite has been tested from the East Zone (run F-21). Composite D recovered 82.4% of total ZnS to the bulk sulphide rougher. From this, a total of about 52.5% of total ZnS reports to the lst-3rd PbS cleaner tails (= ZnS concentrate), 10% to the third PbS cleaner concentrate, 1.23% to the total PbO rougher concentrate and fully 16.4% of total Zn reports to the final tails. The ZnS concentrate grade is given as the result to the third PbS cleaner tails (50.1%). This is very similar to the result from composite B. (Source 1991 Final report).

In summary, concentration of lead and zinc has problems caused by intergrowths and oxidation, but with different separation techniques and flow sheets can provide an acceptable concentrate. Additional tests would have to be done to optimize the recoveries.

# MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES 1990 Estimate

(Figures 20, 21)

Resource estimation and preliminary pit design was undertaken for Billiton by John Paterson, P.Eng of Roscoe, Postle & Associates in the fall of 1990 to provide an order of magnitude grade, tonnage and stripping ratio for the West Zone. This was done using a sectional method of calculation. PC-XPLOR and GEOMODEL software from GEMCOM Services Inc. were used for database management, section and plan generation and volume calculations based on geological interpretations provided by BMCI. The following parameters were used:

- A Canadian Dollar per ton value was calculated for each assay interval based on the total in-situ or "Gross Metal Value" ("GMV") of lead, zinc and silver (with no distinction between sulphide and oxide species) at 1990 metal prices (US\$) 0.26/lb for lead, US\$ 0.50/lb for zinc, and US\$ 5.00/oz for silver respectively using an exchange rate of US\$ = C\$1.25.
- A C\$50/t cut-off was also used to evaluate the potential for significantly higher grade near-surface mineralization. External dilution was added to the margins of all mineralized composites as one assay interval (-3m) at assay grade.

Internal dilution was accepted at up to two contiguous assay intervals at grade.

- For greater than two contiguous intervals below cut-off grade, separate composites were distinguished.
- Correlation of mineralized composites were completed by BMCI on sections generally spaced at 100 meters but also using 50 meter sections where possible.
- This interpretation was completed for level plans at 50 meter intervals.
- Sectional interpretation of block areas completed and were then extrapolated halfway between sections to generate block volumes.

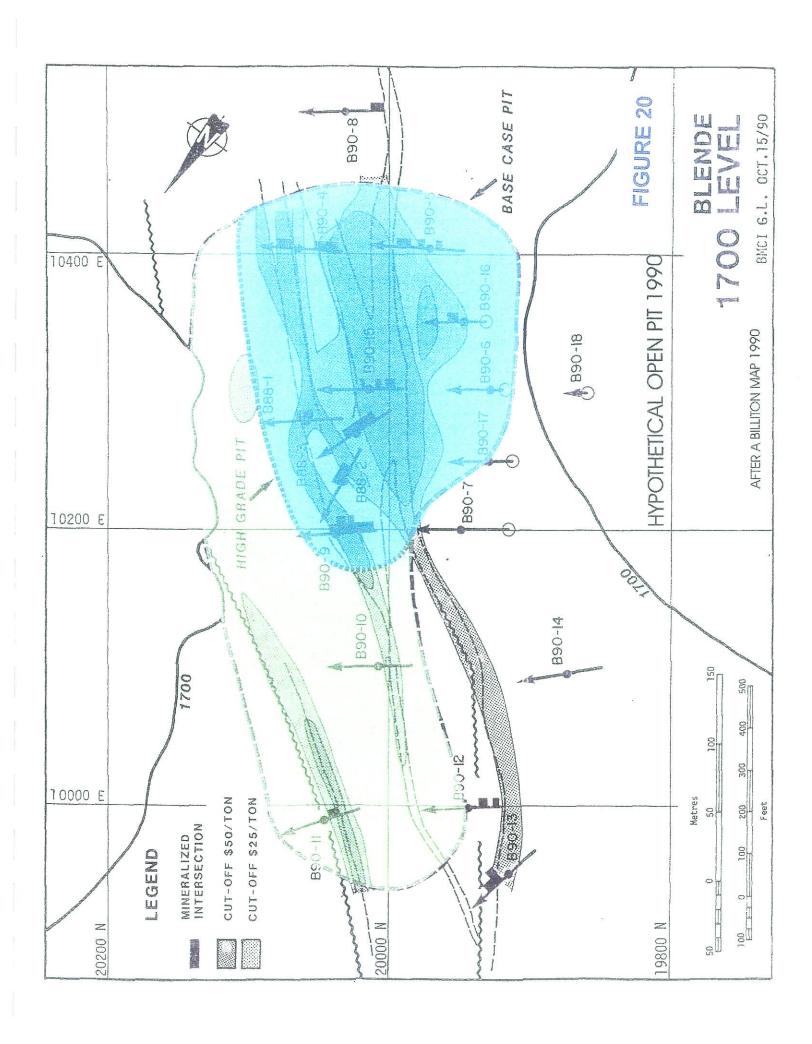
Specific gravity measurements indicate a SG of mineralization at average grade to be about 3.1 and SG of waste to be about 2.8. These values are used in all subsequent calculations.

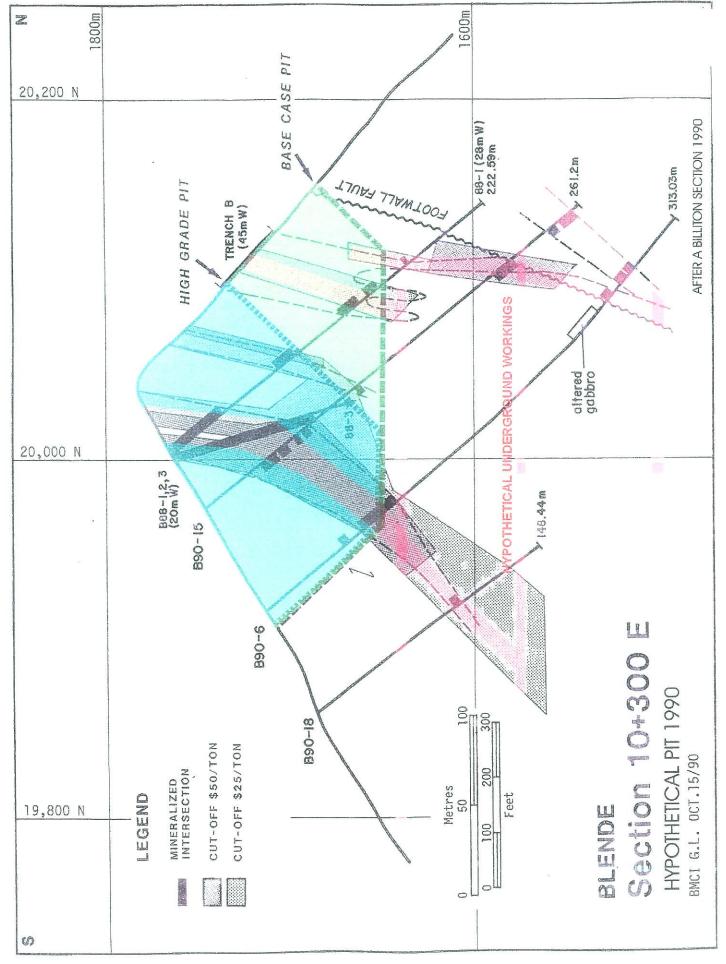
Two pit limits were chosen arbitrarily at the 1600 and 1650 m elevations to include mineralized blocks at the C\$25/t cut-off, and one pit limit was chosen to include only the >C\$50/t mineralization.

The results of this work indicated the potential for 11.5Mt of diluted mineralization with an in-situ value of C\$56.23 above the 1650m level grading 3.01% Pb, 2.20% Zn and 1.46 opt Ag and contained within a potential pit having a strip ratio of about 2:16.

Later, BMCI obtained a series of software utilities from Systems Geostat International Inc. of Montreal, Canada for use in reviewing the work completed by RPA. An initial review of the RPA results using the new software to reproduce their results showed that the quoted in-situ value of C\$56.23/tonne was in error., and should be C\$61.45/tonne. The overall grades obtained using the RPA input parameters were confirmed and in addition, values for non-sulphide lead (0.7%) and zinc (0.6%) were estimated. These are 23% and 27% respectively of the quoted RPA grades for total lead and zinc.

<sup>&</sup>lt;sup>6</sup> The resource estimates were prepared by Billiton Canada Explorations Inc., a large integrated international company prior to the introduction of National Instrument 43-101. Nevertheless, in the writers opinion, the estimates are relevant and reliable.





### 1991 Resource Estimate

Assay values were received in the field and merged with drillhole collar surveys and downhole surveys into a dbase file which includes previous drillhole data from the 1988 and 1990 campaigns. Chris Gallagher of Eagle Plains has converted this database to Microsoft Access/Excel format. Paper drill sections are available for all the programs.

Drillholes are plotted on sections oriented grid north (035 degrees true) and are approximately, but not exactly orthogonal to the strike of the mineralized zones at most locations. The dips shown on section are therefore apparent dips in most instances but with only a small variance from a true dip.

Major shear zones host the vein style mineralization and are outlined on the drill sections using a combined 1% Pb+Zn envelope. As no stratabound mineralization has been identified, only cleavage and fault\shear measurements are plotted on the hole axis. Bedding measurements with respect to core axis are noted periodically in the drill logs.

Drillhole traces for oblique holes were projected by Billiton to section from the digital drillhole database. In the West Zone, the 1990 drillholes were projected within a 50 meter corridor width and included intermediate sections 10+150E - 10+350E. As the drillhole database is relatively small this tends to fragment the data. The 1991 drillholes were therefore projected within a corridor width of 100 meters and are plotted only on the 100 meter sections 9+700E - 10+500E.

The sectional resource estimates were completed for the West Zone using the entire drillhole database projected only to the 100 meter sections. The East Zone mineralization is relatively well defined on 50 meter sections with a corresponding corridor width of 50 meters.

After the 1991 drill program, assay values were received in the field and merged with the drillhole collar surveys and downhole surveys into a dbase file which includes previous drillhole data from the 1988 and 1990 campaigns. This was periodically updated and used to produce preliminary drill sections for illustration using the Sect utility of the Geostat software package which produces simple plots of driliholes and assay data. SectCad is the section modelling utility, and was used to interactively composite drillhole assay data on screen both in the field and in the Toronto office to provide interpretation and preliminary resource estimates. The 1991 resource estimates were undertaken in-house by BMCI using this Geostat software. Ther following methodology was used:

The sectional resource estimates were completed using a gross in situ metal value (GMV) calculated for each assay interval using US\$0.28/lb Pb, US\$0.50/lb Zn and US\$4.25/oz Ag as metal prices at an exchange rate of 1\$US/1.25\$CAN.

For zinc, due to the failure to demonstrate potential metallurgical recovery of non-sulphide Zn, this value was subtracted from the assay for total Zn to yield a value for ZnS which was used to calculate in situ GMV for composite selection in the final run for the West Zone and for the East Zone which

contains very little non-sulphide Pb and Zn.

The specific gravities used were the same as those used for the 1990 RPA estimates - 3.1 for mineralization and 2.8 for waste. For comparison, a calculated specific gravity for the West Zone average grade using the most probable mineral assemblage yields a value of about 3.08 for mineralization at 0% porosity and a calculated specific gravity for the East Zone average grade is about 3.02

Several different attempts at modeling the West Zone mineralization were undertaken using variations in some of the more important parameters in order to test the subsequent variations of

in situ GMV and tonnage.

All estimates were based on sectional interpretation on 100 meter sections from 9+900 East to

10+500 East.

- Minor drilling on 50 meter sections (10+250, 10+350) is insufficient to model these sections
- Block areas are generally extrapolated to mid-points between drill hole composites.
- On sections with surface indications of mineralization drill composites are extrapolated to surface.
- In areas lacking sufficient drill density block outlines are projected only to about 25 meters up and down the section.
- Volume calculations are by linear projection to the mid-points between sections which is 100 meters.
- The first run uses similar parameters used by RPA for their calculations in 1990 and was done for comparison purposes. This uses a \$25 GMV cut-off with no distinction/subtraction of the nonsulphide zinc values.
- External dilution is added at one sample interval (-3m) at assay grade and internal dilution is included at 1-2 contiguous sample intervals but zones are separated at >2 contiguous sample intervals below cut-off.
- One-sample zones are allowed only if they carry external dilution at both margins without being diluted below the cut-off grade.

This initial estimate by Billiton returned a tonnage of about 28 million metric tonnes with an in-situ GMV of about \$52. In comparison to the 1990 estimates, the tonnage is significantly higher in part due to the added mineralization at depth, but mainly because this estimate is not truncated to a potential open pit design. Very little additional tonnage is added along strike to the northwest (9+700E-10+000E) and no mineralization is added to the southeast.

A second estimate was undertaken in which the drillhole assay intervals were recomposited with no external dilution at the same \$25 cutoff. For this and subsequent runs without calculated external dilution, internal dilution is accepted at only one sample interval at grade and composite separation is effected at greater than one sample interval below cut-off. One-sample zones (-3m) are only accepted if the composite grade will carry one sample interval at either the upper or lower margin at >\$25.

This second estimate returned a total of about 19 million tonnes (in both East and West zones) at an in-situ GMV of about \$72. Thus, in comparison to Run 1, the 1990 analogy, Run 2 by cutting dilution increased the GMV by 38% and reduced tonnage by 32%.

A third estimate, using an increased cut-off of \$35, further reduced the tonnage by 24% to about 14 million tonnes and increased the GMV by 17% to \$85.

As the metallurgical work completed to date suggests that the nonsulphide zinc is non-recoverable (and has a net negative effect on ZnS recoveries) a fourth estimate was calculated at a cut-off value of \$25 and with the metal value of non-sulphide Zn species subtracted from the in-situ GMV. For the 1988 drillholes, as no non-sulphide Zn assays are available, this species is arbitrarily calculated at 50% of the total zinc assay.

The results from this estimate were used by Billiton in their internal economic evaluations (equivalent to a "scoping study" and break even analysis. The gross tonnage obtained by Billiton and selected as the most reasonable for the West Zone is 15.3 million tonnes at a grade of 3.23% Pb including 1.09% Pb (non-sulphide), 3.04% Zn including 0.79% Zn (non-sulphide) and 1.97 opt  $Ag^7$ .

<sup>&</sup>lt;sup>7</sup> The resource estimates were prepared by Billiton Canada Explorations Inc., a large integrated international company prior to the introduction of National Instrument 43-101. Nevertheless, in the writers opinion, the estimates are relevant and reliable. The resource, because of drill spacing and density, should be regarded as an Inferred Mineral Resource in accordance with the CIM Resource and Reserved definitions acceptd by the regulatory bodies (Reproduced in Appendix I)

The resource estimates were prepared by Billiton Canada Explorations Inc., a large integrated international company prior to the introduction of National Instrument 43–101. Nevertheless, in the writers opinion, the estimates are relevant and reliable. The resultant block grades, tonnages and GMV's in an Appendix.

East Zone (Figures 14,15)

The East Zone mineralization is mainly present in the #19 and #21 zones. Drilling in the East Zone was sufficient to enable sectional modeling on 50 meter sections. The resultant resource blocks are based on drill-sections 12+450 East to 12+800 East and are listed in table form in Appendix II.

The tonnage and grade were estimated in a similar manner to the west zone using:

- subtraction of non-sulphide zinc
- a \$25 in situ gross metal value ("GMV") cut-off,
- no external dilution, and
- internal dilution allowed for only one sample interval below cut-off. One-sample zones (-3m) are only accepted if the composite grade will carry one sample interval at either the upper or lower margin at >\$25.
- Block outlines are drawn to mid-points between correlated drillhole composites or to 25 meters maximum distance off hole axes, to depth and toward surface, unless correlated with surface mineralization.
- Block areas were calculated with the Sectcad utility from Geostat software
- block volumes were likewise calculated to 50 meter block thicknesses.
- The specific gravities used for mineralization and waste for East Zone mineralization are 3.1 and 2.8 respectively.

The aggregate tonnage obtained for all resource blocks from the East Zone is 4.3 million tonnes at 3.05% Zn which includes 0.06% non-sulphide Zn and 1.31% Pb, which includes 0.19% (non-sulphide Pb, ), 3.05% Zn) and 15.1 g/t silver (0.44 opt) Ag.

Based on 1991 and previous drilling programs, published mineral resources were calculated for the whole property as:

ZONE	RESOURCE tonnes	ZINC %	LEAD %	SILVER grams/tonne
West Zone	15,300,000	3.04	3.23	67.5
East Zone	4,300,000	3.05	1.31	15.1
TOTALS	19,600,000	3.04	2.80	56.0

The resource estimates were prepared by Billiton Canada Explorations Inc., a large integrated international company prior to the introduction of National Instrument 43–101. Nevertheless, in the writers opinion, the estimates are relevant and reliable.

The resource, because of drill spacing and density, should be regarded as an Inferred Mineral Resource

in accordance with the CIM Resource and Reserved definitions accepted by the regulatory bodies (Reproduced in Appendix I)

With reference to the above estimates, the writer has examined the resources from a mathematical viewpoint and found them to be reliable and relevant. Further mathematical manipulation of the intercepts, removing lower grade blocks, permits the designation of a much lower tonnage but with higher grade. The following table

Totals	YEAR	TONNAGE	РВ	ZN	AG	GMV\$	GMV\$
	<del></del>	tonnes	%	%	oz/t	gross US\$	Can\$
ORIGINAL	1991	15,317,523	3.23	3.04	1.97	\$80.45	\$100.5
\$50 Can Cut	2004	13,007,197	3.54	3.33	2.17	\$78.27	\$104.3
\$75 Can Cut	2004	8,334,350	4.41	4.12	2.55	\$96.33	\$128.4
\$100 Can Cut	2004	6,097,452	4.94	4.62	3.03	\$108.89	\$145.1
Underground	1991	4,136,705	6.67	4.62	3.11	\$124.85	\$173.4

A similar exercise has not been done for the East zone. (Note, for polymetallic mineral deposits, Gross Metal Value is an accepted mathematical method for estimating cutoff grades and overall value estimations).

The resource estimated are best classified as inferred mineral resources, considering that the many separate mineralized zones do not always correlate from drill hole to drill hole and that drill spacing (approximately 50 meters at the West Zone, but 100 meters at the East zone) is not considered adequate by the writer to conform with the "indicated" definition. Further drilling is needed to upgrade the reliability of the estimates in the respective zones. A due diligence examination of Billiton's resource estimates is contained in an Appendix

# OTHER RELEVANT DATA AND INFORMATION

# **Environmental Considerations**

In 1991 Archer Cathro and Billiton Canada obtained approval of the Resource Management office through a <u>Land Use Permit</u>; however, work within the claim boundaries has to date been undertaken through the regulations of the Quartz Mining Act (1924) which require no extra permitting. Low impact activities, such as prospecting, line cutting, geochemical and geophysical surveys are generally permitted without delay.

Water quality surveys were initiated in 1990 and hydrometric monitoring in 1991. These studies have consistently shown that there are no water quality anomalies in the surface waters draining the Blende property and heavy metal concentrations continue to be low or non-detectable. This is directly related to the carbonate rock which hosts all mineralization on the Blende property and effectively buffers the pH of streams draining the area.

The potential for any appreciable acid drainage from normal exploration activities is therefore considered to be minimal. If more advanced development activities are contemplated in the future, additional environmental studies will likely be required. A minimum of two years data is required for evaluation of physical, chemical and biological features for mine development purposes.

# Aboriginal Concerns

(Figure 22)

The following paragraphs outline the position of the First Nation of Nacho Nyak Dun, from their website (July 2004)

The First Nation of Nacho Nyak Dun represents the most northerly community of the Northern Tutchone language and culture group. The NND First Nation resides in the community of Mayo, Yukon, a town that had its beginnings during the boom years of the various silver mines in the area. Mayo was serviced by sternwheeler boats until the Klondike Highway/Silver Trail was built in the 1950's. The Nacho Nyak Dun has a number of members who claim Gwichin ancestry from the north and Dene ancestry from the east as well as their Northern Tutchone ancestry.

The *Nacho Nyak Dun* in the Mayo area are closely affiliated with the adjoining Northern Tutchone First Nations of Selkirk at Pelly Crossing and the Little Salmon Carmacks First Nation at Carmacks. The three First Nations form the Northern Tutchone Tribal Council, an organization which deals with matters and issues that affect them by sharing their vision and resources. The First Nation has been very active in the Land Claims movement since its beginnings in 1973. Members of the Nacho Nyak Dun First Nation were instrumental in helping to guide the Council of Yukon First Nations and its member First Nations to their 1993 agreements.

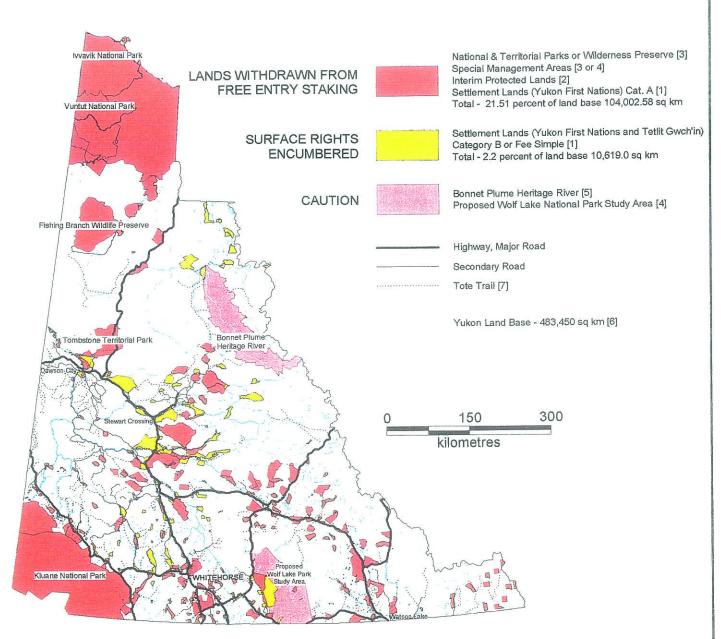
The NND today has a membership of 435. As a self-governing First Nation, the Nacho Nyak Dun has the ability to make laws on behalf of their citizens and their lands. Under the land claims agreement, the First Nation now owns 1830 square miles of settlement lands and will receive \$14,554.654.00 over 15 years. The First Nation has been actively involved in affairs of the Mayo community, attempting to promote a better, healthier lifestyle for its future generations and a strong economy based on its rich natural resources. The Blende property lies north and east of one of the large settlement land blocks. This block could contain additional zinc-lead-silver deposits. The Chief of the bans is Chief Robert Hager, Box 220, Mayo, Yukon, MOB 1MO, Ph: (867) 996-2265, Fax: (867) 996-2107, e-mail <a href="mailto:nnd@yknet.yk.ca">nnd@yknet.yk.ca</a>

# The Village of Mayo

The Village of Mayo was established in 1903 and Incorporated 1984. Mayo, Yukon is located in the central part of the Yukon Territory, which is in the Na Cho Nyak Dun traditional territory. The highway serving our region connects the communities of Stewart Crossing, Mayo, Keno City, and the mining ghost town of Elsa. The Village of Mayo offers services, including two motels, eating facilities, post office, liquor store, propane and gas, grocery store, swimming pool, nursing station, RCMP, airport, and float plane services. There is also a lodge located at Halfway Lakes, 26 km north of Mayo. Mayor is Mayor Shanon Cooper, E-mail: <a href="mayo@yt.sympatico.ca">mayo@yt.sympatico.ca</a>. Mailing Address P.O. Box 160, Mayo, Yukon, Y0B 1M0 Phone (867) 996–2317 Fax (867) 996–2907



# **Land Status Map** Yukon Chamber of Mines



The Yukon Chamber of Mines assumes no responsibility for errors or omissons in this map. Users are urged to consult Yukon claim maps and Y.T.G. Department of Renewable Resources for information on specific areas.

#### Sources

[1] Umbrella Final Agreement (CYI) [2] Land Quantum History and Allocation (Land Claims Secretariat, Y.T.G.) [3] Renewable Resources, Y.T.G.

- [4] Digitized Polygons (Ec. Dev.)
- [5] Digitized Polygons (Y.C. Mines)
- Yukon Statistics Booklet
- [6] Yukon Statistics Booklet[7] Digitized Lines (Y.C. Mines)



Yukon Chamber of Mines 3151-B 3rd Avenue Whitehorse, YT Y1A 1G1

December 21, 2000

Winter Trail Access

(Figures 3, 19)

The Federal Government guarantees a right of way to mineral lands and so application was made by Archer Cathro and Billiton for an access route through this area. A winter trail was then constructed from the Beaver River along Williams Creek for about 8 kilometers to the property. This was completed in November, 1991 and the trail now establishes the easternmost boundary of the Mayo (Na Cho Nyak Dun) land claim. This trail will assist in any future transportation of heavy equipment to and from the property and could be upgraded to a haulage road. Map 3A shows the mineral claims, Indian land claim and the winter trail.

The writer is not aware of any material fact or material change with respect to the subject matter of the technical report which is not reflected in the technical report, the omission of which would make the technical report misleading.

# INTERPRETATION AND CONCLUSIONS

The Blende property 75 km north of Elsa Yukon Territory has a known resource of vein-breccia hosted zinc-lead-silver mineralization in two zones as follows:

Mineral Resources from 1991 Billiton Report

	irces from 1991 bit		
RESOURCE	ZINC	LEAD	SILVER
15,300,000	3.04	3.23	67.5
	3.05	1.31	15.1
	3.04	2.80	56.0
	RESOURCE 15,300,000 4,300,000 19,600,000	15,300,000 3.04 4,300,000 3.05	15,300,000 3.04 3.23 4,300,000 3.05 1.31

Although initially explored as an open-pit target, management of Eagle Plains and Shoshone feel that there is good potential to develop the property as an underground operation. Numerous high-grade intersections have been reported by past operators, including: (amongst others of lower value)

Hole 88–02, which assayed 282 g/t (8.22 oz/t) silver, 12.2% lead, and 4.4% zinc over 19.8m from a depth of 70.7 to 90.5m.

Hole 88-03, which returned 8.5m grading 550.1 g/t (16.04 oz/t) silver, 15.3% lead and 4.6% zinc from 118.0 to 126.5m, and hole 90-15 intersected 9.5m grading 351.2 g/t (10.24 oz/t) silver, 14.11% lead, and 6.59% zinc from 60.1 to 69.6m.

A brief mathematical exercise by the writer removed various mineralized blocks from the overall resource tabulation, using higher Gross Metal Value ("GMV) cutoffs, resulting in reduced tonnages with higher grades. In 1991, Billiton had already anticipated exploring an underground resource which had 4.1 million tonnes grading 6.67% lead, 4.62 % zinc, and 3.11 oz/ton (106.6 grams/tonne) silver.

Step-out drilling in 1994 confirmed the continuation of good grade mineralization westward from the previous limit of the West Zone, with the addition of significant copper values:

Hole 94-81 contained 14.9m of mineralization which assayed 228.4 g/t (6.66 oz/t) silver, 9.71% lead, 5.48% zinc, and 0.78% copper from 9.2m to 24.1m,

Winter Trail Access

(Figures 3, 19)

The Federal Government guarantees a right of way to mineral lands and so application was made by Archer Cathro and Billiton for an access route through this area. A winter trail was then constructed from the Beaver River along Williams Creek for about 8 kilometers to the property. This was completed in November, 1991 and the trail now establishes the easternmost boundary of the Mayo (Na Cho Nyak Dun) land claim. This trail will assist in any future transportation of heavy equipment to and from the property and could be upgraded to a haulage road. Map 3A shows the mineral claims, Indian land claim and the winter trail.

The writer is not aware of any material fact or material change with respect to the subject matter of the technical report which is not reflected in the technical report, the omission of which would make the technical report misleading.

# INTERPRETATION AND CONCLUSIONS

The Blende property 75 km north of Elsa Yukon Territory has a known resource of vein-breccia hosted zinc-lead-silver mineralization in two zones as follows:

Mineral Resources from 1991 Billiton Report

	Mineral Resou	irces from 1991 Bil	illon Report	
ZONE	RESOURCE	ZINC	LEAD	SILVER
West Zone	15,300,000	3.04	3.23	67.5
	4,300,000	3.05	1.31	15.1
East Zone	19,600,000	3.04	2.80	56.0
TOTALS	19,600,000	5.01		

Although initially explored as an open-pit target, management of Eagle Plains and Shoshone feel that there is good potential to develop the property as an underground operation. Numerous high-grade intersections have been reported by past operators, including: (amongst others of lower value)

Hole 88–02, which assayed 282 g/t (8.22 oz/t) silver, 12.2% lead, and 4.4% zinc over 19.8m from a depth of 70.7 to 90.5m.

Hole 88-03, which returned 8.5m grading 550.1 g/t (16.04 oz/t) silver, 15.3% lead and 4.6% zinc from 118.0 to 126.5m, and hole 90-15 intersected 9.5m grading 351.2 g/t (10.24 oz/t) silver, 14.11% lead, and 6.59% zinc from 60.1 to 69.6m.

A brief mathematical exercise by the writer removed various mineralized blocks from the overall resource tabulation, using higher Gross Metal Value ("GMV) cutoffs, resulting in reduced tonnages with higher grades. In 1991, Billiton had already anticipated exploring an underground resource which had 4.1 million tonnes grading 6.67% lead, 4.62 % zinc, and 3.11 oz/ton (106.6 grams/tonne) silver.

Step-out drilling in 1994 confirmed the continuation of ore-grade mineralization westward from the previous limit of the West Zone, with the addition of significant copper values:

- Hole 94-81 contained 14.9m of mineralization which assayed 228.4 g/t (6.66 oz/t) silver, 9.71% lead,
   5.48% zinc, and 0.78% copper from 9.2m to 24.1m,
- Hole 94-84 intersected 8.5m which returned 136.1g/t (3.97 oz/t) silver, 6.74% lead, 3.65% zinc, and

2.43% copper from 45.5-54.0m.

These results were later than the Billiton resource study and have not been factored in to the stated resource.

At present metal prices, the Blende deposit, at least the larger, lower grade pittable tonnage, is not economic. However, the economics should be re-examined from the viewpoint of a higher grade, underground operation to take advantage of the several high grade sections. A number of high grade silver intercepts were seen in some of the deeper holes, and these are unrelated to any significant lead-zinc content. The possibility exists for zonation at the property, and deeper favourable limy horizons may be present. In addition, copper rich zones, particularly at the lesser-explored west end of the West deposit, may indicate zonation associated with one or more of the mafic Hart River sills.

Of considerable interest is the recent discovery of higher grade zinc mineralization in the Far East zone, which has not been drilled. Thus there is potential to discover additional tonnage of mineralization which could improve the economics. A number of world class zinc mines are closing or have recently been closed (Sullivan, Nanisivik in Canada) and there is evidence that a zinc shortage could affect future prices.

The Blende property is a property of merit deserving of additional exploration efforts.

## RECOMMENDATIONS

For the 2004 season, the following recommendations are made:

# Phase I contemplates:

- Prior to the field program, Base Map preparation and compilation of Geochemical and Geophysical
- Preparation of a good drillhole plan on a topographic base
- On arrival at the property, building of a small but comfortable camp
- general prospecting and mapping of all zones. GPS surveying of drill roads, collars, pads topographic points
- Placing of claim tags on the new posts\*
- Staking Far East zone, surveying in points of interest\*
- Mapping and sampling Far East zone (soils and rocks, where possible) \*
- Relog and re-sample some holes
- Planning for a second phase major Drill program
- Possible winter haul of fuel, camp supplies when the area is frozen.
- (The tasks noted with an asterisk are being completed during the first week of August 2004)

Phase II contemplates an infill and step-out drill program of 3000-5000 meters of NQ drilling. Some drill pads are already in place for extending drilling to the northwest. Infill drilling would provide critical data on continuity of mineralization. A comprehensive drill plan could be completed during the winter months.

# SUGGESTED EXPLORATION BUDGET

В	EXPLORA SHOSHONE SILV llende Zinc-Lead	TION BUDGETS /ER MINING COM I–Silver Property	MPANY /, Yukon		
Phase I Budget 2004				CANIC:	US\$
DESCRIPTION	UNITS	RATE1	RATE2	CAN\$	034
	30	500		\$15,000	\$11,250
Geological supervision		300	<u>:</u>	\$27,000	\$20,250
Crew, prospectors, samplers	30	300		\$5,000	\$3,750
Mobilization of crew		<u> </u>		\$10,000	\$7,500
Camp and Equipment		<u> </u>	100	\$6,000	\$4,500
Vehicle rentals, Car ATV	30	2	100		\$40,500
Helicopter mob and support	30	1.5	1200	\$54,000	
Base Map preparation				\$5,000	\$3,750
Data compilation			<u> </u>	\$10,000	\$7,500
Samples	500	25		\$12,500	\$9,375
Food and Fuel	30	5	60	\$9,000	\$6,750
Communication		†		\$3,000	\$2,250
		i i		\$5,000	\$3,750
Filing work		<del> </del>		\$10,000	\$7,500
Reports and Maps		- <del> </del>		\$5,000	\$3,750
Scout winter Trail		- <del></del>		\$75,000	\$56,250
Fuel and supply haul winter				\$5,000	\$3,750
Permits					\$(
					 \$(
	<u> </u>	<u> </u>			\$(
		-		\$256,500	\$192,37
Subtotal				\$17,955	\$13,466
GST on above items			<del>-</del>	\$25,650	\$19,23
Contingency 10%				\$300,105	\$225,07
TOTAL BUDGET ESTIMATE			rounded	\$300,000	\$225,00

NOTE: Although care has been taken in the preparation of these estimates, the writer does not guarantee that the above described program can be completed for the estimated costs. Additional quotes and budgeting should be done when financing is in place prior to the start of the program, when quotes can be obtained for supplies and services. Deviations from the suggested program can be made by the field geologist in charge, depending on current conditions such as weather

Part of the above program is being completed (during the first week of August) on behalf of Shoshone by a small exploration crew under the supervision of Tim Termuende, P.Geo. This program will include placing tags on the claims staked in 2004, staking the Far East Zone, and general prospecting and sampling. Cost of the preliminary program is not known at this time)

The second phase of exploration is budgeted as follows:

	Phase II E		05		LICA
DESCRIPTION	UNITS	RATE1	RATE2	CAN\$	US\$
DECOMM TOX					
Geological supervision	60	500		\$30,000	\$22,500
Crew, prospectors, samplers	60	300	3	\$54,000	\$40,500
Mobilization of crew				\$5,000	\$3,750
Camp and Equipment	····· <del>!</del> ······			\$20,000	\$15,000
	30	3	100	\$9,000	\$6,750
Vehicle rentals, Car ATV	80	1.5	1200	\$144,000	\$108,000
Helicopter mob and support	5000	1	125	\$625,000	\$468,750
Diamond Drilling, 5000 m	5000	ļ		\$50,000	\$37,500
Bulldozer, drill pads roads		ļ	70	\$25,200	\$18,900
Food and Fuel	60	0		\$10,000	\$7,500
Data compilation				\$87,500	\$65,625
Samples	2500	35			\$3,750
Communication				\$5,000	\$7,500
Filing work			<u> </u>	\$10,000	027 9
Reports and Maps				\$20,000	\$15,000
Economic studies				\$10,000	\$7,500
Permits				\$5,000	\$3,750
Camp clean up, rehab		11		\$10,000	\$7,500
Camp clean up, remain		· · · · · · · · · · · · · · · · · · ·			\$0
					\$0
Subtotal				\$1,119,700	\$839,775
GST on above items				\$78,379	\$58,784
				\$111,970	\$83,978
Contingency 10% TOTAL BUDGET ESTIMATE				\$1,310,049	\$982,537
		rounded		\$1,300,000	\$980,000

NOTE: Although care has been taken in the preparation of these estimates, the writer does not guarantee that the above described program can be completed for the estimated costs. Additional quotes and budgeting should be done when financing is in place prior to the start of the program, when quotes can be obtained for supplies and services. Deviations from the suggested program can be made by the field geologist in charge, depending on current conditions such as weather

respectfully submitted

B. J. PRICE GEOLOGICAL CONSULTANTS, INC.

ner

Barry J. Price, M.Sc., P.Geb Qualified Person

August 15, 2004.

PROVINCE

### REFERENCES

Abbott, J.G., Gordey, S.P., Roots, C. and Turner, R.J., 1990, Selwyn-Wernecke cross-sections, Yukon: a joint Indian and Northern Affairs Canada – Geological Survey of Canada project. In: Current Research, Part E, Paper 90–1E, Geological Survey of Canada, p. 1–3.

Abbott, J.G., 1990, Geology of the Mt. Westman map area (106D/1). Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1990-1.

Abbott, Grant (1997), Geology of the Upper Hart River Area, Eastern Ogilvie Mountains, Yukon Territory. Bulletin 9, Exploration and Geological Services Division, Yukon Region, Indian and Northern Affairs Canada.

Bell, R.T., 1978, Breccias and uranium mineralization in the Wernecke Mountains, Yukon-a progress report. In: Current Research, Paper 78–1A, Geological Survey of Canada, p. 317–322.

Bell, R.T., 1986a, Geological map of northeastern Wernecke Mountains, Yukon Territory. Geological Survey of Canada, Open-File 1207.

Bell, R.T., 1986b, Megabreccias in northeastern Wernecke Mountains, Yukon Territory. In: Current Research, Paper 86–1A, Geological Survey of Canada, p. 375–384.

Boyle, R.W., 1965, Geology - Keno Hill-Galena Hill Area. Geological Survey of Canada, Map 1147A. NTS 105M, 106D

Cecile, M.P., 1982, The lower Paleozoic Misty Creek embayment, Selwyn Basin, Yukon and Northwest Territories. Geological Survey of Canada, Bulletin 335, 78 p. (includes map). NTS 105M, 105N, 105O, 106B, 106C, 106D, 106E, 106F

Delaney, G.D., 1978, Stratigraphic investigations of the lowermost succession of Proterozoic rocks, northern Wernecke Mountains, Yukon Territory. Open File 1978–10, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada (report and maps).NTS 106C, 106D, 106F

Delaney, G.D., 1981, The mid-Proterozoic Wernecke Supergroup, Wernecke Mountains, Yukon Territory. In: Campbell, F.H.A. (ed.), Proterozoic Basins of Canada, Geological Survey of Canada, Paper 81–10, p. 1–23.

Gabrielse, H. and Yorath, C.J., (eds.), 1991, Geology of the Cordilleran Orogen in Canada. Geological Survey of Canada, No. 4, 844 p.

Geological Survey of Canada, Regional Stream Sediment and Water Geochemical Reconnaissance Data – NTS 106D, parts of 106C, 106E, 106F. Geological Survey of Canada, Open File 2175.

Green, L.H., 1970a, Geology of McQuesten Lake, Yukon Territory. Geological Survey of Canada, Map 1269A, scale 1:50,000.

Green, L.H., 1970b, Geology of Scougale Creek, Yukon Territory. Geological Survey of Canada, Map 1269A, scale 1:50,000.

Green, L.H., 1972, Geology of Nash Creek, Larsen Creek, and Dawson Creek map-areas, Yukon Territory. Geological Survey of Canada, Memoir 364 (includes map 1282A).

Heginbottom, J.A. and Radburn, L.K. (comp.), 1992, Permafrost and ground ice conditions of northwestern

Canada. Geological Survey of Canada, Map 1691A, scale 1:1,000,000.

Indian and Northern Affairs, 1995, Yukon MinFile 106D - Nash Creek. Exploration and Geological Services Division, Yukon, Indian and Northern Affairs, Canada.

Lister, D., and Eaton, D., (1989); Blende Property 1989 Final Report. Assessment Report No 1092795, for NDU Resources Ltd and Billiton Metals Canada Inc., dated December 1989

Mustard, P.S., Roots, C.F. and Donaldson, J.A., 1990, Stratigraphy of the middle Proterozoic Gillespie Lake Group in the southern Wernecke Mountains, Yukon. In: Current Research, Part E, Paper 90-1E, Geological Survey of Canada, p. 43-53.

Norris, D.K., 1984, Geology of the northern Yukon and northwestern District of MacKenzie. Geological Survey of Canada, Map 1581A, scale 1:500,000. NTS 116SE, 116NE, 106SW, 106NW, 117SE, 107SW

Robinson M, Godwin C I, 1995 - Genesis of the Blende Carbonate-hosted Zn-Pb-Ag deposit, North-central Yukon Territory: geologic, fluid inclusion and isotopic constraints; in Econ. Geol. v90 pp 369-384

Roots, C., 1990, Geology of 106D/8 and 106D/7 (east half) map areas. Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, Open File 1990-3.

Thorkelson, D.J. and Wallace, C.A., 1993, Geological map of Slats Creek (106D/16) map area, Wernecke Mountains, Yukon. Exploration and Geological Services Division, Yukon, Indian and Northern Affairs, Canada, Canada/Yukon Economic Development Agreement, Geoscience Open File 1993-2 (G) (scale 1:50,000).

Vernon, P. and Hughes, O.L., 1966, Surficial geology, Dawson, Larsen Creek and Nash Creek map-areas. Geological Survey of Canada, Bulletin 136, 25 p.

Vernon, P. and Hughes, O.L., 1965, Surficial Geology, Nash Creek, Yukon Territory. Geological Survey of Canada, Map 1172A, scale 1:253,440.

Wheeler, J.O., Brookfield, A.J., Gabrielse, H., Monger, J.W.H., Tipper, H.W. and Woodsworth, G.J., 1991, Terrane map of the Canadian Cordillera. Geological Survey of Canada, Map 1713.

Wheeler, J.O. and McFeely, P., 1991, Tectonic Assemblage map of the Canadian Cordillera and adjacent parts of the United States of America. Geological Survey of Canada, Map 1712A.

Williams, G.K., 1988, A review of the Bonnet Plume area, east-central Yukon Territory (including Snake River, Solo Creek, Noisy Creek and Royal Creek areas). Geological Survey of Canada, Open File Report 1742. NTS 106C, 106D, 106E, 106F

### Assessment Reports

CYPRUS ANVIL MINING CORP., 1975. Assessment Report #090076 by W.J. Roberts and P.Dean.

ARCHER CATHRO AND ASSOCIATES (1981) LTD, Jun/95. Assessment Report #093288 by W.D. Eaton.

ARCHER CATHRO AND ASSOCIATES (1981) LTD, 1982. Assessment Report #090988 by W.D. Eaton and A.R. Archer.

ARCHER CATHRO AND ASSOCIATES (1981) LTD, 1983. Assessment Report #091475 by W.D.Eaton. ARCHER CATHRO AND ASSOCIATES (1981) LTD, 1984. Assessment Report #091586 by R.C.Carne and R.J. Cathro.

CANADIAN NICKEL COMPANY LTD, 1985. Assessment Report #091665 by W. Greneweg.

NDU RESOURCES LTD, 1988. Assessment Report #062294 by J.P. Franzen.

NDU RESOURCES LTD, 1989. Assessment Report #092683 by M. Phillips.

NDU RESOURCES LTD, 1989. Assessment Report #092684 by J. Franzen.

NDU RESOURCES LTD, 1989. Assessment Report #092795 by W.D. Eaton.

NDU RESOURCES LTD, 1991. Assessment Report #092942 by W.D. Eaton.

#### Other Sources

EAGLE PLAINS RESOURCES LTD, News Release, 02 Apr/2002.

GEORGE CROSS NEWS LETTER, 24 Aug/90; 6 Dec/90; 30 April/91; 30 May/91; 25 Jun/91; 31 Jul/91; 8 Aug/91; 27 Nov/91; 16 Sep/95.

MINERAL INDUSTRY REPORT, 1975. Yukon Territory, p. 60.

NORTHERN MINER, 29 Jul/91, p. 19.

ROOTS, C.F., 1990. New Geological maps for Southern Wernecke Mountains, Yukon. Geological Survey of Canada, Paper 90–1E, p. 5–13.

YUKON MINING AND EXPLORATION OVERVIEW, 1988, p. 31; 1989, p. 7. YUKON EXPLORATION AND GEOLOGY, 1981 p. 195–196; 1983 p. 233–234. YUKON EXPLORATION, 1985–1986, p. 296; 1990, p. 8, 11, 17, 19–20; 1991, p. 6, 8, 12.

References: Nash Creek Map Area - N.T.S. 106D

# CERTIFICATE OF BARRY J. PRICE, P. GEO.

I, Barry James Price, hereby certify that:

lam an independent Consulting Geologist and Professional Geoscientist residing at 820 East 14th Street, North Vancouver B.C., with my office at Ste 1028 – 470 Granville Street, Vancouver, B.C., V6C 1V5, (Telephone: 682–1501)

I graduated from University of British Columbia, Vancouver B.C., in 1965 with a Bachelors Degree in Science (B.Sc.) Honours, in the field of Geology, and received a further Degree of Master of Science (M.Sc.) in Economic Geology from the same University in 1972.

I have practiced my profession as a Geologist for the past 35 years since graduation, in the fields of Mining Exploration, Oil and Gas Exploration, and Geological Consulting. I have written a considerable number of Qualifying Reports, Technical Reports and Opinions of Value for Junior companies in the past 15 years.

I have worked in Canada, the United States of America, in Mexico, The Republic of the Phillippines, Indonesia, Cuba, Ecuador, Panama, Nicaragua, Tajikistan, The People's Republic of China, and the Republic of South Africa, Chile, and Argentina.

My specific experience concerning the subject deposit is related to work done for another client on a Mississippi Valley type deposit in Missouri, and on considerable work done in the Mackenzie Mountains in 1965 for Chevron Oil and Gas Ltd., in 1970 for Archer Cathro and Associates Ltd. and for other clients since that time.

l am a registered as a Professional Geoscientist (P. Geo.) in the Province of British Columbia (No 19810 – 1992) and I am entitled to use the Seal, which has been affixed to this report.

I have based this report on a visit to the subject property from June 20–21, 2004, a review of all available data concerning the subject property supplied by the property vendors and on other materials obtained from the literature and from web sites.

For the purposes of this Technical Report I am a Qualified Person as defined in National Instrument 43–101. I have read the Policy and this report is prepared in compliance with its provisions.

I have no direct or indirect interest in the property which is the subject of this report I do not hold, directly or indirectly, any shares in Shoshone Silver Mining Company., nor in Eagle Plains Resources Ltd., nor in any related companies, nor do I intend to acquire any such shares, in full compliance with all provisions of National Instrument 43–101.

I do not hold any interest, directly or indirectly, in any claims within the Yukon Territory. I will receive only normal consulting fees for the preparation of this report.

I am not aware of any material fact or material change with respect to the subject matter of the technical report which is not reflected in the technical report, the omission of which would make the technical report misleading.

PROVINCE OF B. J. PRICE

BRITISH COLUMBIA SCIEN

Dated at Vancouver B.C. this 15th day of August 2004

respectfully submitted

Barry James Price, M.Sc., P. Geo., Qualified Person

### LETTER OF AUTHORIZATION

B.J. PRICE GEOLOGICAL CONSULTANTS INC.
Barry James Price, M.Sc., P. GEO., Consulting Geologist
Ste 1028 - 470 Granville St. Vancouver B.C., V6C 1V5
TEL: 604-682-1501 FAX: 604-684-4297

bpricegeol@telus.net

August 15, 2004

#### DIRECTORS

SHOSHONE SILVER MINING COMPANY P.O. Box 2011, Coeur d'Alene, ID 83816 Office Telephone: 208–666–4070 Office Fax: 208–676–1629

#### Gentlemen

With this letter is transmitted your signed and stamped copies of my Draft report., entitled: "Technical Report BLENDE ZINC – LEAD – SILVER DEPOSIT, Beaver River Area, Nash Creek Map Area, Yukon Territory" dated March 25, 2004. You may use this report for any corporate purpose, provided that any material extracted from the report is kept in proper context.

PHOVINCE

Yours sincerely.

B.J. Price Geological Consultants Inc.

per:

Barry J. Price, M.Sc., P. Geo.

**Oualified Person** 

### APPENDIX I RESOURCE AND RESERVE DEFINITIONS

### CIM Resource and Reserve Definitions

Technical Reports dealing with estimates of Mineral Resources and Mineral Reserves must use only the terms and the definitions contained herein. Figure 1, displays the relationship between the Mineral Resource and Mineral Reserve categories.

The CIM Standards provide for a direct relationship between Indicated Mineral Resources and Probable Mineral Reserves and between Measured Mineral Resources and Proven Mineral Reserves. In other words, the level of geoscientific confidence for Probable Mineral Reserves is the same as that required for the in situ determination of Indicated Mineral Resources and for Proven Mineral Reserves is the same as that required for the in situ determination of Measured Mineral Resources.

### Mineral Resource

Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource.

A Mineral Resource is a concentration or occurrence of natural, solid, inorganic or fossilized organic material in or on the Earth's crust in such form and quantity and of such a grade or quality that it has reasonable prospects for economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge.

The term Mineral Resource covers mineralization and natural material of intrinsic economic interest which has been identified and estimated through exploration and sampling and within which Mineral Reserves may subsequently be defined by the consideration and application of technical, economic, legal, environmental, socio-economic and governmental factors. The phrase `reasonable prospects for economic extraction implies a judgement by the Qualified Person in respect of the technical and economic factors likely to influence the prospect of economic extraction. A Mineral Resource is an inventory of mineralization that under realistically assumed and justifiable technical and economic conditions, might become economically extractable. These assumptions must be presented explicitly in both public and technical reports.

### Inferred Mineral Resource

An `Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade or quality can be estimated on the basis of geological evidence and limited sampling and reasonably assumed, but not verified, geological and grade continuity. The estimate is based on limited information and sampling gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes.

Due to the uncertainty which may attach to Inferred Mineral Resources, it cannot be assumed that all or any part of an Inferred Mineral Resource will be upgraded to an Indicated or Measured Mineral Resource as a result of continued exploration. Confidence in the estimate is insufficient to allow the meaningful application of technical and economic parameters or to enable an evaluation of economic viability worthy of public disclosure. Inferred Mineral Resources must be excluded from estimates forming the basis of feasibility or other economic studies.

### Indicated Mineral Resource

An `Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics, can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed.

Mineralization may be classified as an Indicated Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such as to allow confident interpretation of the geological framework and to reasonably assume the continuity of mineralization. The Qualified Person must recognize the importance of the Indicated Mineral Resource category to the advancement of the feasibility of the project. An Indicated Mineral Resource estimate is of sufficient quality to support a Preliminary Feasibility Study which can serve as the basis for major development decisions.

### Measured Mineral Resource

A `Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade or quality, densities, shape, physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters, to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough to confirm both geological and grade continuity.

Mineralization or other natural material of economic interest may be classified as a Measured Mineral Resource by the Qualified Person when the nature, quality, quantity and distribution of data are such that the tonnage and grade of the mineralization can be estimated to within close limits and that variation from the estimate would not significantly affect potential economic viability. This category requires a high level of confidence in, and understanding of, the geology and controls of the mineral deposit.

### Mineral Reserve

Mineral Reserves are sub-divided in order of increasing confidence into Probable Mineral Reserves and Proven Mineral Reserves. A Probable Mineral Reserve has a lower level of confidence than a Proven Mineral Reserve.

A Mineral Reserve is the economically mineable part of a Measured or Indicated Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined.

Mineral Reserves are those parts of Mineral Resources which, after the application of all mining factors, result in an estimated tonnage and grade which, in the opinion of the Qualified Person(s) making the estimates, is the basis of an economically viable project after taking account of all relevant processing, metallurgical, economic, marketing, legal, environment, socio-economic and government factors. Mineral Reserves are inclusive of diluting material that will be mined in conjunction with the Mineral Reserves and delivered to the treatment plant or equivalent facility. The term `Mineral Reserve' need not necessarily signify that extraction facilities are in place or operative or that all governmental approvals have been received. It does signify that there are reasonable expectations of such approvals.

### Probable Mineral Reserve

A `Probable Mineral Reserve' is the economically mineable part of an Indicated, and in some circumstances a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study.

This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified.

### Proven Mineral Reserve

A `Proven Mineral Reserve' is the economically mineable part of a Measured Mineral Resource demonstrated by at least a Preliminary Feasibility Study. This Study must include adequate information on mining, processing, metallurgical, economic, and other relevant factors that demonstrate, at the time of reporting, that economic extraction is justified.

Application of the Proven Mineral reserve category implies that the Qualified Person has the highest degree of confidence in the estimate with the consequent expectation in the minds of the readers of the report. The term should be restricted to that part of the deposit where production planning is taking place and for which any variation in the estimate would not significantly affect potential economic viability.

### Preliminary Feasibility Study

The CIM Standards describe completion of a Preliminary Feasibility Study as the minimum prerequisite for the conversion of Mineral Resources to Mineral Reserves. A Preliminary Feasibility Study is a comprehensive study of the viability of a mineral project that has advanced to a stage where the mining method, in the case of underground mining, or the pit configuration, in the case of an open pit, has been established, and where an effective method of mineral processing has been determined. This study must include a financial analysis based on reasonable assumptions of technical, engineering, operating, and economic factors and evaluation of other relevant factors which are sufficient for a Qualified Person acting reasonably, to determine if all or part of the Mineral Resource may be classified as a Mineral Reserve.

(Source CIM Website)

### APPENDIX II DUE DILIGENCE

- A. Laboratory procedures (Chemex 1991)
- B. Review of several drill hole intercepts
- C. Table of Resources
- D. Sketch maps with GPS points
- E. Estimate of Expenditures at Blende
- F. Selected Drill Hole Intercepts
- G. Comparable Yukon Silver Lead Zinc Deposits
- H. A typical Soil Geochemical Profile At Blende

1988 DRILL HOLES BLENDE PROPERTY

% %	17.16	7.93	8.87	5.34	2.21	7.80	2.02	3.48	0.39	1.59	1.10	7.73	6.32	1.07	2.61	30.80				
AG F oz/ton	4.49	2.57	1.78	0.34	0.20	1.12	0.42	0.43	0.09	0.47	0.22	1.33	1.23	0.15	0.36	6.17	6.65	6.70	0.8	6.7
NZ %	5.96	3.04	4.34	4.13	1.67	4.69	0.85	2.29	0.19	0.51	0.52	4.25	3.14	0.67	1.70	13.70	1.34	1.36	1.7	1.7
PB %		4.89															3.23	3.33	3.0	3.2
	-	. `																3.49	4.1	3.5
WIDTH	6.4 6.3	, <u>_</u>	7. 17.	1.6	8	7.5	7.5	1.9	15	1.5	1.2	<u></u>	8	10.00	6.0	1.6	24.7	:	9.4	24.7
<u>Б</u> Е	4.3	0, 1	, co	10.4	100	13.7	15.2	17.1	- 86	20.2	21.3	23.0	25.0	26.5	27.4	29.0	9		7	0
FROM	0 ,	4. ო ა. თ	7.0	) «	2.0	10.7	13.7	- C 4	17.7	- 007	20.4	24.2	23.7	25.2	2.0.0 78.6	27.4	4.12		13	4.3 29.0
HOLE	1988-1	1988-1	1900-1	1088-1	10001	1 0000	1000	1900-1	1,000,1	1,000-1	1-000-1	1900-1	1800-1	1-000-1	1900-1	1960-1	1.0001	D^47	vvid.	

PB+ZN %		7	~		9	2			~	00	50	~	0.1	C		ο.	et-	89	72	က	9	5		D (	ဘ	
		11.32	27.6	1.75	13.1	26.12	3.37	2.44	1.08	22.5	22.2	2.03	3.25	8 00	0.0	4. (	8.6	14.	10	5.1	1.3	5.0	U	0 1	1.5	
AG oz/ton	VERY																									
1	RECOVERY	2.95	10.80	0.31	1.43	3.85	0.47	0.52	0.19	6.27	3.24	0.35	0.73	0.74	- C	1.95	3.53	6.56	4.05	1.46	09.0	251	i ,	1.90	0.51	
N %	ORE																									
	NO CORE	4.45	6.41	0.91	7.74	16.30	1.86	0.81	0.58	7.29	13.20	1.22	1.59	CO 7	4.92	1.83	2.92	4.69	4.42	2.96	0.46	1 76		2.53	0.61	
PB %																										
	the state and the state	6.87	21.20	0.84	5.42	9.82	1.51	1.63	0.50	15.30	9.00	0.81	163			3,13	5.72	10.20	6.30	2.17	06.0	000	0.73	3.36	0.98	
WIDTH									7																80	
3	4.3	4.5	1.6	7.57	1.5	1.5	1.6	1.5	10.	1.5	1.5	6.1		5 .	7.0	1.5	1.5	1.5	1.6	1.5	. σ	. 4		70	15	
일 돈																										
<b>L</b> eave	1.3	00	10.4	0 7	13.4	14.9	16.5	18.0	28.7	30.2	31.7	27.8	0,0	40.0	42.4	43.9	45.4	46.9	48.5	50.0	2 0 0	0.0	53.3	54.9	70.7	
	7		, .	•	e e.					- assu																
FROM																										
μ_	0	, c,	ά	5.0	1. 0	12.5	10.71	- 4 - 4	2 0 0	28.7	20.7	24.7	0.1.0	37.00	40.8	42.4	420	45.5 7.7.4	1.04	5 0	4 r 0 0	20.0	51.8	53.3	54.9	
HOLE	88-2	288.7	7-00	7-00	7-00	2-00 2 8 3	25.00	7-00	2-00	7-00	7-00	7-00	2-99	88-2	88-2	88-2	1 0 8	2-00	7-00	7.00	7-00	2-22	88-2	88-2	88-2	

<del>-</del>	39	25	42	95	0	0	5	47		4/	45	.62	80		20	17.53	.7	52			.7	e
6.9	21.	15.	24.	30.	1.6	9.0	9.0	24	10	17	16	10	22	0	0	17	14	22		0	16	co
4.00	13.60	9.62	15.30	19.80	0.57	3.88	2.30	SAS	0.40	12.10	7.15	3.91	7 44	04.0	3.13	8.68	3.6	6.8		2.6	ස ප	4.
1.35	3.99	3.15	6.12	7.55	0.88	3.56	4 99	1.67	10.1	7.17	2.55	2.25	000	0.20	3.01	4.66	6.4	10.3		2.9	4.4	3.0
5.56	17.40	12.10	18.30	23.40	0.72	5.44	4 08	0 0	13.80	20.30	13.90	8.37	0000	10.00	5.34	12.86	60	122	- Fe i Fe	4.0	12.3	5.3
1.5	1.6	1.5	7.	, t	. t	. <u>_</u>	 		1,5	1.6	5.0	7.		1.5	86.1	18.3	10 6	0 %	0.0	14.1	19.8	86.2
72.2	73.8	75.3	76.8	78.7	0.07	81.S	+ 0	02.30	84.4	86.0	87.5	008	2.0	90.5			44.9	0 76	51.2	54.9	90.5	90.5
7.07	72.2	73.8	7.00	76.0	70.0	70.0	9.00	81.4	82.9	84.4		0.00	0.70	89.0			c	5.4	7.97	An 8	707	6.3
C	200	0000	7-00	7-00	7-00	7-00	7-00	88-2	88-2	88-2	1 0 0	2.00	2-00	88-2	chark	5	7	olo				

우 ㅌ
7.
.2
8.
7.4
18.9
29.6
32.6
43.3
6.7.
6.09
54.0
57.0
0.09
64.6
72.2
82.9
95.1
118.0
135.9
95.1
135.9
Similar onto the Branzan 1988

Original calculations by Franzen 1988 Checked by B.J.Price Geological 2004

Exchange 0.72	69	\$38.67	411731	4 L L / 1 J L	#01./ I	\$28.4/	\$27.17 +40.01	\$40.87	\$34,65	\$67.87	\$32.04	\$59.47	\$61.33	\$34.27	\$103.78	455.22	40106	+ + 	#00°.00	/C.UZI\$	\$49.92	\$52.29	\$129.81	\$81.05	\$62.10	\$52.78	\$88.71	\$65.38	\$167.02	\$33.10	4115 93	4169 77	4 4 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	D 7
Ag	Ag(opt) GMV	4.00	5 4	14.0	0.38	0.25	0.22	0.36	0.13	0.16	0.24	0.20	0.57	0.29	233		- F	L.C.	0.17	3.90	0.30	1.09	2.36	0.93	0.97	0.33	1.36	0.33	3,46	0.82	. t.	7.7	70.0	0.18
		0.07	0.0	0.24	0.44	0.75	0.30	0.32	60.0	0.10	0.89	1.59	0.64	0.74	78.0	700	100	T.0/	0,39	0.63	1.12	0.45	1,13	0.77	1.00	0.49	1.13	5	4.97	0	1 2	0.40	J. 0.	
Zn 0.5	Zn(%) Zn0(%)	1 26	1.20	10.90	4.53	2.04	2.36	3.16	3,36	6.61	2.97	5.53	5.17		. C	. v .	5.20	6.07	6.10	5.37	4.38	3,00	7.74	5.72	1.65	4.90	2,61	4 90	8 20	1 5	0 0	7.00	3.74	3.64
	(%)O9A		40.0	0.11	0.33	0.29	0.10	0.28	0.01	0.02	0.05	0.18	0.17	7.0	5 5	4. 2 V. 2	1.14	1.17	0.02	1.27	0.17	0.52	1,05	0.47	2.40	0.10	2.46	٠ ٢	, מ מ מ מ מ	000	000	7.20	0.73	0.10
Pb 0.45		0	0.23	0.65	1.57	0.73	0.25	0.79	0.03	0.09	0.10	33	0000	0.0	0.17 110	6.70	1.88	2.60	0.17	4.83	0.48	1.75	4.25	2.03	4.42	0.20	6.05	20:0	7 7 7	רו.	T.02	7.83	10.47	0.42
uo	Tonnage Pb(%)		282,379	46,097	211,482	39,153	130.820	113.832	58,683	28 551	32 280	56,000	20,00	089,182	27,032	23,963	65,317	363,568	60,667	332.785	107.570	436 511	187,869	120.342	573 996	A9 285	35,743	7700	172,040	CO//OT	130,/2/	88,53	30,6	9
ONS erty, Yuk	cal 2004 Specific	Gravity	3.1	3.1	رب 1		ر ا <del>ر</del>			) (r		 	J. C	יי די	L	3.1	3.1	3.1	3.1	ر 1	, ( <sub>1</sub>	, v	. u	) (C	, w	ָרָ רִי קיד		7.7	ນ ເ 	3.1	3.1	3.1	3.1	3.1
RESOURCE CALCULATIONS West Zone - Blende Ag-Pb-Zn property, Yukon Billiton Resources Canada Inc.	a vocal	1000	910.9	148.7	682.2	126.3	47.00	0.724	100.3	1.00 1.00	1,00	100.0	180.9	941.6	87.2	77.3	210.7	1172.8	195.7	1072	0.070	0.75	1400.1	388	7000	0.1001	4473	115.5	399.5	605.5	421.7	285.6	744.0	350.2
OURCE CALCUL Blende Ag-Pb-Zn p Billiton Resources Canad	d by B.J.Pric Block Are	Thick	100	100	0 0	007	000	007	001	007	100	100	100	100	100	100	100	100	001	0 0	000	007	007		007	007	100	100	100	100	100	100	100	100
RESOUF	Checked b Section Bl	广	1	100 KG	9000L	9800E	38000	9900E	9900E	9900E	9900E	30066	9900E	30066	9900E	10000E	10000F	TOOOL	10000	10000	100000	10000	100001	101000	TOTOT	10100	10100E	10100E	10100E	10200E	10200E	10200E	10200F	10200E
Wes	Block No.		50	ر با ر	D21-1	B21-2	B21-3	B21-4	821-5	B21-6	B27-1	827-2	B27-3	B13-1	B13-2	B11-1	1	1 0	011-0	811-4	B11-5	B12-1	B12-2	810-1	B10-2	B10-3	B14-1	B14-2	814-3	B9-1	R9-2	1 0	0	

\$26.66	; c	4 6	jr		- 1	\$67.7	4 1	144.5	~	<u>.</u> .	~i	7.		10	8	00	6		8	-	4	1	3	3	0	N	4	2	2	7	34	33	39	35	50	26	·
0.08	0.53	47.0	1.00	4.0%	1.04	2.25	7.0	22.91	2.88	3.14	2.86	99'0	1.37	1,94	0.81	1.09	5.56	1,23	1.15	9.42	3,11	4,42	1.57	99'0	0.51	3.15	0.46	1.15	1,01	1.24	0.88	1,44	1,08	1.39	1,75	4.83	
0.32	0.08	0.55	0.53	0.43	0.62	3.26	3.81	0.01	0.04	0.61	0.04	0.05	1.65	2.43	0.89	0.78	3.22	-	0.58	5.25	1.51	1.96	0.74	0.16	0.20	1.21	0.13	90.0	00.0	0.08	0.19	0.01	0.01	1,49	0.29	0.15	
2.42	1,33	2,43	2.63	1.90	0.71	3.26	4,05	0.11	0.07	0.82	0.31	1,65	3.30	4.83	1.77	1.56	6.44	222	111	5.72	3.17	2.29	6.70	141	0,69	2,44	3,16	1,37	0.77	2.61	0.52	1.35	1.85	3.15	1.45	2.64	
0.05	0.28	0,31	1,03	1.11	2.41	1.32	0.51	0.10	2,65	1.48	0.51	0.52	1.68	2.61	0.91	060	3.96	, ,		7.76	2.70	2 C	4 4 8	3 0	0.70	2.24	0.26	0.19	0.00	0.43	1.01	0 23	030	2.30	0.72		l !
0.22	1.36	0,94	2.34	4,25	3,05	2.40	2.97	0.66	4.49	4.83	2,49	2.33	2 2 2	7.22 2.22	1 82	1 - 1 2 C Z C	7 92	7 7 7	+. 	12.07	70.0	י ע מ מ	00.0 40.7	1.7.1	2.75	7.64	1.09	1.29	2 09	1 99	1 C	1 27	1 1 54	7.0	ος 7000 1000 1000 1000 1000 1000 1000 100	7.91	1
75,609	60,791	4	59	34	55	50.71	2	62 96	413	1 3	27.70	1 4	- 1	147	7,50	1 2	77,4	ű.	-1 0	Σ 2	י ע	ĎΠ	J C	, ב ה	787 787	, I		, ~		. I	. u	50	10	jr	200	76,	5
1.	3,1	3.1	3.1	3,1	 T.		, m	. u	. v		. c	. r.	ָר הַרָּ	٠ ١٠	ე r	ή, r	ກໍເ	ກໍເ	λ) ( 	ν, ι. Τ. τ	ე (	λ) (. 	λ) (. Τ •	ν, ι. Τ. τ.	ე ი -i -		. v	. v	ָהָ רָ הַיִּ		7.0	ָהָ רִי הַיִּר		٠, د ۲	Ų C	7.0	T
243 9	196.1	249.8	199.0	317.7	476.1	1 7 7 7	739.5	ניטטי	403.E	400.1	מינים מינים	781.0	0000	370.0	310.0	746.1	391.9	233.3	103.6	255.1	401.6	199.0	1588.8	1019,4	092.9	1,707,	7.7601	27/17	0.0.0	7.427	11/8.9	0.108	1523.5	1007.0	6./077	2728.8	740.0
00	100	100	100	100	100	000	007	207	007	100	100	100	OOT	100	100	100	100	100	100	100	100	100	100	100	100	100	T T T	007	OOT	100	100	100	100	100	100	100	100
, ,	10200E	1020F	1020E	100001	10200	10000	102001	10200	10700	10200E	10200E	10200E	107001	10300E	10300E	10300E	10300E	10300E	10300E	10300E	10300E	10300E	10300E	10300E	10300E	10300E	10300E	10300	103000	10300E	10300E	10300E	10300E	10300E	10400E	10400E	10400E
1	B7-7	, 1	1 1	· L		1-099	B60-2	860-3	B60-4	B43-1	B43-2	B54-1	B54-2	*B88-1	*B88-2	*B88-3	*B88-4	*B88-5	*B88-6	*B88-7	B15-1	B15-2	B15-3	B15-4	B15-5	B6-1	B62	B6-3	B6-4	B18-1	B18-2	818-3	N	5	1	B4-2	4

																					_		T	1	_
S C	\$112.31	\$77.42	\$75.57	¢46 78	10	4/.	\$57.71	\$80.65	435 70	) (	50.0	\$46.26	494 75	7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	\$43.59	\$39,85	C	) '	\$42.50	\$88.39	CMV+(arocc)	(SEO 16) & ALIE	480 AS		5/1.35
0.82	2.66	0.30	0 82	10.	VI .	2.16	1.90	1.58	0 77		1.26	1.26	-	T.30	1.15	0.95	000	0.00	2.19	2.04	A ~ ( 0 m+)	Ag(opt)	107	7.57	1.9/
0.58	1.86	0.25	0.07		0.53	0.29	0.25	0 71	100	O.T.O	0.07	0.03		0.08	0.07	ر ا	7	71.1	0.20	0.87	1	%0U7	1	0.79	0.83
2.22	5.18	7.13	L 7	0.10	7.03	1.12	7 48	, to		1.50	0.58		1 (	6.87	1.86	24	) i	1.32	0.38	177	1.76	Zn(total	2 0 4	3.04	3.04
0.86	1.68	0.08	0 0	O.14	0.62	0.73	0 7 7	0.0	0.07	0.48	0.49	0 18	0 (	0,33	0.30	78.0	4.0.4	1,34	7.75	000		Pb0%		1.09	1.09
5.91	4 95	0.48	 	Z.15	1,98	2.58	1000	Z. Z.	4.20	1.92	2.95	00	7.00	1.95	2 01	. C	0.40	2,35	7 84	. D	0,00	Pb(total)	%	3.23	3,23
86,087	262 012	00,710	711,00	44,/95	194,184	17	7 7 7	12/,719	383,408	137,051	92 194	- 100	TUR'ADD	769.017	077 770	0.77.70	18,228	29.760	7	1 1	77,568	Tonnage		15,317,523	15,316,759
3.1			7.C	3.1	3.1		1.0	3,T	3.1	3,1	(1	, (	3.1	۲,	) (	. ·	3.1	Υ.	ָרָ הַלְּיִר	7 · ·	3.1	Sp. G		3.1	3.1
7777	0.45.0	2.040	7,027	144.5	626.4	C 1100	7.0157	410.9	1236.8	442.1	7 700	1./67	351.5	7 7480 7	100	_	58.8	0 90	1 0	-	72.8	1991 Totals Area(m2)		84 49411.3	100 49408.9
100	0 0	OOT	100	100	100	0 0	100	100	100	100	0 0	TOO	100	000	000	100	100	001	COT	100	100	Totals			
TOO 1	100101	10400	10400E	10400E	HOALOK	100to	10400E	10400E	10400E	1040F	11000	10400E	10400E	T C C C C	TO400E	10400E	10500E	LOCLO	TOPOCE	10500E	10500E	1991		1991	2004
7	4-14	B5-1	B5-2	B5-3	0 0 0	D42-1	B45-2	845-3	B45-4	- 170	T - / 1-0	B47-2	R47-3		B4/-4	B57-1	R30-1		B30-7	B30-3	R40-1			Average	2000

\* PbO and ZnO calculated at 50% of total Pb and Zn respectively

JOOG GMV	Cans Cans	\$51.56	\$82.28	\$54.49	\$90.49	\$79.29	\$81.77	\$138,37	\$73.63	\$122.61	\$84.73	\$160.76	\$66.56	\$69.72	\$173.08	\$108,07	\$82.80	\$70.37	\$118.28	\$87.17	\$222,69	\$154,57	\$220.07 \$55.01	\$71.15	\$113.05	\$54.39	\$90.27	\$145.96	\$192.67	\$77,03 404.01	\$56.89	\$55.24	\$95,16	\$142.56	\$51.92	\$51.12	\$225.39	\$95,30	4200 47	\$300.47 4139 51	\$130,45	\$164.77	\$149.41	\$58.89	\$68.60	\$52.99
4004 CM/A	(netZnO)	\$45.73	\$71.09	\$47.67	\$91.50	\$56,21	\$71,67	\$69.54	\$39.79	\$89.70	\$81.16	\$129,47	\$50.69	\$56.15	\$140,15	\$90.28	\$49.82	\$64.58	\$76.44	\$78.20	\$123.40	\$112.84	\$1/T.U6	\$20.32 \$53.71	\$84.71	\$31,97	\$34.02	\$74.69	\$164.23	\$54,80	\$42.64	\$44.57	\$80.76	\$120.61	\$44.01	\$42.89	\$188,15	\$75.02	\$41.04	\$112.22	476.51	\$133.37	\$97.60	\$53,33	\$58.76	\$45.45
60	2004 GMV US\$	\$38.67	461.71	\$40.87	\$67.87	\$59.47	\$61.33	\$103.78	\$55.22	\$91.96	\$63,55	\$120.57	\$49.92	\$52.29	\$129.81	\$81.05	\$62.10	\$52.78	\$88,71	\$65,38	\$167.02	\$115,93	\$169.55	\$41.26	\$84.79	\$40.79	\$67.70	\$109.47	\$144.50	\$58,39	\$70.51 ¢42.67	441.43	\$71.37	\$106.92	\$38.94	\$38.34	\$169.04	\$71.52	\$38.48	\$231.35	\$104.03 \$07.84	¢123 58	\$112.06	\$44.17	\$51.45	\$39.74
	1991 GMV \$ 200	\$46.69	\$130.03 \$77.15	\$52.08	\$92.87	\$80.12	\$80,49	\$108.40	\$65,83	\$112.71	\$86,53	\$138,10	\$66.12	\$62.35	\$155,76	\$100.88	\$63.59	\$71.33	\$92.01	\$82.18	\$191.92	\$118.77	\$175.75	\$54,64	\$0.10¢	\$40.45	\$78,94	\$127.21	\$164.37	\$55.42	\$10.22	445.13 445.25	\$80.76	\$120,61	\$44,01	\$42.89	\$188,15	\$75.02	\$41,04	\$244.56	\$111.63	\$103.32 \$143.57	4114 27	\$55.12	\$59.86	\$45.59
	Pb+Zn(%)	1,49	11.55	201.0	6.70	5.86	5.86	9.00	20.7	8.67	6.27	10.20	4.86	4.75	12.00	7.75	6.07	5.10	99'9	6.50	15.34	10.51	1420	4.06	4.90	3.76				4,56			6.50							=			10.08			
L	Ag(opt) F	4.00	0.41	0.30	0.30	0.10	0.57	25.0	20.7	1.31	1.31	3 90	0.50	1 00	2.36	0.93	0.97	0,33	1,36	0,33	3.46	3,11	6,32	0.18	1.00	1,09	2.25	7.04	22,91	2,88	3.14	7,86	1 37	1.94	0.81	1,09	5.56	1.23	1,15	9.45	3,11	4.42	1.5/ 7 5	3,13	1.24	1.08
	(%)Ou2	0.07	0.24	0.44	0.32	1.50	1.0	70,0	70.7	1.67	1.07 0 20	0,09	1 13	1.12 0.45	7 -	0.77	1.00	0.49	1.13	0.29	4.97	0.43	0,34	1,91	0,53	0,43	30.0						0.05											17.71		
	Zn(%) Zn0(%)	1.26	10.90	4.53	5,10	0.01	7.13	5,17	C. 2.	3.20	0,07	0.10	7.57	4.50	2,00	5 77	1.65	4.90	261	4.90	8.20	2,68	3.74	3,64	2.63	1.90	2.74	4.05	0.11	0.07	0.82	0.31	1.65 2.00	0.50	1.77	1.56	6.44	2.22	1,16	5.72	3,17	2.29	6.70	2.44	3.10	1.85
	(%)O9d	0.04	0.11	0.33	0.28	0.02	0.T0	0.17	4.91	1.14	1.12	0.02	1.77	0.17	4.05	T.03	2.40	01.0	2.46	0.35		2.20					1.41							1.68											0.75	
	d (%)qd	0.23	0.65	1.57	0.79	0.09	0.33	0,69	6.70	1,88	2,60	0.17	4.83	0.48	1,75	C7.4	2,03	4.42	0,20	1.60	7.14	7.83	10,47	0.42	2.34	4,25	3.05	2.40	0.66	4,49			2.33							-			5,24			1.54
	Tonnage P	282,379	46,097	211,482	113,832	28,551	56,079	291,896	23,963	65,317	363,568	60,667	332,785	107,570	436,511	182,869	120,342	3/3,990	507,20	132 845	187 705	88 536	230,640	108,562	61,690	98,487	147,591	50,716	62,643	141,391	276,489	87,296	196,416	114,700	35,100	121,291	121,409	32,116	79.081	124,496	61,690	492,528	316,014	495,132	73,501	365,459
	pecific	Gravity 3.1	3,1	3.1	3,1	3.1	3,1	3.1	3.1	3,1	3,1	3.1	3.1	3,1	3.1	3,1	3,1	ر ا د	٦,٠	ν, τ. Τ. τ.	J, C	ე. 	, m	3,1	3,1	3.1	3.1		2,1	3.5	3,1	3.1			3,1						3,1			3,1		3,1
	olume Cu	91,090	14,870	68,220	36,720	9,210	18,090	94,160	7,730	21,070	117,280	19,570	107,350	34,700	140,810	58,990	38,820	185,160	22,350	11,530	39,950	28 550	74 400	35,020	19,900	31,770	47,610	16,360	73,950	45,610			63,360	37,000	31,000			10.250				-		-		117,890
rostor	0	910 9	148.7	682.2	367.2	92.1	180.9	941.6	77.3	210.7	1172.8	195.7	1073.5	347.0	1408.1	589,9	388,2	1851.6	223.5	115,3	399.5	605.5	744.0	350.2	199.0	317.7	476.1	163.6	739.5	203,1 456.1	891.9	281.6	633,6	370.0	310.0	746,1	391,9	233.3	103.0	401 6	199.0	1588,8	1019.4	1597	237.1	1178,9
da Inc. Cantan or d	Block Are	Thick	100	100	100	100	100	100	100	100	100	100	100	100	100	100			100				100							100										100						100 I
urces Cana	Section Block	20070	GROOF	9800E	9900E	9900E	9900E	9900E	10000E	10000E	10000E	10000E	10000E	10000E	10000E	10100E	10100E	10100E	10100E	10100E	10100E	10200E	10200E	10200	10200L	1020E	10200E	10200E	10200E	10200E	10200E	1020E	10200E	10300E	10300E	10300E	10300E	10300E	10300E	10300E	10300E	10300E	10300E	10300E	10300E	10300E
Billiton Resources Canada Inc.	Cut to blocks with GMV Canada or greater Block No. Section Block Area(m2		B33-1 R31-1	R21-2	821-5	B27-1	R27-3	B13-1	B11-1	B11-2	B11-3	811-4	B11-5	B12-1	B12-2	810-1	B10-2	B10-3	B14-1	B14-2	814-3	B9-1	B9-3	B9-4	D/"1 B7.5	B7-6	B60-1	B60-2	860-3	B60-4	B43-1	D+5-2 R54-1	B54-2	*B88-1	*B88-2	*B88-3	*B88-4	*B88-5	*B88-6	*B88-7	B15-1	B15.3	B15-4	B6-2	B6-3	B18-2

\$113.84 \$67.53 \$168.76 \$107.08 \$149.75 \$100.76 \$61.71 \$63.17 \$63.17 \$63.17 \$63.17 \$63.17 \$63.17 \$53.21 \$53.21 \$53.21 \$53.21 \$53.21 \$53.21 \$53.21 \$53.21 \$53.21 \$53.21 \$53.21 \$53.21 \$53.21 \$53.21 \$53.21 \$61.68 \$53.21 \$61.68 \$53.21 \$61.68 \$53.21 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.68 \$61.	2004	\$104.35
\$71.49 \$49.95 \$128.62 \$73.85 \$102.39 \$100.44 \$91.96 \$45.46 \$45.46 \$79.35 \$62.26 \$79.35 \$118.25 \$39.48 \$35.37 \$35.37 \$35.37 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.53 \$35.5	\$70.55	
\$85.38 \$50.65 \$126.57 \$80.31 \$112.31 \$77.42 \$77.42 \$47.38 \$47.38 \$57.71 \$80.65 \$39.91 \$39.85 \$39.85 \$39.85 \$39.85 \$39.85 \$39.87 \$39.85 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87 \$39.87	US\$	\$78.27
\$22.08 4.30 4.30 10.55 \$130.68 8.13 10.14 \$10.14 \$127.99 7.60 \$103.11 7.28 \$92.92 4.07 \$50.17 3.70 \$50.17 4.87 \$50.17 \$7.53 \$89.08 3.75 \$419.35 \$3.74 \$3.74 \$3.74 \$3.76 \$49.06 \$3.76 \$49.06 \$3.77 \$49.06 \$3.78 \$49.06 \$3.74 \$40.66 \$3.74 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66 \$40.66	1991 80.45	
Lance Control of the		
1.39 1.75 1.75 1.83 0.82 0.30 0.30 0.30 1.26 1.26 1.26 1.26 1.26 1.26 1.26 1.26	1.97	2.17
1.49 0.15 0.15 0.15 0.28 1.86 0.07 0.07 0.02 0.03 0.03 0.03 0.07 1.12 0.15	0.79	
3.15 1.45 2.64 2.64 5.18 7.13 5.13 1.25 1.35 6.82 1.35 6.82 1.35 1.35 1.35 1.35 1.35	2.n(total) % 3,04	3.33
2.30 0.72 1.11 0.86 1.68 0.08 0.14 0.62 0.73 0.55 0.87 0.49 0.46 0.33 0.33 2.25 2.25	1.09	1
5.06 2.85 7.91 5.91 6.95 1.98 2.15 2.15 2.15 2.15 2.95 2.95 2.95 2.95 2.39 2.35 2.35 2.35 2.35 2.35 2.35 2.35 2.35	Pb(total)	3.54
703,049 700,228 76,880 86,087 262,012 88,412 44,795 194,184 717,712 127,379 383,408 92,194 108,965 769,017 67,270 18,28 29,760 32,457 22,568	Tonnage	10
		2004 cut
226,790 225,880 24,800 27,770 84,520 28,520 14,450 14,450 14,450 14,090 123,680 29,740 35,150 29,740 35,150 21,700 5,800 9,600		
2267.9 2258.8 248.0 277.7 845.2 285.2 144.5 626.4 626.4 626.4 2315.2 410.9 1236.8 2315.2 2315.2 2315.2 2315.2 2315.2 207.4 351.5 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217.0 217	Totals Area(m2)	49411.3
100 100 100 100 100 100 100 100 100 100	-	
10400E 10400E 10400E 10400E 10400E 10400E 10400E 10400E 10400E 10400E 10400E 10400E 10400E 10400E 10400E		
64-1 64-3 64-3 64-4 85-1 85-1 85-3 845-3 845-3 845-3 847-4 847-3 847-3 847-3 830-1 830-1	1 21	

 $^{*}$  PbO and ZnO calculated at 50% of total Pb and Zn respectively

RESOURCE CALCULATIONS West Zone - Blende Ag-Pb-Zn property, Yukon Billiton Resources Canada Inc.

\$75 GMV CUTOFF

\$154.72 \$154.72 \$154.72 \$571.09 \$91.50 \$56.21 \$56.21 \$56.21 \$69.24 \$89.70 \$81.16 \$81.16 \$81.16 \$129.47 \$140.28 \$49.82 \$76.44 \$173.40 \$112.84 \$76.28 \$76.44 \$112.84 \$112.84 \$76.28 \$76.42 \$76.42 \$76.65 \$76.52 \$76.52 \$76.51 \$128.15 \$76.51 \$128.65 \$133.37 \$76.51 \$128.65 \$100.44 \$118.25 \$79.35 \$118.25 \$79.35 \$70.44 \$91.96 \$70.44 \$79.35 \$70.44 \$79.35 \$70.44 \$79.35 \$70.44 \$79.35 \$70.44 \$70.44 \$79.35 \$70.44 \$79.35 \$70.44 \$79.35 \$70.44 \$79.35 \$70.44 \$79.35 \$70.44 \$79.35 \$70.44 \$79.35 \$70.44 \$70.44 \$79.35 \$70.44 \$70.55 \$70.44 \$70.44 \$70.45 \$70.44 \$70.44 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46 \$70.46	2004 GMV	Cans	\$156.41	\$82.28	40.49	48177	4138 37	4122.51	\$84.73	\$160.76	\$173.08	4108 07	400.00	4440	\$110.20	77.794	\$277.69	\$154.57	\$226.07	\$113.05	\$54.39	\$90.27	\$145.96	\$192.67	\$77.85	\$94.01	\$95.16	\$142.56	\$2.25.39	\$95.36	4300.47	\$139.31 ¢130.45	4164 77	\$149.41	\$113.84	\$168.76	\$107.08	\$149.75	\$103.23	\$100.76	\$76.95	\$107.53	\$126.33	\$117.85	GMV Cans		2004 Can\$	\$128.44
Nolume Cu Specific         Convolute Cu Specific         Pho(%)         Ph		(netZn0)	\$154.72	\$71.09	\$91.50	\$56.41	4 L.C.	407.04	481 16	#120 A7	¢140 15	01.0114	400.20	547.82	\$/6.44	8/8.70	\$123.40	\$112.84	\$171.06	\$84.71	\$31.97	\$34.02	\$74.69	\$164.23	\$54.86	\$61.82	\$80.76	\$120.61	\$188.15	\$75.02	\$1/2.22	\$90.83	4100 CT	497.60	471 49	4128.62	\$73.85	\$102.39	\$100,44	\$91.96	\$62.26	\$79.35	\$118.25	\$76.99	GMV\$(netZn0	\$70,55		
March   Color   March   March   Color   March   Marc	D4 GMV US\$		\$117.31	\$61.71	\$67.87	\$59.47	\$61.33	\$103.78	452 FF	400.00	\$120.37	10.6714	\$81.05	\$62.10	\$88.71	\$65.38	\$167.02	\$115.93	\$169,55	\$84.79	\$40.79	\$67.70	\$109,47	\$144,50	\$58.39	\$70.51	\$71.37	\$106.92	\$169.04	\$71.52	\$231.35	\$104,63	\$97.84	\$123.30 4112.06	48E 38	4126 57	480.31	\$112,31	\$77.42	\$75.57	\$57.71	\$80.65	\$94.75	\$88.39	GMV (Gross)	US\$ 2004	2004 Can\$	\$98.33
Volume Cu   Specific   Tonnage Pb(%)   Pb0(%)   To(%)   To(%	1991 GMV \$ 200		\$158,03	\$77,15	\$92.87	\$80.12	\$80.49	\$108.40	\$112.71	\$86.23	\$138.10	\$122.70	\$100.88	\$63.59	\$92.01	\$82,18	\$191.92	\$118.77	\$175.75	\$90,59	\$40.45	\$78.94	\$127.21	\$164.37	\$55.42	\$70.22	\$80.76	\$120.61	\$188,15	\$75.02	\$244.56	\$111.63	\$103.52	\$143.57	\$114.7/	4130 68	#150.00	4127 99	4103 91	492 92	465 70	\$89.08	\$119,35	\$88.29	-	80.45	?	
Volume Cu Specific	(%)4274	(~) 117.0	11.55	6.10	6.70	5,86	5,86	9.65	8.67	6.27	10.20	12.00	7.75	6.07	99.9	6.50	15,34	10.51	1420	7.1.7	3.76	7 66	7.02	0.77	4.56	5,65	6,65	10.08	14,36	6,88	18.79	9.20	7.67	11.94	10.08	178	CC'OT	10.17	7 60	7 28	787	7 53	8.77	8.27	Pb+Zn%	20 2	0.20	
Nolume Cu Specific	O (too) D	Halaba)	0.41	0.38	0.16	0.20	0.57	2.33	1.31	0.17	3,90	2,36	0.93	0.97	1.36	0,33	3.46	3,11	6 37	4 59	1.03	2,0	7.04	22.91	2.88	3.14	1.37	1.94	5,56	1.23	9.42	3.11	4.45	1.57	3.15	1,39	4.83	70,0	2.00	0.50	100	1.50	1.50	2.30	Ag(opt)	100	T.37	2 2 2
Volume Cu Specific	,0,0	0/ 101	0.24	0.44	0.10	1.59	0.64	2.82	1.67	0.39	0.63	1,13	0.77	1.00	1.13	0.29	4 97	0.43	37.0	10.0	0.43	20.0	5.20 5.81	0.01	0.04	0.61	1,65	2 43	3.22	1.11	5.25	1.51	1.96	0.74	1.21	1,49	0.15	0.58	1.80	0.25	0.07	0.25	7 7 0	0.00	%OUZ		6/.0	
Volume Cu Specific	1 (0)	7 (%) 17	10 00	4.53	6.61	5,53	5,17	2.95	6.07	6.10	5,37	7.74	5.72	1.65	2.61	4 90	00.8	0.40	27.00	7.7	1.90	O. C.	3.20	0.11	0.07	0.07	330	) A	6 44	2.22	5.72	3.17	2.29	6.70	2.44	3.15	2.64	2.22	5,18	7.13	5,13	2.48	7,31	1 73	Zn(total)	%	3.04	07.7
Volume Cu Specific   Tonnage Pb(%)		(%)0	1	0.11	20.0	0.18	0.17	4.91	1.12	0.02	1.27	1.05	0.47	2.40	2.46	7 7 7	000	0,00	2.20	0.73	1.1.	7.41	1,32	15.0	0,10	4.03	1,40	1.00	3.05	2 33	7.76	2.70	2.59	1,48	2.24	2,30	1,11	0.86	1.68	0,08	0.14	0.55	0.87	0,33	%09d		1.09	-
Volume Cu Specific   Tont			L	1 57	000	0.33	0.69	6.70	2.60	0.17	4.83	4.25	2 03	20.7	7,12	00.0	1.00 1.00	7.14	7.03	10.47	4.25	3.05	2.40	2.97	0,66	4,49	4,03	7,50	77.0	1.56	12.02	6.03	5,38	5.24	7.64	2,06	7.91	5,91	4.95	0,48	2.15	2,39	4,23	1,95	Pb(total)	%	3,23	The second secon
M. Gravity  3.7  3.1  3.2  3.1  2.2  68,220  3.1  2.3  68,220  3.1  1.6  9,210  3.1  1.6  9,4160  3.1  1.7  7,730  3.1  1.5  1.9,570  3.1  1.6  1.85,160  3.1  1.6  1.85,160  3.1  1.6  1.85,160  3.1  1.6  1.85,160  3.1  1.6  1.85,160  3.1  1.6  1.85,160  3.1  1.6  1.85,160  3.1  1.6  1.85,160  3.1  1.9  1.9  1.9  1.9  1.9  1.9  1.9		Tonnage Pb		46,097	70 571	56,079	201896	23,963	363,568	60.667	332,785	187 869	120,202	770,075	075,270	77,75	123,845	187,705	88,536	230,640	98,487	147,591	50,716	229,245	62,961	141,391	276,489	114,/00	00T'96	12,323	124 AGE	61,690	492,528	316,014	495,132	703,049	76,880	86,087	262,012	88,412	44,795	127,379	383,408	769,017	Tonnage	,	15,317,523	THE RESERVE THE PERSON NAMED IN
M. Volume Cu. M. 14,870 2.1 14,870 2.2 8,220 2.1 9,210 2.2 9,210 2.3 11,580 2.4 11,580 2.5 10,7350 2.6 11,581 2.7 19,570 2.7 19,570 2.8 11,581 2.9 11,581 2.9 11,581 2.9 11,581 2.9 11,581 2.9 11,581 2.9 11,581 2.9 11,581 2.9 11,581 2.9 11,581 2.9 11,581 2.9 11,581 2.9 11,581 2.9 11,581 2.9 11,581 2.9 11,981 2.9 11,981 2.9 11,981 2.9 11,981 2.9 11,981 2.9 11,981 2.9 11,981 2.9 11,981 2.9 11,981 2.9 11,981 2.9 11,981 2.9 11,981 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,681 2.9 123,781 2.9 123,781 2.9 123,781 2.9 123,781 2.9 123,781 2.9 123,781 2.9 123,781 2.9 123,781 2.9 123,781 2.9 123,7		oecific	ravity	3,1	λ, τ	0. L		7 7		, t			7.0	o c	ر ا د	3,1	3.1	3,1	3.1	3.1	3.1	3.1	3.1	3,1	3.1	3.1	3.1	3.1	λ. 	λ, c	າ້.	ν, ς. 	, w	i e	3.1	3.1	3.1	3,1	3,1	3.1	3,1	3.1	3.1	3,1	3,1		original	
2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.2.		lume Cu Si		14,870	68,220	9,210	10,030	7 730	117 280	10 570	107 350	000 01	58,990	38,820	185,160	11,530	39,950	60,550	28,560	74,400	31,770	47,610	16,360	73,950	20,310	45,610	89,190	37,000	31,000	23,330	10,360	10,160	158 880	101,940	159,720	226.790	24,800	27,770	84,520	28,520	14,450	41,090	123,680	248,070	7,280			
Cut to blocks with GMV Can575 or g Block No. Section Block Are Block No. Section Block Are Block No. Section Block Are B21-1 9800E 100 B27-3 9800E 100 B13-1 9900E 100 B11-3 10000E 100 B11-3 10000E 100 B11-4 10000E 100 B11-5 10000E 100 B11-5 10000E 100 B10-3 10100E 100 B11-5 10100E 100 B11-7 10100E 100 B11-3 10100E 100 B11-3 10100E 100 B11-4 10100E 100 B11-7 10100E 100 B11-4 10100E 100E 100 B11-4 10100E 100E 100E 100E 100E 100E 100E 1	reater	_		148.7	682.2	92.1	180.9	941.0	1177.8	1057	193.7	10/2.5	589.9	388.2	1851.6	115,3	399.5	605,5	285.6	744.0	317.7	476.1	163.6	739.5	203.1	456.1	891.9	370.0	310.0	233,3	103.6	401.6	199.0	1019 4	1597	97966	248.0	277.7	845.2	285.2	144.5	410.9	1236.8	2480.7	72.8	ווכמ(וווגי)	9411.3	
Cut to blocks with GMV of Block No. Section Blazi-1 9800E BZ7-1 9900E BI3-1 9900E BI3-1 9900E BI3-1 10000E BI1-3 10000E BI1-3 10000E BI1-2 10100E BI1-2 10100E BI1-2 10100E BI1-2 10100E BI1-3 10200E BI1-3 10200E BI2-3 10200E BI3-3 10200E BI3-4 10200E BI3-4 10200E BI3-4 10200E	an\$75 or g	ock Are	nick	100	100	100	100	100	007	007	007	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100			4	
Cutifuc Investigation of the property of the p	with GMV Co	Section Bl	Ħ	9800E	9800E	9900E	9900E	9900E	10000E	100005	10000E	10000E	10100E	10100E	10100E	10100E	10100E	10200E	10200E	10200E	10200E	10200E	10200E	10200E	10200E	10200E	10200E	10300E	10300E	10300E	10300E	10300E	10300E	10300E	103000	10300E	10400E	10400F	10400F	10400E	10400F	10400E	10400E	10400E	10500E			
	Cut to blocks	Block No.		B21-1	B21-2	B27-1	B27-3	B13-1	B11-1	B11-3	811-4	B11-5	810-1	B10-2	B10-3	B14-2	814-3	B9-1	B9-3	B9-4	B7-6	B60-1	B60-2	860-3	B60-4	B43-1	B43-2	*B88-1	*B88-2	*B88-5	*B88-6	B15-1	B15-2	B15-3	B15-4	2-99	D4-1	BA-4	- L-R	R5-7	2 Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	845-3	B45-4	B47-4	B40-1			

2004 8,334,350

\* PbO and ZnO calculated at 50% of total Pb and Zn respectively

RESOURCE CALCULATIONS West Zone - Blende Ag-Pb-Zn property, Yukon Billiton Resources Canada Inc.

\$100 GMV CUTOFF

2004 GMV	Cans	\$156.41	\$138.37	\$122.61	\$160.76	\$173.08	\$108.07	\$118,28	\$222.69	\$154.57	\$226,07	\$113,05	\$145.96	\$192.67	\$142,56	\$225.39	\$308.47	\$139.51	\$130,45	\$164.77	\$149.41	\$113.84	\$168.76	\$107.08	\$149,75	\$103.23	\$100.76	\$107.53	\$126.33	\$117.85	GMV Cans	2004		2004 Can\$	\$145.19	
1991 GMV\$	(netZno)	\$154.72	\$69.54	\$89.70	\$129.47	\$140.15	\$90.28	\$76.44	\$123.40	\$112.84	\$171,06	\$84.71	\$74.69	\$164.23	\$120.61	\$188.15	\$172.22	\$90.83	\$76.51	\$133,37	\$97.60	\$71.49	\$128.62	\$73.85	\$102.39	\$100.44	\$91.96	\$79.35	\$118,25	\$76.99	GMV\$(net7n0)	1991	\$70.55			
POOL CANNELISE	JOS GININ COS	\$117.31	\$103,78	\$91.96	\$120.57	\$129.81	\$81,05	\$88.71	\$167.02	\$115,93	\$169,55	\$84.79	\$109.47	\$144.50	\$106.92	\$169.04	\$231.35	\$104.63	\$97.84	\$123.58	\$112.06	\$85,38	\$126.57	\$80,31	\$112.31	\$77.42	\$75.57	\$80.65	\$94.75	\$88,39	CMV (Groce)	_	1	2004 Can\$	\$108.89	
C & MARCH POOR	1991 GIMIV & ZUO4 GIMIV CO	\$158.03	\$108.40	\$112.71	\$138.10	4155.76	\$100 88	492 01	419192	4118 77	4175 75	\$90.59	\$127.21	\$164.37	\$120.61	\$188.15	\$244.56	\$111,63	\$103.52	\$143,57	\$114.27		-01		\$127.99	\$103,91	492.92	489 08	411035	# 88 39	100000	PD+2N% GMV\$(91055)				
1	(%)uZ+q	11 55	9.65	8 67	10.20	12.00	7 7 7	01.1	15 34	10.01	1420	6 15	7.02	0.77	40.01	14.36	18 79	00.0	7.67	11.94	10.08	821	10.55	8 13	10 14	7.60	7 28	7 52	7.7.0	70.0	0.27	70+474	6.26			
1	Ag(opt) Pb+Zn(%)	0.41	7 33	1 3 3	100	30.00	2,50	44.0	1,30	0,40	3,11	7 50	70.7	22 91	10.21	T.7.7	0.00	211	4.42	1 57	100	7.10	4 8 3	20.4	20.0	02.7	00.0	0,02	1.00	1,50	40.7	Ag(opt)	1 07	10.1	3.03	200
	10(%)	VC 0	7 7 C	1 27	1.0	0.03	L.13	0.77	1,13	4.97	0.43	0.34	0,4°C	0.01	0.01	24.4	3,22	5,23	10'T	1,20	1 10	1,41	1.43 1 + 0	0.13	0,00	1,00 Tr. 0	0.00	0,07	0.71	0,08	0.82	%ouz	07.0	0.73		
	Zn(%) Zn0(%)	000	10.90	20.7	0.07	5.3/	1.74	2.72	2.61	8.20	2.68	3.74	1.90	4.03	0,11	4.83	6,44	5,72	3,17	67.7	0.70	2,44	3.L3	7.04	77.7	0.10	CT./	5,13	3.31	6.82	1,1/2	Zn(total)	0%	3,04	A CO	76.4
	PbO(%)		0,11	4,91	1,12	1.2/	1.05	0.47	2,46	3,83	2.20	0.73	1,1	0.51	0.10	2.61	3,96	7.76	2.70	2,59	1.48	47.7	2.30	1.11	0.86	1.68	0.08	0.14	0.87	0.33	2.92	%09d		1,09		
			0,65	6.70	2.60	4.83	4.25	2.03	6,05	7,14	7.83	10.47	4,25	2.97	99.0	5.22	7,92	13.07	6,03	5,38	5,24	7.64	5.06	7,91	5,91	4,95	0.48	2,15	4,23	1.95	6.55	Pb(total)	%	3,23		4.94
	Tonnage Pb(%)		46,097	23,963	363,568	332,785	182,869	120,342	35,743	187,705	88,536	230,640	98,487	229,245	62,961	96,100	72,323	124,496	61,690	492,528	316,014	495,132	703,049	76,880	86,087	262,012	88,412	44,795	383,408	769,017	22,568	Tonnage		15,317,523		6,097,452
	pecific	Gravity	3.1	3.1	3.1	3.1	3.1	3.1	3,1	3.1	3,1	3.1	3,1	3.1	3.1	3.1	3.1	3.1	3.1	3,1	3.1	3,1	3.1	3,1	3,1	3.1	3,1	3.1	3.1	3,1	3.1			Original		2004
	Volume Cu Specific	9	14,870	7,730	117,280	107,350	58,990	38.820	11,530	60,550	28,560	74,400	31,770	73,950	20,310	31,000	23,330	40,160	19,900	158,880	101,940	159,720	226,790	24,800	27,770	84,520	28,520	14,450	123.680	248,070	7 280					
	Area(m2) Vo		148.7	77.3	1172.8	1073.5	589 9	388 2	115.3	605.5	285.6	744.0	317.7	739,5	203.1	310.0	233.3	401.6	199.0	1588.8	1019.4	1597	2267.9	248.0	277.7	845.2	285.2	144.5	1236.8	2480 7	72.8	Totals Area(m2)		49411.3		
la Inc.	Block Ar	Thick	100	100	100	100	000	100	100	001	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	007		atost		-	200			
Billiton Resources Canada Inc.	Section		PROPE	TOUCH	100001	10000	100001	TOTOE	TOTOLE	TOTOT	1020C	10200E	10200E	1020C	10200	10200E	10300E	10300E	10300L	10300E	1030E	10300E	TOTOL	1040E	TOTOL	TOTOL	10700	10400	10400	10400	104001	1050UE				
Billiton Resc	Block No.	DIOCK INC.	1,100	D21 1	D11-1	D11-3	D11-3	810-1	B10-2	B14-2	B9-1	B9-3	DY-4	0-70	800-3	#-D00-4	7-88G+	*B88-3	D13-1	D13-2	0.010	4-C10	2-0G	D4-1	0-+0	1-1-0	1.00	7-59	B5-3	B45-4	P4/-4	B40-1				

 $\frac{2004 \left| -6.097,452 \right|}{\text{FPO}}$  and ZnO calculated at 50% of total Pb and Zn respectively

## RESOURCE CALCULATIONS

West Zone - Blende Ag-Pb-Zn property, Yukon Billiton Resources Canada Inc. 1991 Appears to use a US \$75 cutoff

\$81	\$82 \$81 \$102	\$118 \$93 \$127 \$102	\$122 \$87 \$76	\$124.85
1.72	0.99 1.04 2.09	1.9 3.83 4.83	3.63 0.34 0.82	3.11 Can\$
4.38	2.02	4.05 2.22 2.64 1.77	5.30 8.00 5.13	4.62
2.97	6.21 6.52 8.16	7.36 5.36 7.91 8.6	5.2 0.54 2.15	6.67
43,861	95,349 100,752 157,962	332,133 181,163 196,260 128,324	258,701 66,427 63,407	4,136,705
12420 3.531	27000 3.531 28530 3.531 44730 3.531	94050 3.531 51300 3.531 55575 3.531 36338 3.531	73256 3.531 18810 3.531 17955 3.531	
0.0	0.00	0.95 0.95 0.95 0.95	0.95	
3.45	3.00 3.17 4.97	12.00 6.00 6.00 3.40	12.24 3.00 3.00	0.72 exch.
20	50 50 50	75 75 75 75	75 75 75	
80	200	110 120 130 150	88 88	tions by Billi
18A	16A 16B 16C	44 4B 4D 4D	5A 5B	n calcula
10+300E	10+350E 10+350E 10+350E	10+400E 10+400E 10+400E	10+400E 10+400E	Copied and checked from calculations by Billiton TOTALS AND AVERAGES Can
90-18	90-16 90-16 90-16	90-4 90-4 90-4	90-5 90-5	Copied a

27946007 39660179 12489467 12489467 11346063 15653179 7467474 21464522 32399405 32399405 37893832 7026624 18892178	27533535
T X gmv us\$ 27946007 39660179 12489467 1346063 15653179 27841523 746747 2146452 3239940 3789383 702662 1889217	
T X AG 424103 1282862 320034 498333 130189 166212 576767 200326 542147 469661 1014355 166871 1668664 335965 251880	794258
T X ZN 1812315 1766403 671258 1573871 800734 655483 172629 513275 773135 615935 170090 953522 200433 964544	567327
T X PB 808693 1588776 428520 878356 284177 900119 1190208 504359 1453210 2427788 1407390 323547 2038514 334056 859495	1899412
BLOCK NO 11A 11B 10A 10B 10C 10C 17A 15B 15C 15D 15D	6A
SECTION 10+000 10+100E 10+200E 10+300E 10+300E 10+300E 10+300E 10+300E	10+300E

3546130	7821491 8142798 16124736	39238178 16924283 24840670 13050557	31452906 5772469 4791681
75440	94396 104782 330140	631052 693856 947937 141156	939086 22585 51994
192109	192605 160196 254318	1345138 402183 518127 227134	1371117 531413 325279
130266	592118 656905 1288968	2444498 971036 1552419 1103587	1345247 35870 136325
18A	16A 16B 16C	4A 4B 4D	58 50 50
10+300E	10+350E 10+350E 10+350E	10+400E 10+400E 10+400E	10+400E 10+400E 10+400E

SUMS 27,583,859 19,097,480 12,875,052 TONNES 4,136,705 4,136,705 6.67 4,62 3.11				The second named in column 2 is not a se	4 1 1 1	110 011 011
TONNES 4,136,705 4,136,705		SWITS	27,583,859	19,097,480	12,875,052	510,478,640
TONNES 4,136,705 4,136,705		01100			100	107 ack k
CBADE 6.67 4.62		TONINES	4 136 705	4.136.705	4,136,705	4,130,703
CBADE 6 67		חוווים ו	1 1 ( ) 1		P P C	RADA SE
	DIV TIV	RADE	6.67	4.62	3.11	0.4210

RESOURCE CALCULATIONS

West Zone - Blende Ag-Pb-Zn property, Yukon Billiton Resources Canada Inc. 1991

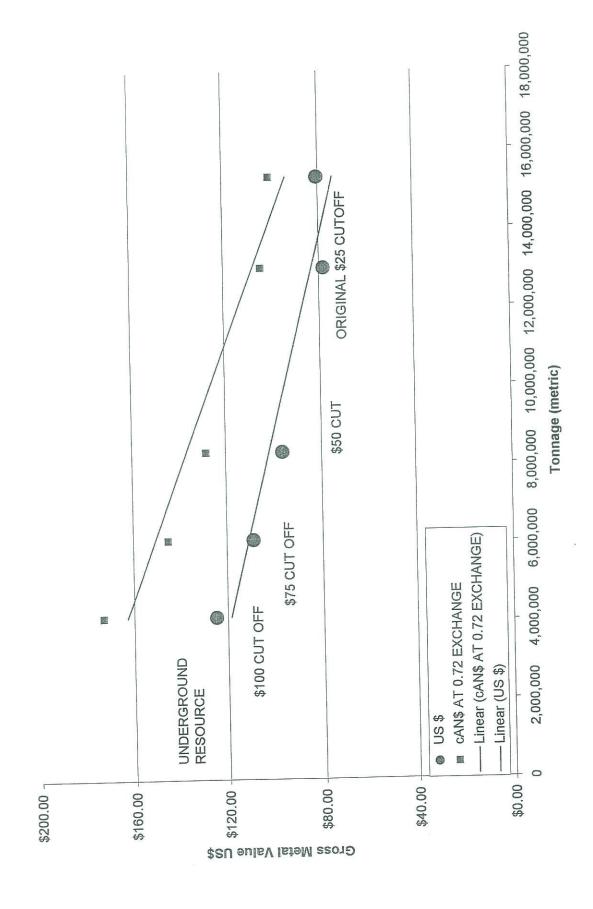
# Compilation of Resource Calculations 1991 and 2004

AG GMV\$ GMV\$	1.97 \$80.45	\$78.27	\$96.33		\$124.85	
		3.33	4.12	4.62	4.62	
ZN %		3.54	4.41	4.94	6.67	
PB %	0/			r 11202		
FONNAGE	15 317 523	13,007,197	8 334 350	6,097,452	4,136,705	0000
	1991	2004	2004	2004		
YEAR					1991 CALCS/2004	
Totals	I VIVIO	OKIGINAL #50 Oct	#30 Call Cut	#100 Call Cut	Underground	

1991 calculations by Billiton Resources Canada 2004 calculations from 1991 calcs modified by 2004 metal prices.

na = checking exchange rate 1991

Tonnage Grade Curve, Blende Deposit



# Cross Sectional Reserve Estimates East Zone

Oct. 17, 1991

Geological Resource Blocks

All composites > \$25 GMV Cut-off, Undiluted

	GMV\$(net ZNO)	\$46.74	\$33.01	\$37.49	\$94.08	\$34.73	\$40.25	\$51.52	\$74.12	\$42.69	\$102.44	\$162.05	\$70.55	\$39,48	\$74.97	\$37.19	\$35.89	\$56.29	\$53.81	\$96.15	\$54.17	\$69.54	\$37.43	\$126.12	\$27.09	\$69.94	\$45.06	\$26.33	\$37.92	\$41.67	\$60.66	\$29.78
	Pb+Zn (%) G	4.92	2.,49	2.77	6.74	2.82	3.54	4.47	6.20	3.09					6.31																	
	Ag(opt) F	0.78	0.04	0.09	0.32	0.32	0.36	0.56	0.30	0.17	1.06	2.97	0.77	0.12	0.91	0.35	0.10	0.10	0.06	1.86	0.59	0.71	0.28	1.11	0.13	0.20	0.17	0.13	0.13	0.24	0.28	0.08
	ZnO(%)	0.47	0.11	0.09	0.05	0.05	0.02	0.03	0.90	0.05	90.0	0.16	0.04	0.04	0.07	0.03	0.04	0.21	0.14	0.08	0.04	0.04	0.05	0.96	0.09	0.07	0.11	0.06	0.07	0.05	0.05	0.03
, ondiluted	% uZ	1.63	2.48	2.76	69.9	1.89	1.77	2.24	6.04	3.03	5.01	4.50	3.28	2.84	3.46	1.63	2.55	4.24	4.01	3.39	2.45	3 22	2.19	8.22	1.98	5.04	3.29	1.90	2.74	2.45	3.59	1.95
v cut-on, on	PbO(%)	0.93	0.01	0.01	0.01	0.11	0.17	0.31	0.07	0.02	0.49	1.62	0.31	0.01	0.34	0.25	0.02	0.01	0.01	0.59	0.37	0.31	0.16	1.01	0.01	0.01	0.01	0.01	0.01	0.14	0.20	0.07
4   composites > \$25 GMV Cut-on	Pb(%)	3.29	0.01	0.01	0.05	0.93	1.77	2.23	0.16	0.00	3,49	10.60	2.67	0.01	2.85	1.65	0.08	0.01	0.01	4 89	27.0	270	0 78	2.39	0.02	0.01	0.01	0.01	0.03	000	1.29	0.36
All composite	Tonnage	15.659	66 559	126 372	35.631	143,093	67 509	248 536	10.287	20.961	39,258	11,741	344 176	41.361	294.971	155 361	194 736	92,782	44 635	101 347	177 775	07 530	150,000	26,671	61.550	31 994	25 235	33 794	47 716	107.034	179 721	41,734
	Thick Area (m2)	1010	429.4	215.7	0.000	0033	425.5	1603.5	66.4	135.2	253.3	75.8	2220 5	266.8	1903.0	10023	1056.4	506.0	2880	A50.0	4444 7	1.44.1	070	1721	397 1	206 4	162.8	218.0	207.8	2000	1150 F	269.2
	Rlock Thick A	50 m	20 2	20 3	30 III	30 11	30 H	30 III	50 E	200	50 m	50 H	50 H	20 3	100			20 11		11 OC	11 0C	50 III	00 III	30 E	20 E	50 m	20 H	50 m	200	30 11	30 III	50 m
	Confion	4 DAEOE	14400E	12300E	12500E	1200E	12500E	12300E	12330E	12330E	12330E	10550L	12330L	12330E	12330E	1 2000E	TOOOL TOOOL	12000E	120001	TOOOL T	12600E	12500E	12600E	12600E	12650E	12650T	10000L	12650E	TOOSOL TOOL TOOL TOOL TOOL TOOL TOOL TOO	TOOOL L	17000E	12650E
	A Moria	1			B42-2	B23-1			0.00 0 4 0.00 0	B36-	D39-7	0.000	0000	7-000	B39-5		D 19-2	B19-3	B24-1	B24-2	B41-1	B25-1	B25-2	B25-3	0.00	040-1	D40-Z	D40-5	4-040	D46-0	B38-2	B38-4

\$32.99	\$54.92	¢20 12	000	\$113.76	\$50.65	\$ 000 DA	409.94	\$50.46	\$35.88	\$26.74	\$33 29	0 0	\$29.53	\$39.50	\$83.59	0000	440.00	\$54.15	\$55.69	£43 63	00:00	GMV*(net	(ONZ	\$54.32
2.42	4.25	4	2.03	9.45	3 65	9 6	5.03	4.34	2.66	2.17	2 45	7.4	2.15	2.83	6 29	0.20	2.96	3.96	4.05	47.0	0.0	Pp+Zn%		4.37
0.07	0.30	0 0	0.77	1.42	710	- 0	0.22	0.60	0.10	0.12	1 40	0.00	0.04	0.22	OVO	1.0	0.21	0.19	0.09	77	0.13	Ag(opt)		0.44
0.03	0.00	0 0	0.04	0.06	0.05	0.0	0.07	0.12	0.04	0.03	0 0	0.00	0.04	0.06	000	0.00	0.05	0.05	0.04		0.03	%OUZ		90.0
235	2 V	2.0	1.38	5 26	0 0	3,03	5.01	2.39	251	- u	). (	2.43	2.13	2 80	i r	5.5	2.81	3.79	4 02	1 7	3.11	Zn(totA	%	3.05
0.01	2,0		0.25	0.53	0 0	0.01	0.01	0.56	0.04	00.0	0.09	0.01	0.01	0.01	5.0	0.13	0.05	0 08	200	0 0	0.01	PbO%		0.19
700	0.0	0.00	1.27	1 10	+ 0	0.02	0.02	1.95	0.15		0.58	0.02	0 02	000	0.03	0.78	0.15	0.17		0.0	0.02	Ph(total)	%	1.31
077	46,710	100,001	41 174	7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	154,800	337,333	69 397	27 781	160,004	100,001	52,987	86,122	28 544	10,00	407,07	19,960	53 509	40,000	10,700	30,437	26.524	Tonnade	2	4 318 896
	314.3	649.5	265 B	1000	8/0.7	2176.3	7 7 7	170.2	7.07	1034.7	341.9	555.6	C VS F	7.40	162.6	128.8	215 2	7.000	320.9	195.1	171.1			
í	20 m	20 m	50 m		20 M	50 m	50 m	200	000	20 m	50 m	50 m	200	111 00	20 m	50 m	2 4	11 00	III 06	20 m	50 m			10+0F
	12650E	12650E	TO TO TO	JOCOZ I	12650E	12700E	10707	127001	12/00E	12700E	12700E	12700F	10010	12/00E	12750E	12750F	1 1 0 1 0	12/50E	12800E	12800E	10BOF	140001		
	B38-5	B38-6	712	מ/מ-	B75-2	B34-1	- 0	2-4-6	B32-1	B29-1	B29-2	B20-3	0-630	B29-4	B46-1	BAR.2	7 0 0	B46-3	B69-1	B69-2	5000	0-800		

4,318,898 CHECK

4,318,896

Totals

Winter Trail Access

(Figures 3, 19)

The Federal Government guarantees a right of way to mineral lands and so application was made by Archer Cathro and Billiton for an access route through this area. A winter trail was then constructed from the Beaver River along Williams Creek for about 8 kilometers to the property. This was completed in November, 1991 and the trail now establishes the easternmost boundary of the Mayo (Na Cho Nyak Dun) land claim. This trail will assist in any future transportation of heavy equipment to and from the property and could be upgraded to a haulage road. Map 3A shows the mineral claims, Indian land claim and the winter trail.

The writer is not aware of any material fact or material change with respect to the subject matter of the technical report which is not reflected in the technical report, the omission of which would make the technical report misleading.

### INTERPRETATION AND CONCLUSIONS

The Blende property 75 km north of Elsa Yukon Territory has a known resource of vein-breccia hosted zinc-lead-silver mineralization in two zones as follows:

Mineral Resources from 1991 Billiton Report

Mineral Resol	lices hom 1991 pu	inton report	
RESOURCE	ZINC	LEAD	SILVER
15,300,000	3.04	3.23	67.5
	3.05	1.31	15.1
19,600,000	3.04	2.80	56.0
	RESOURCE 15,300,000 4,300,000	RESOURCE ZINC 15,300,000 3.04 4,300,000 3.05	15,300,000 3.04 3.23 4,300,000 3.05 1.31

Although initially explored as an open-pit target, management of Eagle Plains and Shoshone feel that there is good potential to develop the property as an underground operation. Numerous high-grade intersections have been reported by past operators, including: (amongst others of lower value)

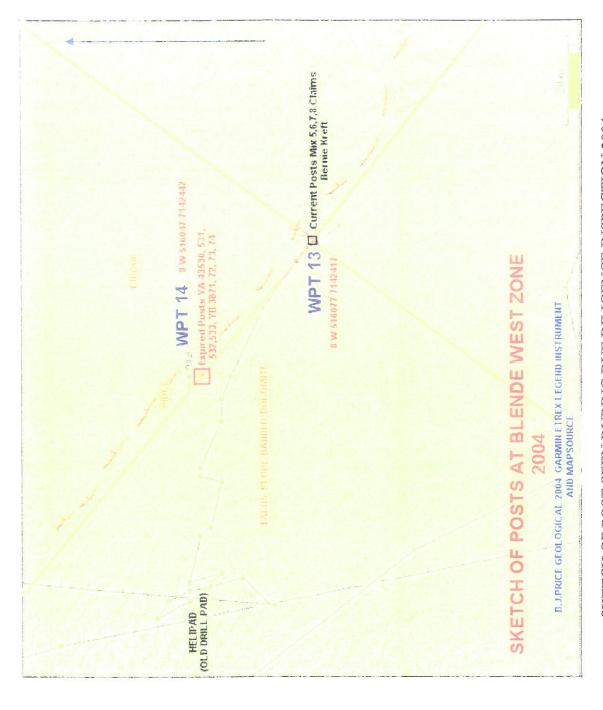
Hole 88–02, which assayed 282 g/t (8.22 oz/t) silver, 12.2% lead, and 4.4% zinc over 19.8m from a depth of 70.7 to 90.5m.

Hole 88-03, which returned 8.5m grading 550.1 g/t (16.04 oz/t) silver, 15.3% lead and 4.6% zinc from 118.0 to 126.5m, and hole 90-15 intersected 9.5m grading 351.2 g/t (10.24 oz/t) silver, 14.11% lead, and 6.59% zinc from 60.1 to 69.6m.

A brief mathematical exercise by the writer removed various mineralized blocks from the overall resource tabulation, using higher Gross Metal Value ("GMV) cutoffs, resulting in reduced tonnages with higher grades. In 1991, Billiton had already anticipated exploring an underground resource which had 4.1 million tonnes grading 6.67% lead, 4.62 % zinc, and 3.11 oz/ton (106.6 grams/tonne) silver.

Step-out drilling in 1994 confirmed the continuation of good grade mineralization westward from the previous limit of the West Zone, with the addition of significant copper values:

Hole 94-81 contained 14.9m of mineralization which assayed 228.4 g/t (6.66 oz/t) silver, 9.71% lead, 5.48% zinc, and 0.78% copper from 9.2m to 24.1m,



SKETCH OF POST SEEN DURING DUE DILIGENCE INSPECTION 2004

### DRILL HOLE INTERCEPTS

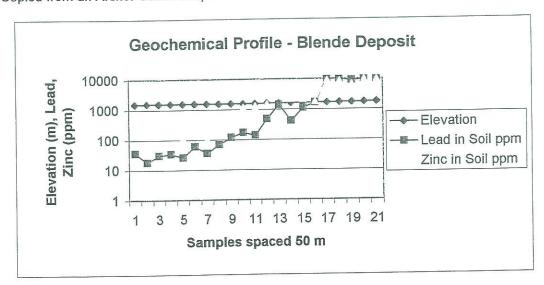
Blende Deposit, Yukon Territory 1988 and 1990 Programs

Hole	Interv	al	Width	Pb	Zn	Ag g/t
11010	(m)		(m)	%	%	
88-1	4.30	28.99	24.69	3.5	3.3	46.6
00-1	83.48	85.89	2.41	7.9	6.4	190.3
	129.20	132.31	3.11	4.7	2.2	42.2
88-2	8.81	90.50	81.69	5.2	2.8	108.9
00-2	207.90	209.70	1.80	3.4	3.6	93.6
88-3	3.69	135.88	132.19	3.7	1.8	88.8
00-3	227.72	230.70	2.98	2.4	2.8	27.4
90-4	53.64	77.72	24.08	5.1	3.1	47.7
30 <del>-4</del>	95.74	119.45	23.71	2.8	1.4	60.0
	129.08	135.09	6.01	7.9	2.6	165.6
	218.88	224.79	5.91	5.9	2.2	28.1
90-5	58.55	88.91	30.36	3.2	3.3	51.4
90-0	114.00	126.95	12.95	0.6	3.1	7.9
90-6	68.73	92.99	24.26	7.6	2.4	108.0
30-0	252.37	257.01	4.64	1.1	3.2	15.8
90-7	217.99	241.98	23.99	2.7	1.5	76.8
90-8	49.01	60.02	11.01	1.6,	1.6	20.2
90-9	15.00	-26.91	11.91	7.1	8.2	118.6
30-3	45.99	58.00	12.01	1.8	0.9	24.7
	67.36	84.92	17.56	5.6	2.2	71.7
90-10	29.99	37.89	7.90	4.2	7.8	165.6
90-10	90.50	94.34	3.84	2.0	5.7	31.9
	155.66	176.84	21.18	3.9	1.5	28.8
90-11	16.95	52.73	35.78	2.0	3.7	32.2
90-11	151.15	158.80	7.65	4.8	5.4	133.7
90-12	112.99	115.98	2.99	0.5	4.4	10.6
30-12	242.99	267.98	24.99	1.8	3.0	37.4
90-13	132.01	141.00	8.99	0.5	4.3	14.7
90-13	250.79	252.89	2.10	0.8	4.0	8.2
90-14	100.00	110.92	10.92	0.2	3.0	9.9
30-14	212.90	215.10	2.20	6.0	2.6	46.6
	230.92	235.21	4.29	1.6	4.9	11.3
90-15	34.99	104.85	69.86	5.1	2.3	131.0
30-13	201.75	216.99	15.24	3.2	4.4	33.6
	240.43	257.01	16.58	1.7	1.4	22.6
90-16	7.16	16.00	8.84	1.6	0.8	18.2
90-10	31.00	43.01	12.01	2.8	1.7	31.9
	65.99	104.70	38.71	3.0	0.9	23.3
90-17	75.90	84.31	8.41	10.1	3.2	66.9
3U-11	204.40	206.59	2.19	3.7	2.2	19.9
90-18	26.00	32.00	6.00	2.1	0.8	34.6
20-10	91.35	133.01	41.66	1.5	1.5	21.6
	91.00	.00.01				

### GEOCHEMICAL PROFILE Blende Deposit West Zone

SAMPLE	ELEV	PB	ZN
No.	m	ppm	ppm
na	1525	36	178
	1537	18	246
	1550	30	188
	1560	34	160
	1565	26	116
	1570	60	140
	1565	36	110
	1560	70	234
	1540	118	438
	1545	170	1185
	1570	138	1295
	1585	478	1510
	1610	1405	4680
	1625	414	2240
	1635	1115	2200
	1665	1685	1800
	1680	10000	9290
	1700	10000	8770
	1715	8960	6940
	1755	10000	10000
	1780	10000	10000

Copied from an Archer Cathro map



### LABORATORY PROCEDURES USED IN 1991 Chemex Laboratories Inc.

### Lead, Zinc

A 2 gram sub-sample is digested in hot perchloric-nitric acid mixture for two hours, cooled, then transferred into a 250 ml volumetric flask. Nitric acid is added to the final sample and standard solutions. The solutions are then analyzed on an atomic absorption instrument.

### Silver

A 2 gram sample is digested in aqua regia and taken to dryness. The residue is dissolved in dilute HCL and transferred to a volumetric flask. After cooling to room temperature and making to volume the solution is run on the A.A. against matched matrix standards of known Ag content. The detection limit is 0.01 oz/t or  $0.5 \, g/t.$ 

### Lead - Non Sulphide Leach

- Weigh 1 gram of finely ground pulp into a 250 ml beaker. 1.
- Add 100 ml of 60% ammonium acetate solution. 2.
- Leach cold for 1.5 hours swirling occasionally. 3.
- Filter through a No. 42 Whatman filter paper (using filter aid). 4.
- Wash with cold H20. 5.
- Analyze against prepared acetate standards by atomic absorption techniques. 6.

Note: If phosphates or vanadinates are present, wash the filtered residue with cold, 10% perchloric acid and analyze this solution by A.A.

### Zinc - Non Sulphide Leach Routine Method:

Weigh a 1 gram sample into a 250 ml beaker 1.

- Add 25 ml of 25% ammonium chloride solution and 10 ml of saturated ammonium acetate solution. 2. Note: When making saturated ammonium acetate solution start with 1/4 the required volume of water.
- Boil for 10 minutes.
- 3. Filter through a No. 42 Whatman filter (using filter aid) into a 250 ml volumetric flask. 4.

Wash with hot water. 5.

Analyze against prepared standards by A.A. 6.

### Alternate Method: (Difficult Ores)

Weigh a 1 gram sample. 1.

Add 50 ml of 2% H2SO4 saturated with S02. 2.

- Stopper flask and allow to stand at 30 degrees C for one hour swirling every 10 minutes. 3.
- Filter and wash with hot water. 4.
- Analyze by A.A. 5.

SHOSHONE SILVER MINING COMPANY

46

PAGE

The second secon

### APPENDIX I -C

	IV GMV\$	\$ (net ZnO)		+	A .		46 \$25.13	.00 \$31.90	08 \$47.67					\$80.12 \$56.21						2.71 \$89.70	\$86.53 \$81.16	#120 10 #179 47	9-		\$62.35 \$56.15	\$155.76 \$140.15	
	Pb+Zn GMV	%			69		2.77 \$35.46	2.61 \$36.00				6.70; \$92.87	3.07 \$43.35	5 86: \$80				<del>- (A)</del>	5.08 \$65	8.67 \$112.71	6.27 \$86		#	4.86 \$6	4.75 \$6	12.00 \$15	
	Ag Pb-				0.41 1	0.38	0.25	0.22				0.16	0.24	0.20	0.20	0.5/	0.29	2.33	1.05	1.31	0.17			0.30	1.09	2.36	
 ukon	700				0.24	0.44	0.75	0.30			60.0	0.10	0.89		FC.T	0.64	0.74	2.82	1.89	1.67	0.30	60.0	0.63	1.12	0.45	1 13	1
RESOURCE CALCULATIONS Zone - Blende Ag-Pb-Zn property, Yukon Billiton Resources Canada Inc. ORIGINAL DATA	Zn	7/0	0%	1.26	10.90	4.53	2.04	76.0	V.50	3.16	3.36	6.61	2.97	i L	5,53	5.17	3.10	2.95	3.20	6.07	6 10	0.10	5.37	4.38	3,00	7 7 7	1.1.7
 RESOURCE CALCULATIONS  Zone - Blende Ag-Pb-Zn property, \ Billiton Resources Canada Inc. ORIGINAL DATA	CHO	DOL Y	%	0.04	0.11	0.33	0.29		0.10	0.28	0.01	0.02	0.05	0 0	0.18	0.17	0.07	4.91	1.14	1 12	-i c	0.02	1.27	0.17	0.52	Т	T.U.
OURCE O Blende A Illiton Resou ORIGIN	ā	PD	%	0.23	0.65	1.57	0.73	00	0.25	0.79	0.03	0.09	0.10	) - F	0.33	69.0	0.17	6.70	1.88	2 60	2.00	0.17	4.83	0.48	1.75	L	4.75
RESC West Zone -		Tonnage	metric	282,382	46,111	211.460	707 00	39,784	130,824	113,837	58,697	28,554	27 075	32,873	56,064	291,966	27,023	23,963	65.378	LOJ COC	363,307	60,674	332,788	107,559	436 506		182 881
		Area	mZ	910.9	148.7	682	1 0	126.3	422.0	367.2	189.3	92.1	1 (	106.0	180.9	941.6	87.2	77.3	210.7	7.00	11/2.8	195.7	1073.5	347 D	1 400 1	T400.T	.0001
		Width	E	100	100	50	000	100	100	100	100	100	0	100	100	100	100	001	0 0	TOOT	100	100	100	100		TOOT	00
		Section		9700E	OROOF	) ()	9800E	9800E	9900E	9900E	9900E	ДОООО	9900E	30066	9900E	9900E	30000	10000	10000	TOOOGE	10000E	10000E	10000E	10000 F	TOOOOT	10000E	LCCFCF
		Block No.	(DrillHole	Number)	1 -	DZ1-1	B21-2	B21-3	B21-4	821-5	B21-6	1 1 1	D2/-1	827-2	B27-3	B13-1	, c c t a	D13-2	T-TTG	B11-2	B11-3	811-4	R11-5	) + + (	D12-1	B12-2	7

0.49j         0.33         5.10         \$71.33           1.13         1.36         6.66         \$92.01           0.29         0.33         6.50         \$82.18           4.97         3.46         15.34         \$191.92           0.27         0.82         3.00         \$35.91           0.34         6.32         1420         \$18.75.75           0.08         3.11         10.51         \$118.77           0.08         2.64         \$35.59           0.08         2.64         \$35.59           0.08         2.64         \$35.59           0.09         3.37         \$42.39           0.65         1.04         \$3.76         \$40.45           0.043         4.59         6.15         \$40.45           0.62         1.04         3.76         \$40.45           3.26         2.25         5.66         \$164.37           0.04         2.88         4.56         \$55.42           0.04         2.88         4.56         \$55.42           0.04         2.88         4.56         \$43.19           0.04         2.86         \$43.19
1.36 6.66 \$  0.33 6.50 \$  0.082 3.00 \$  0.082 3.00 \$  3.11 10.51 \$1  6.32 1420 \$1  0.08 2.69 \$  0.09 2.69 \$1  0.053 2.69 \$2  1.00 4.96 \$1  1.00 4.96 \$2  2.25 5.66 \$2  1.04 3.76 \$2  1.05 4.56 \$2  4.59 0.77 \$2  4.58 4.56 \$2  4.58 4.56 \$2  4.58 4.56 \$2  4.58 4.56 \$2  4.58 4.56 \$2  4.58 4.56 \$2  4.58 4.56 \$2  4.58 4.56 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.58 5.65 \$2  4.5
0.33 6.50 \$\frac{1}{5}\$ 0.33 6.50 \$\frac{4}{5}\$ 0.82 3.00 \$\frac{4}{5}\$ 0.82 3.00 \$\frac{4}{5}\$ 0.18 4.06 \$\frac{4}{5}\$ 0.24 3.37 \$\frac{4}{5}\$ 0.24 3.37 \$\frac{4}{5}\$ 0.25 5 6.15 \$\frac{4}{5}\$ 0.25 7.04 7.02 \$\frac{4}{5}\$ 0.77 \$\frac{4}{5}\$ 0.78 \$\frac{4}{5}\$ 0.78 \$\frac{4}{5}\$ 0.79 \$\frac{4}{5}\$ 0.79 \$\frac{4}{5}\$ 0.79 \$\frac{4}{5}\$ 0.70 \$\frac{4}{5}\$
0.33       0.30       \$ 1         3.46       15.34       \$ 1         0.82       3.00       \$ 4         3.11       10.51       \$ 1         0.18       4.06       \$ 4         0.24       3.37       \$ 4         0.24       3.37       \$ 6         1.00       4.96       \$ 7         2.25       5.66       \$ 5         2.25       5.66       \$ 4         2.29       \$ 4.56       \$ 4         4       2.88       4.56       \$ 4         4       2.88       4.56       \$ 4         4       2.88       2.80       \$ 3.37         4       2.86       \$ 2.80       \$ 3.98
3.4b       15.34       **         0.82       3.00       *         3.11       10.51       *1         6.32       1420       *1         0.08       2.64       *         0.24       3.37       *         1.00       4.96       *         4.59       6.15       *         2.25       5.66       *         7.04       7.02       *         7.04       7.02       *         2.291       0.77       *         4       2.88       4.56         2       2.88       4.56         3.14       5.65         3.98       3.98
0.82       3.00         3.11       10.51       \$1         6.32       1420       \$1         6.32       1420       \$1         0.18       4.06       \$4         0.24       3.37       \$6         4.59       6.15       \$6         2.25       5.66       \$6         2.25       5.66       \$6         4       2.28       4.56       \$6         4       2.88       4.56       \$6         4       2.88       4.56       \$6         4       2.86       2.80       \$6         5       4.26       \$6       \$6         6       4.56       \$6       \$6         7       0.66       \$6       \$6         8       2.86       \$2.80       \$6         8       2.86       \$6       \$6         8       2.86       \$6       \$6         9       2.86       \$6       \$6         8       2.86       \$6       \$6         9       2.86       \$6       \$6         9       2.86       \$6       \$6       \$6         9       2.86<
3.11       10.51       \$1         6.32       1420       \$1         0.18       4.06       \$1         0.08       2.64       \$1         0.24       3.37       \$2         4.59       \$3.37       \$2         1.00       4.96       \$2         2.25       5.66       \$2         2.25       5.66       \$4         2.29       \$4       \$2         4       2.88       4.56         4       2.88       4.56         4       2.86       \$2         4       2.86       \$2         5       6.15       \$4         6       7.02       \$4         7       7.04       \$6         8       \$2.80         1       3.98
6.32 1420 \$4 0.18 4.06 \$4 0.08 2.64 \$9 0.24 3.37 \$9 1.00 4.96 \$9 1.04 3.76 \$1 2.25 5.66 \$2 2.25 7.04 7.02 \$\$ 2.291 0.77 \$\$ 1.2.88 4.56 3.14 5.65 3.14 5.65
0.18 7.00 4 9 6 0.24 3.37 8 6 1.00 4.59 6.15 7.04 7.02 \$ 4.56 \$ 7.02 \$ 4 2.88 4.56 7.02 \$ 4 2.88 7.02 \$ 4 2.88 7.02 \$ 4 2.88 7.02 \$ 4 2.88 7.02 \$ 4 2.88 7.02 \$ 4 2.88 7.02 \$ 4 2.88 7.02 \$ 4 2.88 7.02 \$ 4 2.88 7.02 \$ 4 2.88 7.02 \$ 4 2.88 7.02 \$ 4 2.88 7.02 \$ 4 2.88 7.02 \$ 4 2.88 7.02 \$ 4 2.88 7.02 \$ 4 2.88 7.02 \$ 4 2.86 7.06 \$ 3.98 \$ 4 2.88 7.02 \$ 4 2.86 7.06 \$ 3.98 \$ 4 2.88 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.02 \$ 4 2.86 7.0
0.08 2.64 3 3 3 6 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9
0.53 2.69 3.00 4.00 4.50 6.15 6.15 7.04 3.76 7.02 \$\$\$ 22.91 0.77 \$\$\$ 22.91 0.77 \$\$\$ 3.14 5.65 3.98
0.24     3.37       1.00     4.96       4.59     6.15       2.25     5.66       7.04     7.02       22.91     0.77       2.88     4.56       3.14     5.65       2.86     2.80       0.66     3.98
1.00 4.96 4.59 6.15 2.25 5.66 7.04 7.02 \$ 22.91 0.77 \$ 22.91 0.77 \$ 3.14 5.65
4.59     0.15       1.04     3.76       2.25     5.66       7.04     7.02       22.91     0.77       2.88     4.56       3.14     5.65       2.86     2.80       0.66     3.98
1.04 3.7b 2.25 5.66 7.04 7.02 \$ 22.91 0.77 \$ 2.88 4.56 3.14 5.65 2.86 2.80
2.25 5.66 7.04 7.02 \$ 22.91 0.77 \$ 2.88 4.56 3.14 5.65 2.86 2.80
7.04 7.02 \$ 22.91 0.77 \$ 2.88 4.56 3.14 5.65 2.86 2.80 0.66 3.98
22.91 0.77 \$ 2.88 4.56 3.14 5.65 2.86 2.80 0.66 3.98
2.86 2.80 0.66 3.98
3.14 5.65 2.86 2.80 0.66 3.98
2.86 2.80
3.98
1.37 6.65
7
3.36
3.22 5.56 14.36 \$188.15
1.11 1.23 6.88 \$75.02

\$41.04	\$172.22	\$90.83	\$76.51	\$133.37	434 61	4 C C C C C C C C C C C C C C C C C C C	\$26.42	\$97.60	\$53.33	\$35.93	\$33.69	\$58.76	¢31 N6	27 00 4	430.10	\$45,45	\$71.49	\$49.95	\$128.62	473.85	0.00	6C.ZUT¢	\$100.44	\$91.96	\$45.46	\$46.15	\$62.26	70.07+	00.674	\$38.03	07.624	\$48.47
\$41.04	\$244.56	\$111.63	\$103.52	\$143.57	437 13	υ - 1 . L	\$30.49	\$114.27	\$55.12	\$36.75	\$33.69	459.86	423 67	· · · · ·	\$38,32	\$45.59	\$92.08	\$53.99	¢130 68	70.00	# 0 L.04	\$177.99	\$103.91	\$92.92	\$52.77	\$50.17	465 70		\$83.08	\$39.41		\$48.89
3.38	18.79	9.20	7,67	11.94	C F C	3.14	2.94	10.08	4.25	2.66	2 86	7 50	7 0	),I,C	79.7	3.49	821	4.30	10 55	TOTO	8,13	10.14	7.60	7.28	4.07	3.70	787	70 1	7.53	3.42	3.53	4,15
1.15	9.42	3.11	4,42	1.57	1 (	0.00	0.51	3.15	0.46	1.15	101	1,0 t	T 7 0	0.88	1.44	1.08	1.39	1.75	0.00	4.83	0.82	2.66	0.30	0.82	1.26	2.16	7	T.30	1.58	0.57	1.26	1.26
0.58	5.25	1.51	1.96	0.74	F 1	0.16	0.20	1.21	0.13	90.0	000	00.0	0.00	0.19	0.01	0.01	1.49	0.29	L	0.15	0.58	1.86	0.25	0.07	0.53	0.79	0 0	0.25	0.71	0.10	0.02	0.03
1.16	5.72	3.17	2.29	7 7	0.70	1.41:	0.69	2.44	3.16	1.37	0	0.77	T9.7	0.52	1.35	1.85	3,15	1.45	7	2.64	2.22	5,18	7.13	5.13	2.09	1 17	7T'T	2.48	3,31	1.50	0.58	1.35
1.11	7.76	2,70	2 59	1 7	1.48	0.31	0.70	2.24	0.26	0.19	) (	00.00	0.43	1.01	0.23	0.30	2.30	0.73	0.7.7	1,11	0.86	1.68	0.08	0.14	0,62	0 73	0.7.3	0.55	0.87	0.48	0.49	0.46
2.22	13.07	6.03	7 38	5 1	5,24	1.71	2.25	7.64	1.09	1 29	1	2.09	1.99	2.65	1.27	1.64	5.06	) L	7.85	7.91	5.91	4.95	0.48	2.15	1.98	i C	2.58	2.39	4.23	1.92	2,95	2.80
920,62	124,485	61 684	01/100	492,326	316,009	214,798	247,292	495.123	73.488	252 041	730,041	88,167	365,467	263,824	472,290	312.173	703 040	01000	700,229	76,871	86,078	262,010	88.409	44,810	194 193	004/-04	717,727	127,385	383,407	137,066	92,207	108,956
255.1	401.6	0 00 1	0.001	1588.8	1019.4	692.9	7.797	15072	737 1	1.707	816.3	284.4	1178.9	851.0	1523.5	1007.0	0 2300	6.7077	2258.8	248.0	277.7	845.2	285.2	144 5	V 9C3	070,1	2315.2	410.9	1236.8	442.1	297.4	351.5
100	100	0 0	TOO	100	100	100	100	0 0	700	OOT	100	100	100	100	100	100	) (	100	100	100	100	100	001	000	0 0	TOO	100	100	100	100	100	100
1 10200E	10300E	TOSOGE	10300E	10300E	10300E	10300E	103001	J L	10300E	IU3UUE	10300E	10300E	10300E	10300E	10300E	10300F	1 1 1	10400E	10400E	10400E	10400E	10400F	1 00 00	10400F	10400E	10400E	10400E	10400E	10400E	10400E	10400E	10400F
L 000	*B88-/	B15-1	B15-2	B15-3	B15-4	R15-5	ם דר ב	T-QQ	B6-2	B6-3	B6-4	B18-1	B18-2	818-3	B51-1	י ר	D31-2	B4-1	B4-2	B4-3	B4-4	- L	T_C0_!	85-Z	B5-3	B45-1	B45-2	845-3	R45-4	R47-1	R47-2	7 / 10

ANY
COMPAN
MP
0
NG CC
9
Z
INI
2
SILVER
-
S
ш.
Z
모
S
SHOSHON
S

B47-4 B57-1 B30-1

	8.77	3.87	3.76	3.67		3.22	
49	1.50	1.15	0.95	0.63		2.19	
PAGE	0.08	0.07	0.15	1 12	1	0.20	
and the state of t	6.82	1.86	0.31	1 37	1.0V	0.38	
77	0.33	0.30	2.34	VC +	1	2.25	The second secon
TECHNICAL REPORT	1.95	2.01	3.45	L C	2.35	2.84	TOTAL CONTRACTOR OF THE PROPERTY OF THE PROPER
TECHI	900'692	67,283	16.224		29,762	32,443	
PANY	2480.7	217.0	8 87	2	0.96	104.7	
NG COM	100	100	0 0	OOT	100	100	001
SILVER MINING COMPANY	10400E	100001	1 L	TUSUUE	10500E	10500E	TOOCOT

\$48.10 \$35.37

\$49.06 \$37.44 \$40.66 \$42.24 \$88.29

\$118.25

\$119.35

\$39.48 \$76.99

(net ZnO)

GMVS

GMV

8.27 Pb+Zn

0.82 2.04

2.25 2.92 ZnO Ag

Zn

Pbo

Ьb

22,571

72.8

100 100 Total

10500E 10500E

B30-3 B30-2

B40-1

Tonnage

Area

\$70.55

\$80.45

6.26

1.97

0.79

3.04

1.09

3.23

15,317,523

49411.3

opt

%

Total %

%

total %

metric

\$2,523

\* PbO and ZnO calculated at 50% of total Pb and Zn respectively GMV\$ assumed to be US\$

## RESOURCE CALCULATIONS

West Zone - Blende Ag-Pb-Zn property, Yukon Billiton Resources Canada Inc. 1991

UNDERGROUND RESOURCE CALCULATIONS

			5										(
L	HIGH I BIOCK I FNGTH WIDTH	BI OCK	I FNGTH	WIDTH	THICKNESS	FACTOR	VOLUME	SG	TONNES	PB	NZ	AG:	CIMIS
DRILLHOLF	מברכוסו		)							%	%	%	SN
		no.	no.	Е	Ε								£
00 11	10+000			100	11.10	0.8	74592	3.531	263,418	3.07	6.88	1.61	D ::
			152	100	7.66		93146	3.531	328,939	4.83	5.37	3.9	\$12
		i										••••	
									2000	2 46	4 95	2.36	69
90-12	10+000	12A		96 100	5.00	0.8	38400	3.531	000,661	0		i	
									470 2EE	. V	8 78:	2.78	\$14
00-10	10+100E	10A	94 100	100	00.9	6.0	09/09	3.551	002,671	)			
2		[	7	400	2 83	60	39641	3.531	139,988	2.03	5.72	0.93	₩ ₩
		901		2					14.1	7 20	n n	1 42	<del>()</del>
		100		132 100	2.79	0.0	33145	3.531	100,711	60.7			
													6
90-9	10+200E	•	9A 66 75	75	11.92	0.8	47203	3.531	166,696	7.14	8.2	3.46	A .
	)						.,						

11	
ii.	-
11	-
11	$\circ$
10	0.1
81	
1,	LO
11	
- 53	- 1
11	20)
11	
	(7)
Ĭ.	-
1	
11	-
1	

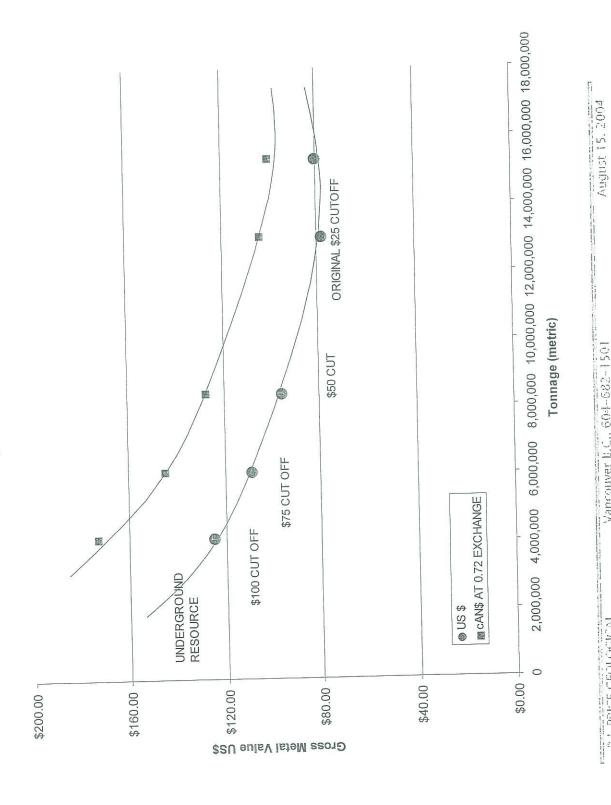
		 98	100	75	3.04	0.8	18240	3.531	64,414	7.83	2.68	3.11	\$116
		26	100	75	72.57	0.8	45420	3.531	160,398	9.06	3.2	3.38	\$134
													£
77	10+250E	17A	180	50	8.42	0.9	68202	3.531	240,852	10.08	3.21	J.95	
71-0	20 00 00 00 00 00 00 00 00 00 00 00 00 0	150	88	50	7.70	0.9	30492	3.531	107,681	13.07	5.72	9.42	\$231
90-15	10+300E	227	8 6	50	3.67	0.9	15194	3.531	53,656	6.03	3.17	3.11	\$105
	10+300E	0.00	20	50:	9.47	0.9	40910	3.531	144,473	14.11	6.6	11.55	\$262
	10+300E	150	110	50	3.64	6.0	18018	3.531	63,630	5.25	3.15	5.28	\$110
	10+300E	15E	148	50	5.71	0.8	33803	3.531	119,374	7.2	8.08	2.11	\$158
9-06	10+300E	6A	89	50	21.00	6.0	64260	3.531	226,931	8.37	2.5	3.5	\$121
90-18	10+300E	18A	80	50	3.45	6.0	12420	3.531	43,861	2.97	4.38	1.72	\$81
				r C	3 00	6.0	27000	3.531	95,349	6.21	2.02	0.99	\$85
90-16	10+350E	16A	007	0 4	3.17	60	28530	3.531	100,752	6.52	1.59	1.04	8
90-16	10+350E	16B	007	0 0	4 97	6 0	44730	3.531	157,962	8.16	1.61	2.09	\$102
90-16	10+350E	၂ <u>၅</u>	200	000	ř								
	L	< 8	7,7	75	12.00	0.95	94050	3.531	332,133	7.36	4.05	1.9	911
90-4	10+400E	ţ	2 22	75	9.00	0.95	51300	3.531	181,163	5.36	2.22	3.83	89
90-4	10+400	4 6	130	75	6.00	0.95	55575	3.531	196,260	7.91	2.64	4.83	\$12
90-4 90-4	10+400E	4D	150	75	3.40	0.95	36338	3.531	128,324	8.6	1.77	1.1	\$10
				1	40.04	0.05	73256	3.531	258,701	5.2	5.30	3.63	\$12
90-5	10+400E	2A	84	0)	+7.7	0 0	18810		66.427	0.54	8.00	0.34	\$3
90-5	10+400E	2B	 & &	9/	3.00	50.00		1	704 69	2 15:	5 13	0.82	\$7
90-5	10+400E	5C	84	75	3.00	0.95	17955	3.531	TONNES:	PB	ZNZ	AG	GMV US
Copied and cl	Copied and checked from calculations by Billiton	ulations by E							A 436 705	6.67	4.62	3.11	\$124.8
TOTALS AND AVERAGES	AVERAGES		Pb	Zu	Ag				4,120,02	i	C206	0.72 exch	\$173.4
111111111111111111111111111111111111111			0.45	0.50	6.00	•••			••••		*****		-

TECHNICAL REPORT

SHOSHONE SILVER MINING COMPANY

TECHNICAL REPORT

Tonnage Grade Curve, Blende Deposit



Vancouver B.C., 604-682-1501

B.I. PRICE GEOLOGICAL

PAGE 52

SHOSHONE SILVER MINING COMPANY

### APPENDIX I - C

		GMV\$(net	\$46.74	\$22.04	-0.000	\$37.49	\$94.08	\$34.73	\$40.25	\$51.52	1000	4.14	842.09	\$102.44	\$162.05	\$70.55	\$39.48	674 07	D. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	837.18	\$35.89	\$56.29	\$53.81	\$96.15	\$54.17	\$69.54	\$37.43	
		Pb+Zn	1 02:	70.1	2.,49:	2.77	6.74	2.82	3.54	4.47	r c	6.20	3.09	8.50	15.10	5.95	2.85	0 0	6.31	3.28	2.63	4.25	4.02	8.28	4 64:	0.0	70.0	76.7
Ф	osits	Ag(opt)	0 10	00	0.04	60.0	0.32	0.32	0.36	0 68	00.0	0.30	0.17	1.06	2.97	0.77	0.12	. (	0.91	0.35	0.10	0.10	0.06	1.86				
ast Zon	Inc inde Dep	(%)OuZ	1	0.47	0.11	60.0	0.05	0.05	0.02		0.03	0.90	0.05	90.0	0.16	0.04			0.07			0.21	0.14	0.08				0.03
nates E	Canada ne of Ble	Zn %		1.63	2.48	2.76	69.9	1.89	1 77		2.24	6.04		5.01	4.50	3.28	Y 0 C				2.55	4.24	4.01	02.5				2.19
re Estin	ource Blocks - East Zone of B	PbO(%)		0.93	0.01	0.01	0.01	0.11	0.47		0.31	0.07	0.02	0.49	1.62						0.02	0.01	0.01	0 50				3 0.16
Reserv	Blocks -	Pb(%)		3.29	0.01	0.01	0.05	0.93	1 77	1.7.7			90'0	3.49	10.60			0.01	2.85	1.65	0.08	0.01	0.01					3 0.78
ectional	Oct. 17, 1991 Billiton Metals Canada Inc Il Resource Blocks - East Zone of Blende	All compo Tonnage		15,659	66,559	126,372	35,631	143 093		enc'/a	248,536	10,287	20,961	39,258	11 741	244 475	044,170	41,361	294,971	155,361	194,736	92,382	44.635		101,347	177,425	87,530	150,688
Cross Sectional Reserve Estimates East Zone	Oct. 17, 1991 Billiton Metals Canada Inc eological Resource Blocks - East Zone of Blende Deposits	ick Area (m2)		101.0	429.4	815.3	229.9	003.0	7.070	435.5	1603.5	66.4	135.2	253.3	75.8	0 1	c.0222	266.8	1903.0	1002.3	1256.4	596.0	288.0		653.9	1144.7	564.7	972.2
O	Gec	Block Thick		50 m	50 m	50 m	70 m		II 06	50 m	50 m	50 m	50 m	50 m		EL OG	20 m	50 m	50 m	50 m					20 m	50 m	50 m	50 m
		Sortion	••••	12450E	12500E	12500E	42500E	10002	12500E	12500E	12550E	12550E	12550E	42550E	700071	12550E	12550E	12550E	12600E	12600E	12600F	4.2600F	70000	12000	12600E	12600E	12600E	12600E
		. ON Joria	DIOCK NO.	B65-1:	R42-1	- 21-0 - 21-0	7 7 7 7	1-679	B26-1	B26-2	B39-4	B39-1	B39-2	0000	B38-3	B68-1	B68-2	B39-5	B19-1	B19-2	B 10-3		D24-1	B24-2	B41-1	B25-1	B25-2	B25-3

Vancouver B.C., 604-682-1501

	5	
-	-	
-	RIPRICE GROUDGICAL Vancouver B.C., 6	
1	Vancouver B.(	
1	Vel	
	2	
	5	
-	-	
	E	
	.>	
-		
i		
-		
	1	
-		
į	1	
4000	-	
	Ų.	
	-	
	C	
	12	
	1	
100	LL	ì
3	1 7	
3	R I PRICE GEOLOGICAL	
	_	
	10	
	1	

\$126.12	\$27.09	\$69.94	\$45.06	\$26.33	\$37.92	\$41.67	\$60.66	\$29.22	\$32.99	\$54.92	\$30.12	\$113.76	\$50.65	\$69.94	\$50.48	9 40 40 88 40 40	00.00	47.076	923.23	\$29.53	839.50	\$00.00 \$00.00	\$40.63	\$54.15	\$55.69	\$43.63	GMV\$(net ZNO)	\$54.32
10.61	2.00	5.05	3.30	1.91	2.77	3.35	7 88	7.20	2.42	A 25	t C	0 V	. v. v.	, c	0 5	40.4	Z.000	2.17	2.45	2.15	2.83	6.29	2.96	3.96	4.05	3.13	%uZ+qd	4.37
1.11	0.13	0.20	0.17	0.13	0.13	0.24	000	0.70	0.00	5 6	0.00	17.0	1.42	2 0	0.22	0.60	00	0.12	0.05	0.04	0.22	0.40	0.21	0.19	0.09	0.15	Ag(opt)	0.44
96.0	60.0	0.07	0.11	0.06	0.07	0.05		0.05	0.03	0.00	0.04	0.04	0.00	0.00	0.0	0.12	0.04	0.03	0.05	0.04	0.06	0.08	0.05	0.05	0.04	0.03	%OuZ	90'0
8.22	1.98	5.04	3.29	1.90	2 74	2.45	i	3.59	1.95	2.35	3.40	1.38	5.26	3.63	5.01	2.39	2.51	1.5	2.43	2.13	2.80	5.51	2.81	3.79	4.02	3.11	Zn(totA%	3.05
1.01	0.01	0.01	0.01	0.01	0.04	144	j	0.20	0.07	0.01	0.15	0.25	0.53	0.01	0.01	0.56	0.04	60.0	0.01	0.01	0.01	0.13	0.05	90.0	0.01	0.01	%O9d	0.19
2.39	0.02	0.01	0.01	0.01		5 6	000	1.29	0.36	0.07	0.85	1.27	4.19	0.02	0.02	1.95	0.15	0.59	0.02	0.02	0.03	0.78	0.15	0.17	0.03	0.00	Pb(total) %	1.31
26,671	61,550	31,994	25 235	33 704	1 00,1	47,710	107,034	179,721	41,734	48,716	100,671	41,174	134,955	337,333	69,397	27,781	160,384	52,987	86,122	28,544	25,204	19,960	53,509	49,733	30.237	. VC H OC	Tonnage	4,318,896
172.1	397.1	206 4	2007	2 0 0	0.017	307.8	690.5	1159.5	269.2	314.3	649.5	265.6	870.7	2176.3	447.7	179.2	1034.7	341.9	555.6	184.2	162.6	128.8	345.2	320.9	195.1			
50 m	50 m	20 02		1100	m nc	50 m	50 m	50 m	50 m	50 m	50 m	50 m	50 m	50 m	50 m	50 m	50 m	50 m		000	50 m	Totals						
12650F	12650E	12000L	100071	300071	12650E	12650E	12700E	12700E	12700E	12700E	12700E	12700E	12700E	12750E	12750E	12750F	12800F		1200821	12800E								
B38_1:	2000	040-1	B48-2	B46-3	B48-4	B48-5	B38-2	B38-3	B38-4	B38-5	B38-6	B75-1	B75-2	B34-1	B34-2	B32-1	B29-1	B29-2	B29-3	R29-4	B46-1	B46-2	2 2 2	D40-3	000-1	7-699	B69-3	

SHOSHONE SILVER MINING COMPANY

## APPENDIX I E – BLENDE PROPERTY

### DOCUMENTED AND ESTIMATED EXPENDITURES

Archer Cathro Norvista Development Ltd. Inco Exploration Ltd. Archer Cathro NDU Resources Ltd. Billiton Metals Canada Inc. Archer Cathro NDU/Billiton Billiton	DATE CC	COMPANY	WORK	AMOUNT	AMOUNT ESTIMATED
Inco Exploration Ltd.  Archer Cathro  NDU Resources Ltd.  Archer Cathro  Billiton Metals Canada Inc.  Archer Cathro  NDU/Billiton  Billiton  Billiton  Billiton  Billiton  Billiton Res. Canada Inc.		cher Cathro orvista Development Ltd.	Surface sampling, trenching Helicopter Costs only	\$33,000.00	
Archer Cathro  NDU Resources Ltd.  Archer Cathro  Billiton Metals Canada Inc.  Archer Cathro  NDU/Billiton  Billiton  Billiton Res. Canada Inc.		co Exploration Ltd.	Claim staking 1984 Mapping and Sampling 1985	\$0.00	\$10,000.00
Archer Cathro  NDU Resources Ltd. Billiton Metals Canada Inc.  Archer Cathro  NDU/Billiton  Billiton Res. Canada Inc.  Billiton Res. Canada Inc.		cher Cathro DU Resources Ltd.	Diamond Drilling NQ BQ 3 holes, 718 m (Franzen Report)	\$200,000.00	\$0.00
Archer Cathro Archer Cathro NDU/Billiton Billiton Billiton Res. Canada Inc. Billioton Metals Canada Inc.		rcher Cathro DU Resources Ltd. Iliton Metals Canada Inc.	Diamond Drilling, Ortho-Photos, VLF, Mag, Grad surveys, Assays	\$55,182.31	\$0.00
Archer Cathro NDU/Billiton Billiton Billiton Res. Canada Inc. Billioton Metals Canada Inc.		rcher Cathro	Water Quality Study John Gibson	\$0.00	\$3,000.00
Billiton Res. Canada Inc. Billioton Metals Canada Inc.		rcher Cathro IDU/Billiton	15 holes 7, 3660 m Diamond Drilling NQ Costs estimated	\$0.00	\$1,000,000.00
Billioton Metals Canada Inc.		illiton	Final Drill report Glenn Lutes, Billiton	\$0.00	\$5,000.00
Billioton Metals Canada Inc.		illiton Res. Canada Inc.	Barbara Murck, Geoplastech Inc. Petrographic report	\$0.00	\$5,000.00
	25-10	sillioton Metals Canada Inc.	Prelim. Open Pit Study Glenn Lutes, M.Sc., Billiton	\$0.00	\$25,000.00
		Billiton	Preliminary Metallurgical Testwork Bacon Donaldson and Assoc.	\$0.00	\$50,000.00

PAGE 55

SHOSHONE SILVER MINING COMPANY

1991	Archer Cathro NDU Billiton	Diamond Drilling 62 holes, 11525.1 m Not all filed? Filed \$151,165.57	\$472,611.27	\$3,000,000,00
1991	Billiton	Drilling Report Glenn Lutes Report of Activities Economic study	\$0.00	\$10,000.00
1991	Billiton	Preliminary Mineralogy Mineralogy of Concentrates Min Scan Consultants Ltd. Seven separate studies	\$0.00	\$10,000.00
1991	Billiton	Metallurgical Flowsheet Bacon Donaldson and Assoc.	\$0.00	\$15,000.00
1991	Archer Cathro	Survey of Points, Drillholes Lamerton and Associates	\$0.00	\$20,000.00
1992	Billiton	Water Quality and Hydrology Survey, J. Gibson and Associates	\$0.00	\$5,000.00
1992	Billiton	Geophysical Evaluation Jerry Roth, Stratagex Ltd.	\$0.00	\$5,000.00
1994	Archer Cathro NDU Resources Ltd.	596 meters, 7 holes No affidavit, costs estimated	\$0.00	\$75,000.00
1984-94	DOCUMENTED AND ESTIMATE	TOTAL	\$760,793.58	\$4,238,000.00
		College od street III - 1 - 1	7	

NOTE: costs documented are for assessment purposes only. Not all costs may be applied. Chemex Analytical certificates, Drill Logs available for all programs PAGE INTENTIONALLY LEFT BLANK

### APPENDIX III ZINC

Prepared by the Minerals and Metals Sector, Natural Resources Canada. Telephone: (613) 947-6580 E-mail: info-mms@nrcan.gc.ca

Canada is an important producer and exporter of zinc and zinc products. Zinc metal production in Canada dates back to the early 1900s when the Consolidated Mining and Smelting Company of Canada (which later became Cominco Limited in 1966, followed by Teck Cominco Limited in 2001) started production at a small electrolytic zinc plant at Trail, British Columbia. With a smelting capacity of just over 800 000 t/y from four smelting facilities located across the country, Canada currently produces some 10% of the world's total supply of zinc.

### HISTORY OF ZINC

Zinc is a relative newcomer to the group of metals discovered and used by society. While the first use of copper pre-dates recorded history and the discovery of tin goes back 5000 years, the first recovery of metallic zinc, however, came much later. The production of metallic zinc was first described in India around 1200 A.D. By 1374, zinc was recognized as a new metal, the eighth to be discovered at that time, and a limited amount of commercial zinc production was under way. Although brass-making had developed much earlier, the zinc in brass was obtained by treating zinc ore to produce zinc vapour, which was combined with granulated copper under heat. From India, zinc production was introduced to China sometime around 1600 A.D. and then began to be exported to Europe. The first full-scale zinc smelting operation outside of Asia started in Bristol, England, in about 1743. By the beginning of the 19th century, zinc production was established on the continent of Europe, notably in Belgium and parts of eastern Europe. In the latter half of the century, large zinc industries developed rapidly in the United States and Germany.

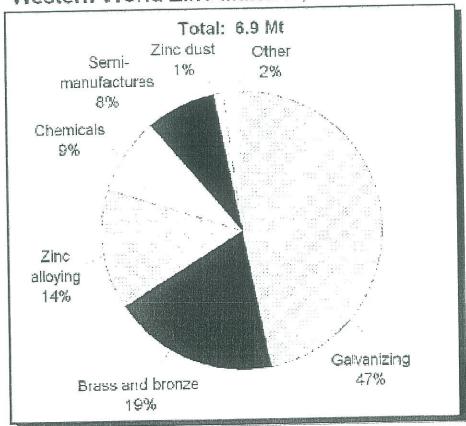
### ZINC IN CANADA

Zinc production in Canada dates back to the time around the First World War when the Consolidated Mining and Smelting Company of Canada began operating a small electrolytic zinc plant at Trail, British Columbia, to help offset a critical wartime shortage of zinc in the United Kingdom. At that time, in fact, the Consolidated Mining and Smelting Company and Anaconda Copper Mining Company in Montana were pioneering the production of zinc in North America by the electrolytic method. The ores used at Trail came from the Sullivan mine near Kimberly, but production was hampered because the complex leadzinc-iron ore was difficult to treat using existing methods. In 1920, however, the differential flotation method was successfully applied to separate the Sullivan ore into a lead concentrate, a zinc concentrate and an iron by-product. This marked the beginning of significant zinc production in Canada. Today the Trail operations are the world's largest, fully integrated lead and zinc smelting and refining complex. Owned and operated by Teck Cominco Limited of Vancouver, the Trail facility has a zinc production capacity of some 290 000 t/y. In Manitoba, the discovery of significant zinc and copper ore with important quantities of gold in 1915 led to the development of the Flin Flon-Snow Lake mining camp, smelter complex and dedicated power plant in the late 1920s. Since 1930, Hudson Bay Mining and Smelting Company Limited has owned and operated some 30 mines, which in turn have fed the company's metallurgical complex at Flin Flon. Since it first started operations in 1930, the Flin Flon smelter and refinery complex has undergone significant capital improvements with the introduction of zinc pressure leach technology in the early 1990s and a new tank house in 2000 that expanded zinc production capacity to 115 000 t/y.

The Kidd Creek orebody was discovered in 1963 and Texasgulf began open-pit mining the deposit in 1966 near Timmins, Ontario. The Kidd Creek zinc plant started production in 1972. In 1983, Kidd Creek started up a zinc pressure leaching facility plant. Today, Falconbridge Limited owns and operates the Kidd Creek complex with a production capacity of 145 000 t/y. With the discovery of significant zinc-bearing ores in northern Quebec and in Ontario in the late 1950s and early 1960s, Noranda Inc. began looking at options to build an electrolytic zinc plant. Construction began at Valleyfield, Quebec, just west of Montréal, in 1962 and Canadian Electrolytic Zinc (CEZ), a subsidiary of Noranda, was brought into production in 1963. The plant's capacity has increased steadily from its original 64 000 t/y at the time of opening to 260 000 t/y today.

Zinc mines have been found in every province and territory with the exception of Alberta and Prince Edward Island. Operations in 2002 are listed in Figure 1.





Source: International Lead and Zinc Study Group.

### USES FOR ZINC

The greatest use for zinc is as a coating for iron and steel products to make them resistant to rust and corrosion. The application of a zinc coating, known as galvanizing, is accomplished electrolytically or by hot-dip methods. Galvanizing accounts for about 47% of the worldwide use of zinc.

The most commonly galvanized products are sheet and strip steel, tube and pipe, and wire and wire rope. The automobile industry is the largest user of galvanized steel. The desire to reduce weight and improve fuel efficiency has led to the increased use of galvanized steel by the automotive industry to protect the thinner gauges of steel from corrosion. Both hot-dipped and electro-galvanized steel are used, the thicker coating of hot-dipped steel giving more corrosion protection to unexposed surfaces and the thinner coating of electro-galvanized steel providing a smoother finish for exposed painted surfaces. Galvanized sheet and strip steel are also widely used by the construction industry for roofing and siding, and for heating and ventilation ducts, as well as for many other applications. Nails and other building materials are often hot-dip galvanized. Zinc and zinc-aluminum thermally sprayed coatings are used for the long-term corrosion protection of large steel structures such as bridges and hydroelectric transmission towers.

Another important use of zinc is in the manufacture of a vast range of die-cast products. Because it has a relatively low melting point and is very fluid, zinc is easy to pour when melted. Therefore, it is well suited to rapid assembly-line die-casting, particularly to produce small and intricate shapes. A major use of die castings is in the automobile industry as trim pieces, grills, door and window handles, carburetors, pumps and other components. However, with the trend toward lighter, more energy-efficient cars, zinc demand for this purpose has declined in recent years. Other familiar zinc die castings include small electrical appliances, business machines and other light equipment, tools and toys. Another important use of zinc is in the manufacture of brass, which is essentially an alloy of copper and zinc, with the proportion of zinc ranging from 5 to 40%. The zinc brasses have good physical, electrical and thermal properties, and are corrosion resistant. They are used in plumbing, heat exchange equipment, and a wide range of decorative hardware, to name a few applications. Rolled zinc metal is a basic component in dry-cell batteries, and zinc oxide is used as a catalyst in the manufacture of rubber and as a pigment in white paint. It is also used in agricultural products, cosmetics and medicinal products.

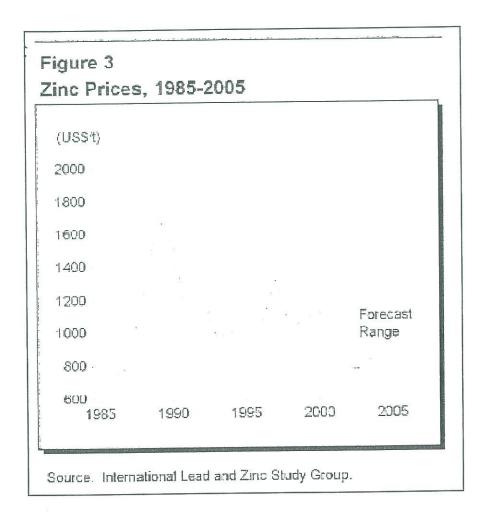
### NATURAL OCCURRENCES

Zinc is never found as a free metal but is found in association with other elements to form a number of important ores of zinc such as sphalerite (zinc blende, zinc sulphide, ZnS), smithsonite (zinc carbonate, ZnCO3), zincspar (also zinc carbonate, ZnCO3), and marmatite (zinc sulphide, ZnS, containing some iron sulphide, FeS). Like all metals, zinc is a natural component of the Earth's crust and is therefore present in varying concentrations in rock, soil, water and air. In Canada, zinc deposits fall into four main categories: sedimentary exhalative (sedex); massive sulphide, Mississippi Valley-type (MVT); volcanogenic massive sulphide (VMS); and skarn deposits. As the name suggests, SEDEX deposits comprise layers of massive sulphide minerals interbedded with sedimentary rocks and tend to be associated with large deposits of lead and zinc. Examples of such deposits include the Sullivan mine in British Columbia. MVT deposits are named after large-scale lead and zinc deposits found in the region in the United States along the Mississippi River where they were first discovered. MVT deposits are characterized by a simple mineralogy that includes pyrite (iron sulphide), galena (lead sulphide), and sphalerite (zinc sulphide) hosted in undeformed calcium and magnesium-rich carbonate rocks (limestones). Examples of this type of deposit are found at the Polaris and Nanisivik mines in Nunavut, both of which closed in late 2002. VMS deposits can be classified into sub-categories depending on their mineralogy: copper-zinc, copperzinc-lead and Besshi-type. As found with SEDEX deposits, VMS deposits are formed through the exhalation of hydrothermal fluids on the sea floor. In the case of VMS, the host rocks are submarine igneous rocks rather than sedimentary rocks. The largest example of a VMS-type deposit in Canada is the Kidd Creek copper-zinc mine near Timmins, Ontario. Other examples include the Flin Flon copperzinc deposits in north-central Manitoba. Many of these types of deposits can also contain significant quantities of gold, such as those deposits in the Abitibi region of northwestern Quebec. While the

copper-zinc deposits are found typically associated with greenstone (mafic) volcanic host rocks such as basalts, the zinc-lead- copper deposits are associated with more felsic to intermediate volcanic rocks such as rhyolite and dacite. Examples of these types of deposits include the mines in the Bathurst region of New Brunswick. Skarn deposits are formed at or near the contact between a typically carbonate-rich host rock with an igneous intrusion. Variations in the type of igneous intrusion result in variations in the mineralization that follows. An example of a lead-zinc skarn is the Sa Dena Hes deposit near Watson Lake, Yukon.

### HEALTH AND THE ENVIRONMENT

Zinc plays an important role as a micro-nutrient in the development and health of a variety of plants and animals. In humans, zinc plays an important role in the function of more than 200 enzymes, for the stabilization of DNA and the expression of genes, and for the transfer of nervous signals. The human body contains 2–3 g of zinc. The recommended daily zinc intake is 12 mg/day for adult women and 15 mg/day for adult men. Daily intake is not only dependent on food, but also on sex, age and general health status. Growing infants, children, adolescents, women in pregnancy, and the elderly have a higher zinc requirement. Food is the primary source of zinc for humans with only a small part coming from drinking water. The major sources of zinc in the diet are red meat, poultry, fish, seafood, whole cereals and dairy products.



### PRICE OUTLOOK

Cash settlement prices struggled throughout the year to remain above US\$800/t on the London Metal Exchange (LME). Overall zinc prices followed a downward trend, reaching record lows of \$725.50/t by mid-August, only to rise again briefly to US\$823/t in December and finish the year at US\$749.50/t. The continued low zinc prices did not, however, lead to any significant cuts in production. While user stocks fell by about 105 000 t during the year, stocks on the LME continued their upward climb from 434 000 t in early January to over 651 000 t by the end of the year. Overall, the International Lead and Zinc Study Group forecast anticipates that the Western World market for refined zinc metal will again remain in substantial surplus in both 2002 and 2003. Prices reflected the oversupply in the market and averaged US\$779/t in 2002 and are expected to rise slightly to average about \$800/t in 2003. Beyond 2003, continued growth in galvanizing markets, combined with good growth overall for principal zinc markets, is expected in the remainder of the forecast period with zinc prices ranging from US\$800 to \$850/t through to 2005.

(Prepared by the Minerals and Metals Sector, Natural Resources Canada. Telephone: (613) 947-6580, E-mail: info-mms@nrcan.gc.ca)

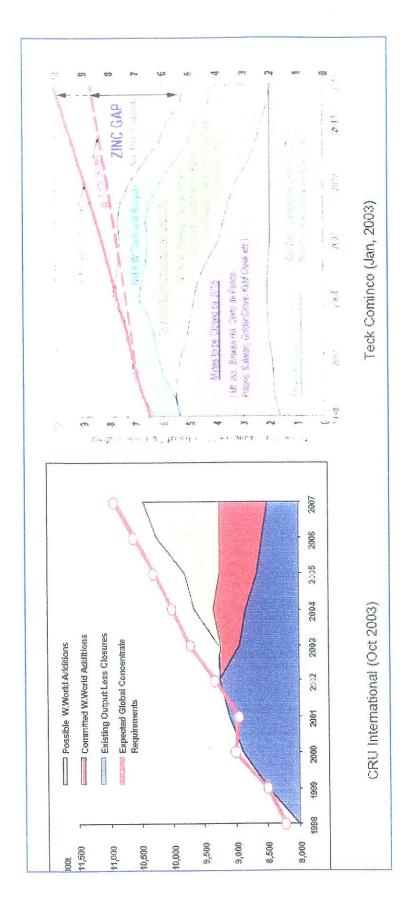
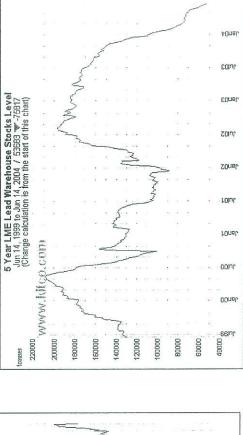
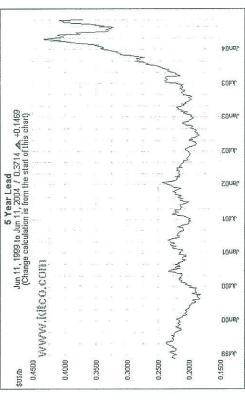


FIGURE XX SKETCH OF PROGNOSTICATED ZINC SHORTFALL

# FIGURE XX FIVE YEAR LEAD PRICE CHART AND STOCKS LEVEL





	2004
	Ň
	August
	501
	-682-1
STATISTICS.	604
1	ن

		MINERAL DEPOSITS AND RESOURCES CANADIAN LEAD-ZINC-SILVER DEPOSITS YUKON AND BC EXAMPLES	NADIA YUŞ	DIAN LEAD-ZINC-SILVER DEPCYUKON AND BC EXAMPLES	AND I	IC-SII	VER XAMI	DEP PLES	CANADIAN LEAD-ZINC-SILVER DEPOSITS YUKON AND BC EXAMPLES		
DEPOSIT	TYPE	TONNES	ΑU	AG	CO	PB	NZ	T/\$	GMV \$/TONNE	GMV \$M	COMMENTS
			g/t	g/t	%	%	%		us \$	\$ SN	
ļ	MISSVAL	76,100,000	ļ	ļ	ļ	2.9	6.5	↔	88.20	6712	Past Producer
S PASS	SEDEX	61,000,000	ļ	ļ	ļ	2.1	5.4	₩	70.80	4319	REMOTE, LARGE INFERRED
POLARIS	MVT ?	22,000,000				4	4	69	172.00	3784	REMOTE, RES PLUS PRODUCTION 1994
CIRQUE, BC	SEDEX	22,000,000		09		2.8	9.4	8	126.90	2792	Remote, Parks nearby
GRIZZLY DY YT	VMS	21,400,000	0.87	81.1	ļ	5.54	7.33	€	141.96	3038	PREFEASIBILITY
LMN	VMS	19,496,000	0.45	150	0.41	0.75	4.98	€₽	97.11	1893	
/EST)	MISS VAL? VEINS	19,400,000		44.9		2.81	3.04	69	60.74	1178	REMOTE, UNDERGROUND POSSIBILITIES.
GRUM YT	VIMS	16,900,000	0.82	47		က	4 6.	€	90.79	1534	RECIEVERSHIP
MT	VMS	16,500,000	ļ	ļ	2.2		11.4	8	166.80	2752	
	VMS	14,100,000		79.9		7.09	6.51	69	135.80	1915	INACTIVE
	VEINS	12,247,000	ļ	26.4			6.17	ಈ	66.32	812	LOW GRADE
BC	SEDEX	12,000,000		ļ		1.5	8.6	69	98.00	1176	
	VMS	11,300,000	1.3	133	0.9	1.5	5.9	es	131.04	1481	PREFEASIBILITY
ļ	MISSVAL	10,000,000				<u></u>	10	69	108.00	1080	ARCTIC, REMOTE, Just closed
REEK NWT	MISSVAL	10,000,000	ļ	188	ļ	11.3	13.1	69	254.30	2543	FEASIBILITY
	SEDEX	9,283,700		69.4		7.5	6.2	69	134.15	1245	REMOTE
NWT	VMS	7,500,000		50	0.5	0.5	9	↔	84.75	636	
	MISSVAL	6,778,000				2.03	7.1	↔	87.24	591	BARITE RESOURCE
	MISSVAL	6,703,297				2.3	rO.	↔	68.40	459	
Ā	VMS	5,600,000		38		7	11.4	69	136.65	765	INACTIVE
MARG	VMS	5,527,000	<u></u>	62.7	1.76	2.46	4.6	€9	130.56	722	EXPL POTENTIAL.
TWN	VEIN	4,900,000	0.54	172	0.08	1.96	5	69	104.00	510	
SWIM	VMS	4,750,000	0.65	42		3.8	4.7	69	92.33	439	RECIEVERSHIP

Vancouver B.C

B.J. PRICE GEOLOGICAL

SHOSHONE SILVER MINING COMPANY

PAGE 63

August 15, 2004

WOLF RIVER JORDAN VIMS SILVERTIP 1998 MISSVAL SA DENA HESS GP4F GUARTZ LK GOZ LAKE SEDEX VIMS	4,100,000 3,186,813		84		1.8	6.2	65	91.10	374	EXPLORATION ACTIVE
JORDAN RTIP 1998 NA HESS TZ LK AKE	3,186,813								5	
ATIP 1998 NA HESS TZ LK AKE			72		8.2	8.5	69	163.20	520	
NA HESS TZ LK AKE	2,570,000	0.63	325		6.4	8.8	69	203.43	523	
TZ LK AKE	2,190,000				2.6	10.4	8	124.80	273	PRODUCTION 1991-92
	1,500,000	2	06	0.1	3.1	6.4	69	130.28	195	SA DENA HES AREA
	1,500,000		103	ļ	5.6	6.54	€9	128.14	192	SMALL. INACTIVE
-	1,400,000					10	€9	100.00	140	OXIDES ALSO
••••	1,318,681	2.4	40.1	0.13 3	3.76	1.07	€9	78.92	104	
	1,130,000	0.3	117	1.03	1.6	4.96	69	111.15	126	
COTTONBELT	1,098,901	ļ	68.6		б	12	69	204.00	224	
CRAIG	964,000		112		8 5	13.5	69	222.60	215	FEASIBILITY
UNITED KENO HILL VEIN	856,000		1026		4.8	3.9	69	256.95	220	RECIEVERSHIP
RUSTY MTN VEIN	850,000	<u> </u>	306		2.7	-	€9	85.15	72	
VERA	850,000		306		ļ	3.7	69	90.55	77	RE-EVALUATION
	533,000		103		6.1	4 8	€9	114.83	61	DRILLED 2002
HART RIVER VMS	523,454	1.37	20	1.45	0.87	3.65	€9	102.99	54	
RUTH VERMONT VEIN	351,648	ļ	204		5.02	5.53	€9	131.16	46	
PLATA INCA	206,000	3.3	268				69	85.31	18	SMALL PRODUCTION
GROUNDHOG	200,951	ļ	91.9		3.18	4.01	69	81.62	16	INACTIVE, SEVERAL ZONES
PESO REX	139,373	i	717	<u> </u>	3.7	<u></u>	69	155.08	22	INACTIVE
CLARK	129,350		220	7	4.99	4.58	€9	124.22	16	INACTIVE
HART RIVER VMS	97,000		1025				69	179.38	17	SMALL. INACTIVE, REMOTE
ZETA	92,248		558		<u></u>		€	97.65	6	INACTIVE
TINTINA	006'06		686		9	10	69	268.05	24	
LOGJAM	69,854	3.01	392	<u> </u>	2	က	€	149.72	10	INACTIVE
VAL	66,000		1030			ļ	69	180.25	12	RE-EVALUATION
Compiled from the literasture including Yukon and BC Minfile, CMH., Northern Miner Sulphide SEDEX = sedimentary exhalative.	y Yukon and BC № lative.	/linfile, Cl	MH., Nor	thern Mi	ner	MIS	SSVA	L = Missis	ssippi Valley T)	MISSVAL = Mississippi Valley Type, VMS = Volcanogenic Massiver

### **PHOTOGRAPHS**

### BLENDE SILVER LEAD ZINC DEPOSIT , YUKON TERRITORY PHOTOGRAPHS



Figure 1





Figure 2 Core stored at Blende Campsite



Figure 3 West Zone at top of ridge,

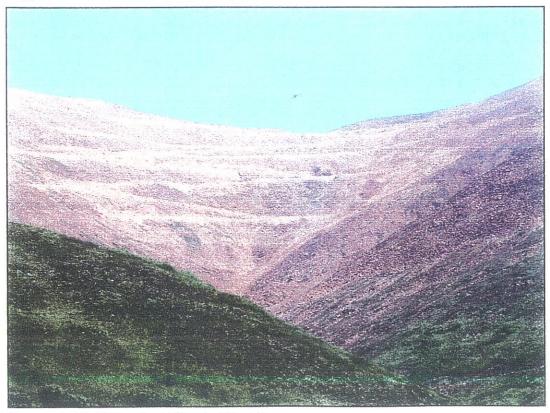


Figure 4 Drill Roads at Blende West Zone

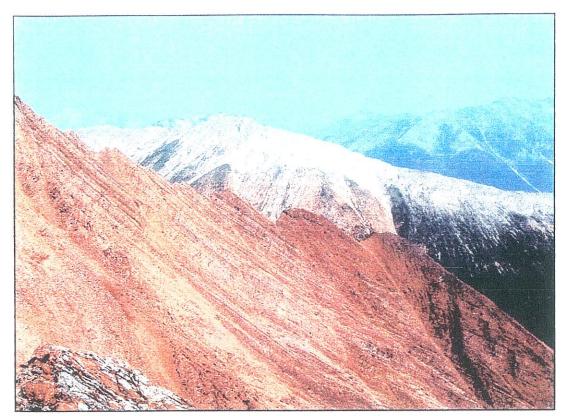


Figure 5 West Zone cutting down steep slope. Footwall carbonates on East

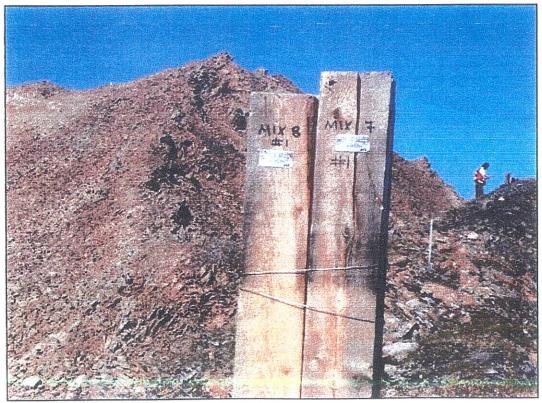


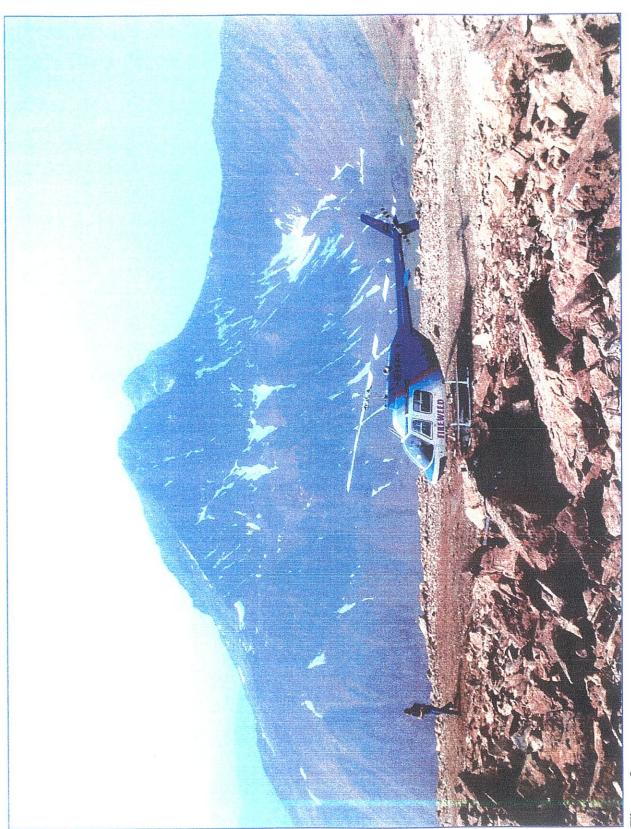
Figure 6 Claim posts and Tags, West Zone of Blende Property



Figure 7 Drill pads and roads at East Zone



Figure 8 Far East zone looking South



Helicopter. Mountain in background composed of mafic sills

Figure 9