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1999 DIAMOND DRILLING  
ASSESSMENT REPORT  
ON THE BABY GROUP OF CLAIMS

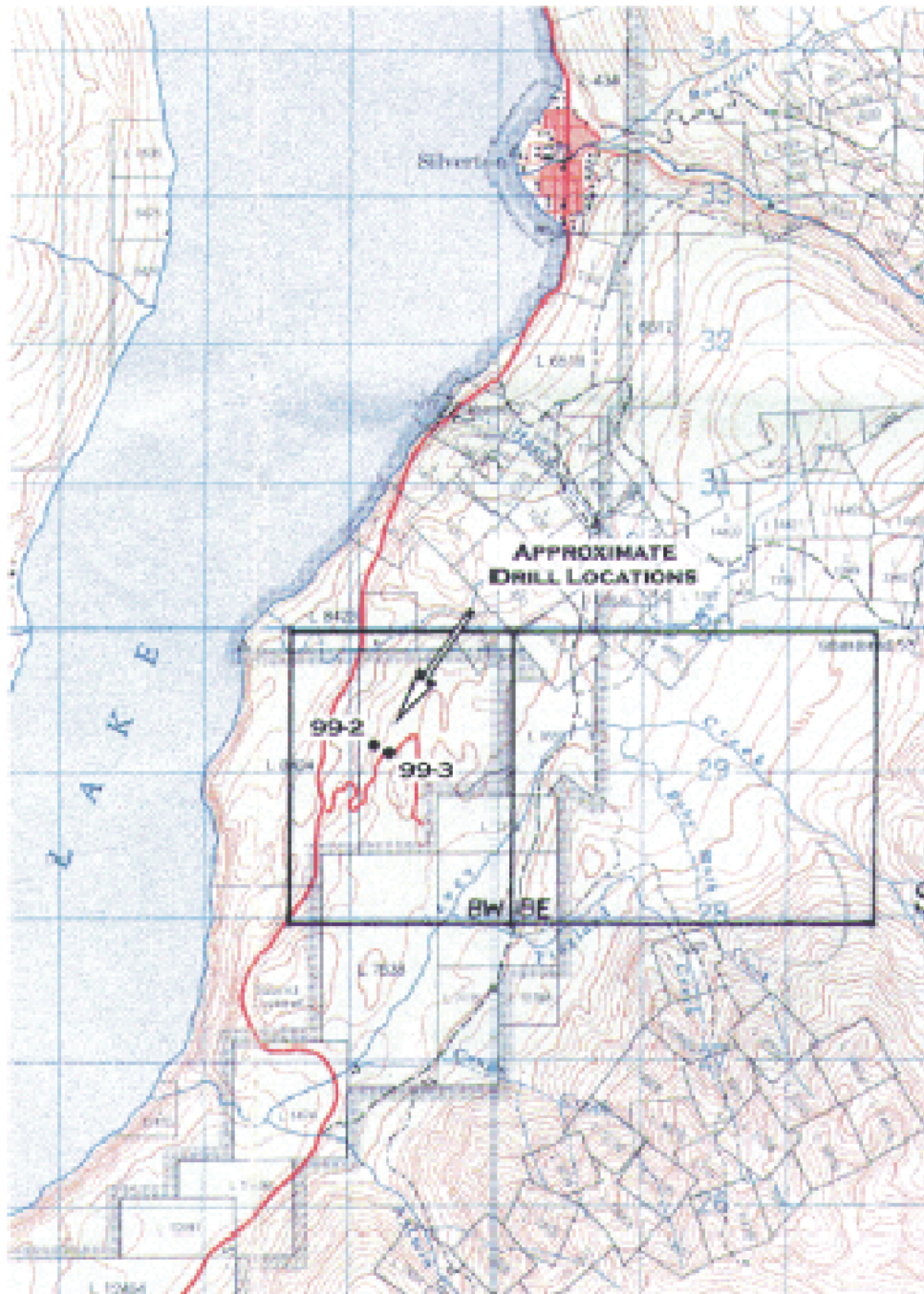
SLOCAN MINING DIVISION  
BRITISH COLUMBIA

NTS 82F14W  
LATITUDE: 49°55' LONGITUDE: 117°22'

PREPARED BY:  
AZTEC GEOSCIENCE INC.  
GEOLOGICAL SURVEY BRANCH  
DEL W.F. FERGUSON, P. GEO.  
JANUARY 2000

26,179

FIGURE 1:  
DRILL LOCATION MAP



SCALE 1:50,000

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## 1.0 SUMMARY

The Baby Group of Claims is located in southeastern British Columbia approximately 4.5km south of the town of Silverton, which is situated on the eastern shores of Slocan Lake. The property is part of the historic Slocan Mining Camp. The property is easily accessed by truck off of Highway #6. High grade gold and silver mineralization is associated with quartz veins hosted by strongly altered granite exhibits anomalous gold mineralization. Limited sampling on the nearby Slocan Lake Fault and its associated breccias also reveal anomalous gold. A detachment fault model of mineralization is indicated, which links the Slocan Lake Fault to the known mineralization and to the potential for bulk tonnage gold and silver deposits and for smaller tonnage high grade gold and silver deposits similar to the known showings. Two diamond drill holes were sunk in November 1999 to test the depth potential of the main mineralized showing.

## 2.0 INTRODUCTION

Approximately 145.5m of diamond drilling was conducted in the vicinity of the 'main road showing' from November 23, 1999 to November 30, 1999. The two holes were drilled on the BW claim, by Lone Ranger Diamond Drilling Ltd., of Lumby, B.C. The core was logged on January 1, 2000, with no significant mineralized horizons being found.

## 3.0 LOCATION, ACCESS, AND TOPOGRAPHY

The Baby Group of Claims is located approximately 4.5km south of Silverton in southeastern BC and approximately 1km east of Slocan Lake, (see Figure 1). The Baby Group of Claims is located on NTS map sheet 82F/14, and is approximately centred at 49°55' north and 117°22' west within the Slocan Mining District.

The claims are road accessible being transected by the Silverton – Alywn Forest Service Road, Red Mountain Road, and other logging roads and skidder trails.

Topography is relatively subdued over most of the property rising from 762m at Highway # 6, to 884m at the 'main showing'. Steeper slopes are encountered in the southeast corner of the "BE" claim with elevations reaching approximately 1372m. The central part of the claim group is covered by hummocky terrain characterized by north trending linear swamps.

## 4.0 CLAIM STATUS

The Baby Claim Group consists of two contiguous claims (see Figure 2), comprised of 32 units, registered in the name of Robert H. Murphy. Essential claim data is listed below.

TABLE 1 - CLAIM DATA

<u>CLAIM NAME</u>	<u>TENURE NUMBER</u>	<u># OF UNITS</u>	<u>MINING DIVISION</u>	<u>N.T.S.</u>	<u>RECORDING DATE</u>	<u>EXPIRY DATE</u>
BW	256909	12	NELSON	82F/14	02/21/90	02/21/00
BE	256908	20	NELSON	82F/14	02/21/90	02/21/00

$\overline{32}$  UNITS = 800 HECTARES (1976 ACRES)

## **5.0 HISTORY**

The Baby Claim Group is situated on the southwest end of the historic "Slocan Camp" which ranks second only to the Sullivan Mine in silver production. To the north, from Silverton to Sandon, high grade silver-lead-zinc ores have been mined from deposits within the Slocan Sediments since the late 1800's. From the Baby Claim Group, south to Slocan, high grade silver-lead-zinc ores of the Slocan City Mining Camp have been mined from deposits within the porphyritic granite of the Nelson Batholith since the late 1800's.

## **6.0 REGIONAL GEOLOGY**

The Baby Claim Group lies within the southern part of the Selkirk Mountains, a region of numerous batholithic and stock-like intrusions, including the Nelson Batholith. Sedimentary and volcanic rocks in the area can be divided into three major, north to north-northeasterly trending sequences. The belt consists predominantly of Mesozoic rocks including those belonging to the Slocan, Kaslo and Roseland groups of sedimentary and volcanic rocks. All Kaslo, Slocan and Roseland Group rocks are Triassic to Lower Jurassic in age.

The western belt consists mainly of metamorphosed Precambrian rocks, which include metasediments of the Horsethief Group. These are well exposed in the mountainous terrain on the west side of Slocan Lake and as a narrow strip on the east side of the lake, separated from the Mesozoic strata by the Slocan Lake Fault. The main showing on the Baby property lies 1km east of this fault.

The eastern sequence of rocks includes metamorphic rocks of the Milford and Lardeau Groups which form the large Kootenay Arc.

## **7.0 PROPERTY GEOLOGY**

The Baby Claim Group property is underlain for the most part by feldspar porphyritic granodiorite of the Cretaceous Age Nelson Batholith. This granite is a coarse grey to pinkish coloured rock, that generally contains numerous white to flesh coloured phenocrysts of twinned alkali feldspar. The groundmass of the granite is generally coarse, hypidiomorphic, consisting of hornblende and biotite. The batholith extends southward to beyond Castlegar and pinches out northward from the Baby Claim Group.

The most distinct geological feature within the property of the Baby Claim Group is a prominent hill composed of massive quartz and chalcedony. This feature has been named the 'Silica Cap'. The exposed 'cap' is roughly arcuate in shape and is approximately 750m by 500m. Previous diamond drilling (1991), of the silica cap has shown: the cap to be a gentle eastward dipping mantle, varying in thickness from ~3.8m to ~13.9m; underlain by a sericitic and argillically altered feldspar-phyric granite; a lower chlorite +/- sericite alteration of the granite was also encountered.

## **8.0 MINERALIZATION**

The main showing, discovered in the early 1990's, was comprised of an echelon, pinch-and-swell quartz veins hosted in altered mafic dyke material within feldspar-porphyritic granite. Veins are mineralized with dark grey to blue, fine grained sulphides, such as tetrahedrite and argentite, pyrite, sphalerite, galena and native silver. The mineralized shear system strikes N30°E, with an apparent vertical dip over its exposed length of 20 metres.

The 'silica cap', southeast of the main showing hosts disseminated and stringer pyrite.

## **9.0 DIAMOND DRILLING**

Holes DDH 99-2 and 99-3 were drilled topographically below and to the west of the main showing. DDH 99-2, located at 4880E and 2050N on the 1999 geophysical grid, was drilled at a 70° angle, on a 130° bearing. Various alteration types such as potassic, sericitic, argillic and lesser chloritic were intersected. Weak mineralization was intersected, with the strongest occurring in quartz veins at 19.51m downhole. The pyrite and blue sulphide mineralization in the quartz veins are contained within a 5.8m wide zone of strong sericitization and bleaching in the granodiorite and dyke rock. The drill hole depth extended to 113.84m, terminating in moderately feldspar flooded granodiorite.

DDH 99-3, located at 5010E and 2065N on the 1999 geophysical grid, was drilled vertically and extended to 31.7 depth, ending in strongly bleached granodiorite. The granodiorite and andesite dyking intersected in this hole were weakly altered above 24m depth. Below this, zones of potassic, sericitic and argillic alteration increased downhole.

No sampling of these holes has been conducted to date.

## **10.0 CONCLUSIONS**

The depth extension of the mineralized shear zone of the 'main showing' may be reflected in DDH 99-2 as the strongly sericitized and bleached zone from 16.76m to 22.56m. A similar strongly bleached zone was intersected at the bottom of DDH 99-3, but no mineralization was detected.

## **11.0 REFERENCES**

- Augsten, B.E.K., 1995; 1995 Summary Report on the Baby Property  
Church, B.N., 1998; Metallogeny of the Slocan City Mining Camp,  
B.C. Geological Survey, Paper 1998-1  
Ferguson, D.W., 1990; 1990 Assessment Report on the Baby Group of Claims,  
Slocan Mining Division  
Ferguson, D.W., 1991; 1991 Assessment Report on the Baby Group of Claims,  
Slocan Mining Division

## 12.0 STATEMENT OF QUALIFICATIONS

I, Delbert Wells Ferguson, of Ladysmith, Province of British Columbia, do hereby state that:

I am a practicing Geologist.

I have practiced my profession for over 20 years throughout Canada.

I am a Fellow Member of the Geological Association of Canada.

I am a Professional Geoscientist, registered with the Association of Engineers and Geoscientists of British Columbia.

I received an Honours B.Sc. Degree in Geology from the University of Western Ontario, London, Ontario, Canada in 1979.

This report was prepared, based on historical data and on diamond drill hole logging conducted by myself.



Delbert Wells Ferguson, P. Geo., FGAC

APPENDIX 1

Property: Baby Claim Group  
BW Claim

DDHole No.: 99-2  
Bearing: 130° @70° dip  
Core Size: NQ (1 7/8")

Date Commenced: November 23, 1999  
Date Completed: November 27, 1999  
Date Logged: January 1, 2000  
Grid Location: 4880E, 2050N

Total Depth: 113.84 metres  
Logged By: D. Ferguson, P.Geo.

Location: approx. 4.5km south of Silverton, B.C.

<b>Depth (m)</b> <b>From</b>	<b>To</b>	<b>Recovery</b>	<b>Description</b>	<b>Sample No.</b>	<b>From</b>	<b>To</b>	<b>Sample Width</b>	<b>Au ppb</b>	<b>Ag ppm</b>
0	3.05	100%	Casing						
3.05	4.11	100%	Andesite porphyry -several calcite-chlorite slips						
4.11	16.76	100%	Coarse grained granodiorite porphyry -4.11m to 7.62m: moderate K-spar alteration; oxidization along slips -8.53m to 8.69m: quartz / K-spar vein -13.26m to 13.56m: strong K-spar / sericite alteration; minor pyrite veinlets -15.09m to 15.39m: strong K-spar / sericite alteration; minor pyrite veinlets 14.33m to 14.94m: moderate chlorite alteration of granodiorite						
16.76	22.56	100%	Strongly sericitized & bleached granodiorite & dyke rock -zones of disseminated fuchsite & pyrite -quartz veins +pyrite and blue sulphides at 19.51m (5cm) -20.73m to 20.88m: veins commonly at 45° to core axis						
22.56	46.18	100%	Moderately sericitized and bleached granodiorite -24.69m to 25.3m: bleached and sericitized dyke at 70° to core axis -pyrite in slips and minor disseminated -31.7m 32.92m: bleached and sericitized dyke at 75° to core axis -44.65m to 44.96m: dyke and brecciation at 70° to core axis						



APPENDIX I

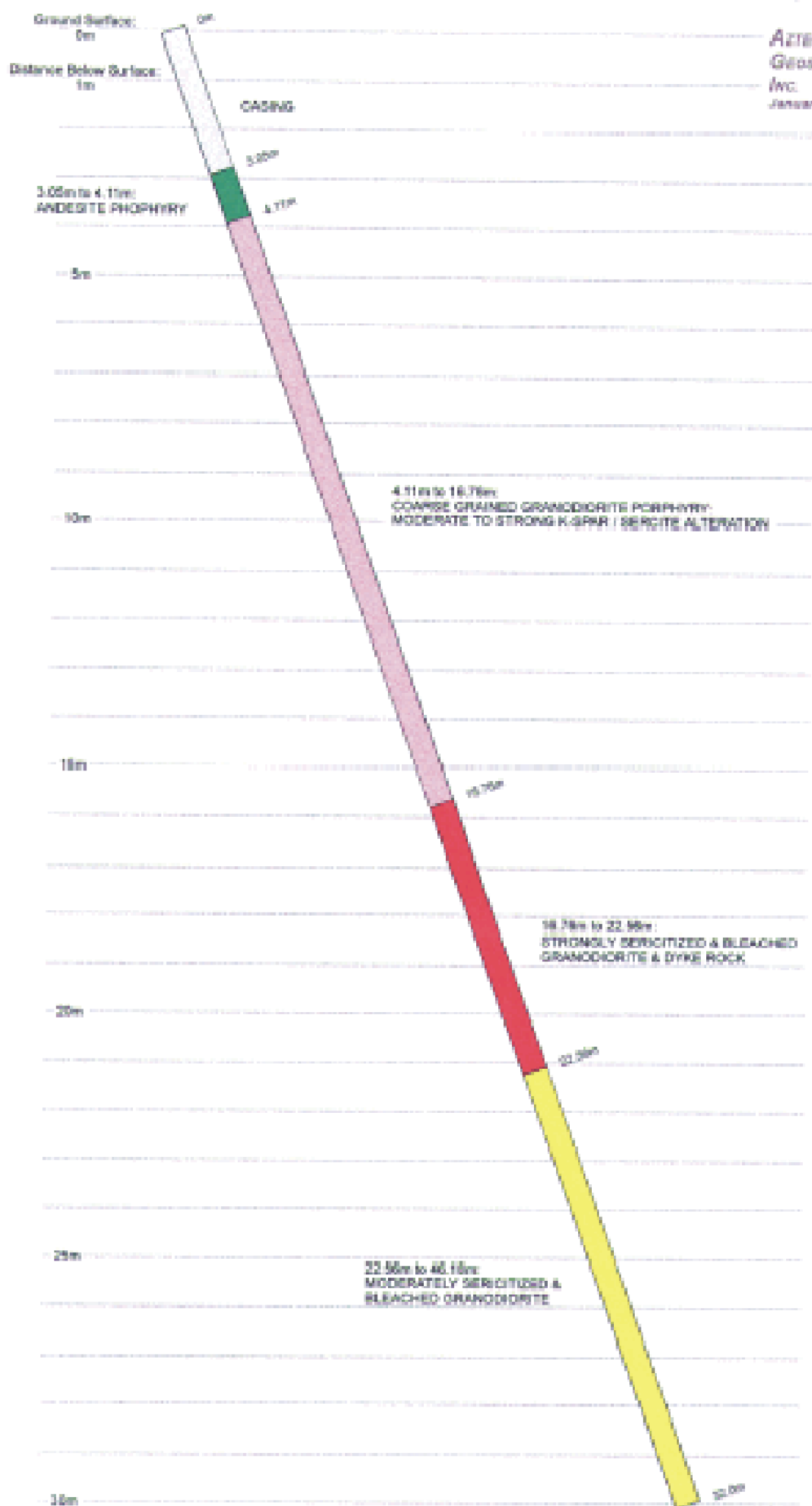
46.18	53.95	100%	<p>Granodiorite porphyry and andesite dykes</p> <ul style="list-style-type: none"> <li>-few zones of moderate bleaching and sericitization with weak K-spar flooding</li> <li>-47.09m to 51.05m: andesite dyke with moderate chlorite-sericite alteration and K-spar flooding; brecciation at 49.99m to 50.29m</li> <li>-52.88m to 53.95m: andesite dyke with moderate chlorite-sericite alteration</li> </ul>						
53.95	62.18	100%	<p>Granodiorite with moderate potassic alteration</p> <ul style="list-style-type: none"> <li>-K-spar flooding and secondary biotite</li> <li>-59.44m to 60.66m: andesite dyke with sericite-chlorite alteration</li> </ul>						
62.18	93.27	100%	<p>Granodiorite and andesite dykes: moderately sericitized and bleached</p> <ul style="list-style-type: none"> <li>-weak, fine disseminated and veinlet pyrite</li> <li>-few narrow carbonate veinlets</li> <li>-andesite dykes at 64.01m to 64.92m and from 68.88m to 70.1m</li> <li>-67.06m to 68.88m: flow breccia zone</li> </ul>						
93.27	113.84 <i>EOH</i>	100%	<p>Granodiorite porphyry with zones of moderate K-spar alteration and few zones of sericitization and bleaching</p> <ul style="list-style-type: none"> <li>-minor disseminated and veinlet pyrite; few chlorite-carbonate-quartz veinlets and slips; hematite slips</li> </ul>						

Baby Claim Group - BW Claim  
DDHole No.: 99-2

Bearing: 130° @ 70° dip

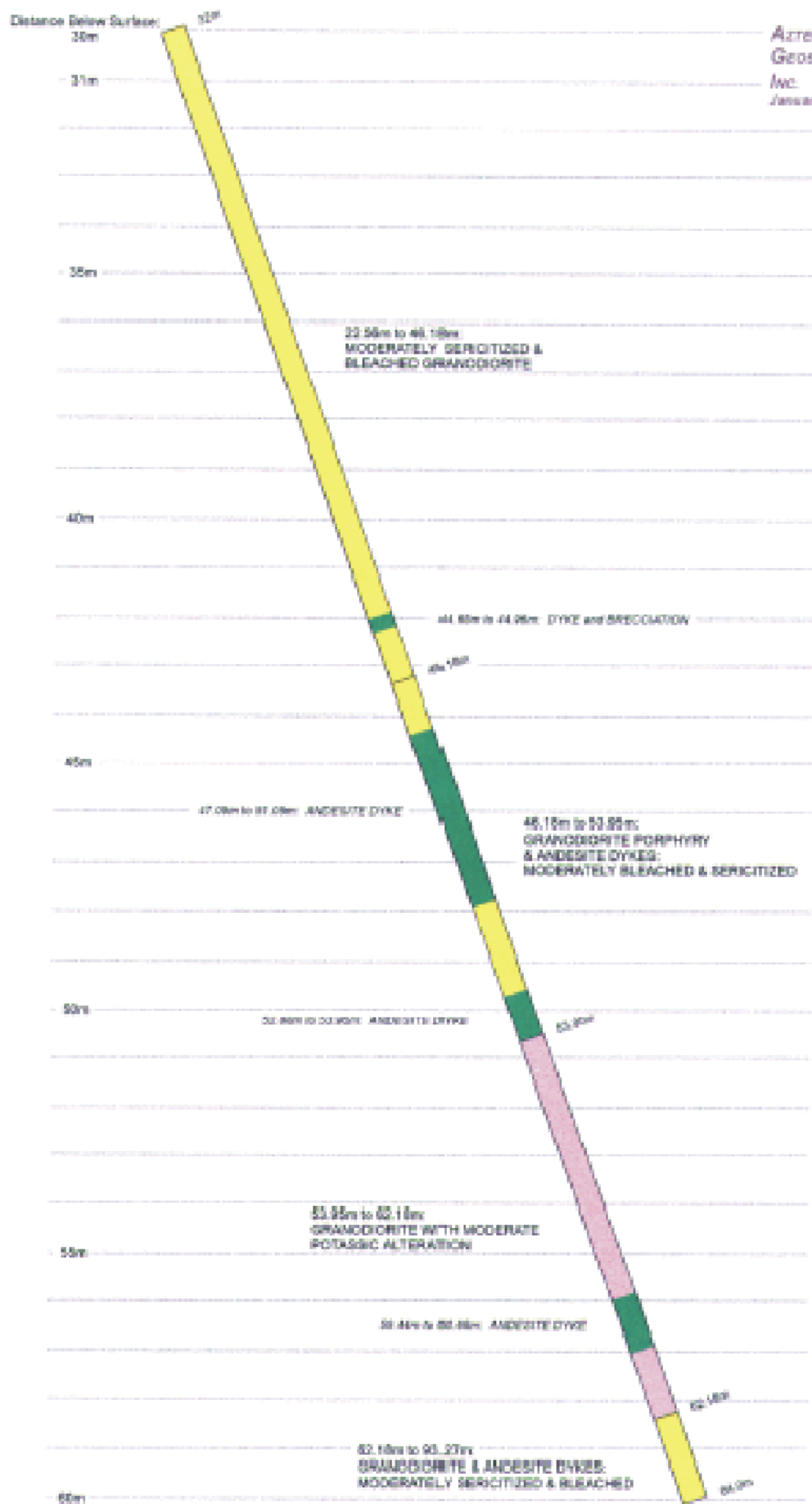
Location: ~4.5km southeast  
of Silverton, B.C.

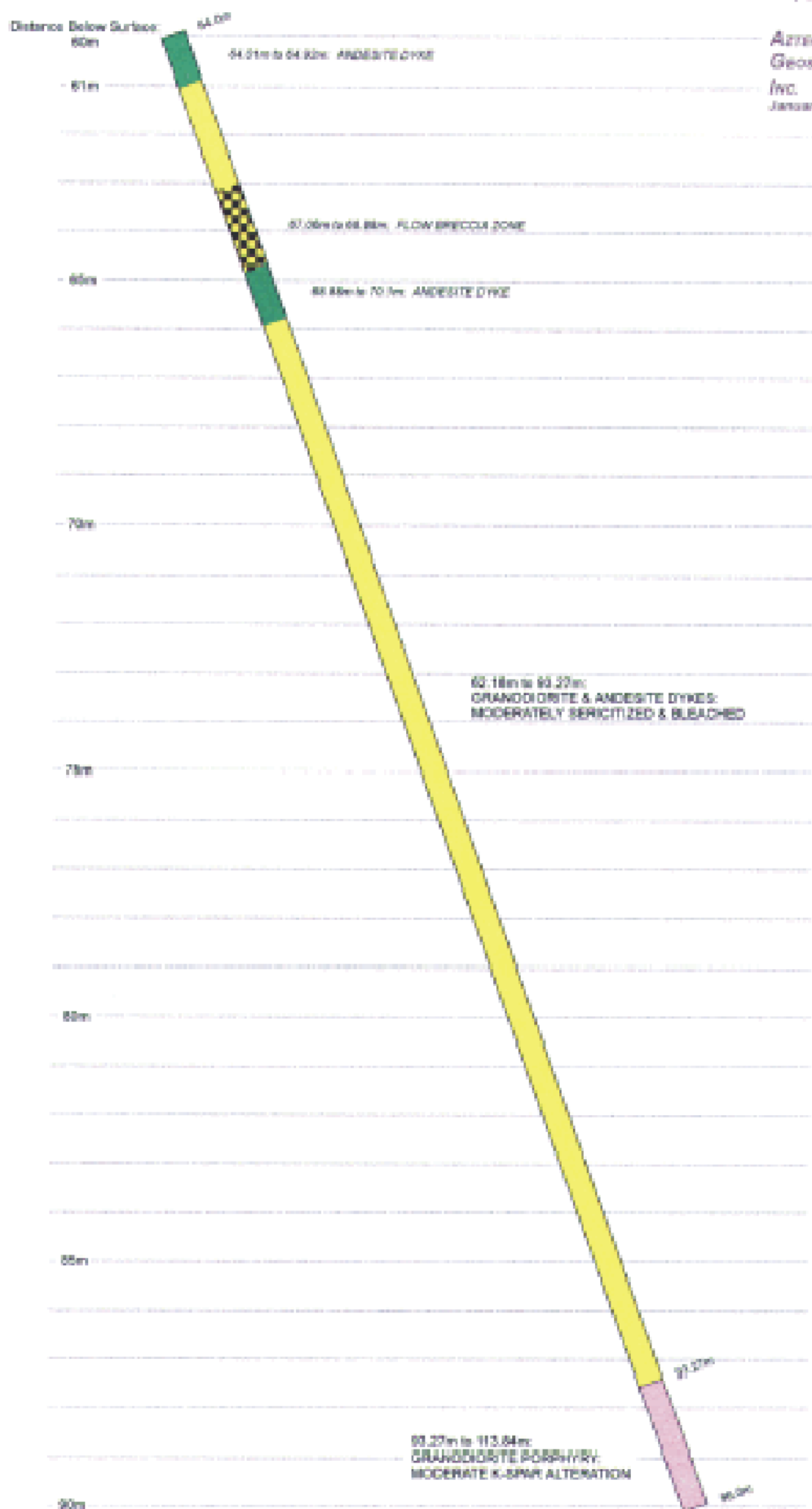
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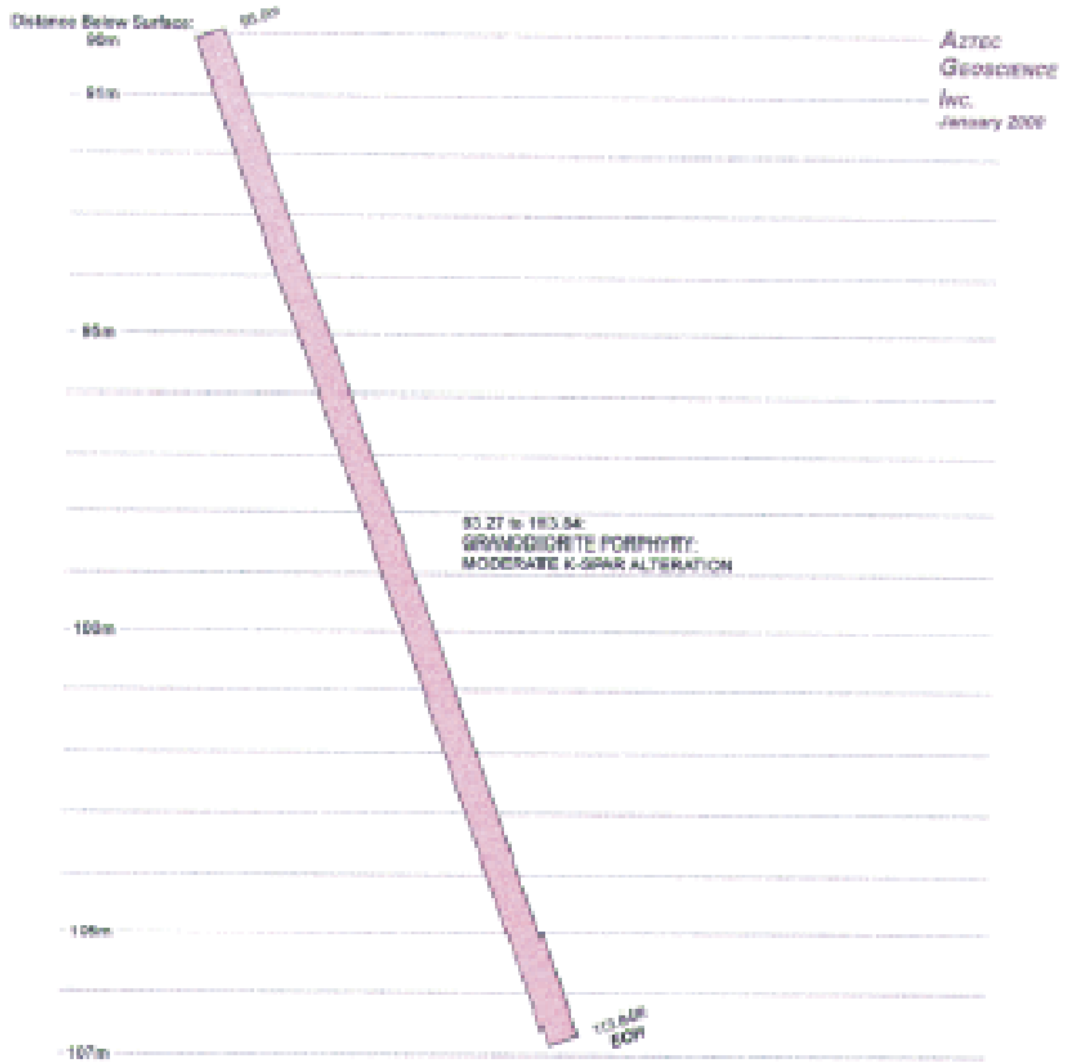




Baby Claim Group - B/W Claim  
DCHole No.: 99-2

Bearing: 130° @ 70° dip

Location: ~4.5km southeast  
of Silverton, B.C.



## APPENDIX 2

Property: Baby Claim Group  
BW Claim

DDHole No.: 99-3  
Bearing: 0°  
Core Size: NQ (1 7/8")

Location: approx. 4.5km south of Silverton, B.C.

Date Commenced: November 28, 1999  
Date Completed: November 30, 1999  
Date Logged: January 1, 2000  
Grid Location: 5010E, 2065N

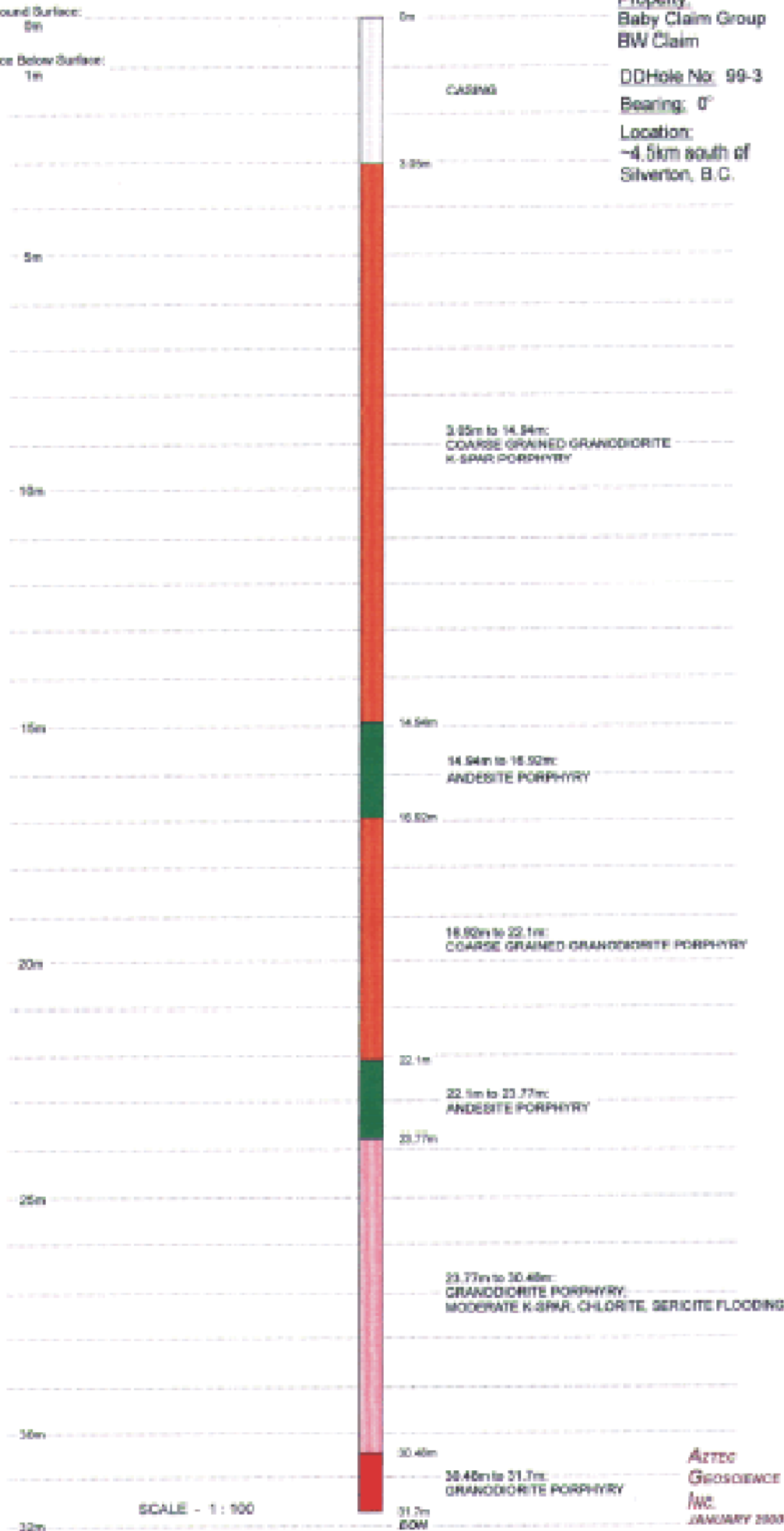
Total Depth: 31.7 metres  
Logged By: D. Ferguson, P.Geo.

<u>Depth (m)</u> <u>From</u>	<u>To</u>	<u>Recovery</u>	<u>Description</u>	<u>Sample No.</u>	<u>From</u>	<u>To</u>	<u>Sample Width</u>	<u>Au ppb</u>	<u>Ag ppm</u>
0	3.05	100%	Casing						
3.05	14.94	100%	Coarse grained granodiorite K-spar porphyry -at 3.05m, +2cm andesite dyke						
14.94	16.92	100%	Andesite porphyry -few calcite-chlorite slips						
16.92	22.1	100%	Coarse grained granodiorite porphyry -chlorite-calcite slips common @ ±45° to core axis -quartz / feldspar veins 1 to 5cm wide throughout						
22.1	23.77	100%	Andesite porphyry, moderately chloritized -few calcite-chlorite slips and veinlets -minor sericite						
23.77	30.48	100%	Granodiorite porphyry -zones of moderate K-spar, chlorite, sericite flooding -24.38m to 24.54m: strong sericite-chlorite alteration						
30.48	31.7 <i>EOH</i>	100%	Granodiorite porphyry -strong bleaching, K-spar alteration and sericite slips at 45 to 60° to core axis						

Ground Surface:  
0m  
Distance Below Surface:  
1m

Property:  
Baby Claim Group  
BW Claim

DDHole No: 99-3  
Bearing: 0°  
Location:  
~4.5km south of  
Silverton, B.C.



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JANUARY 2003

APPENDIX 3

**Statement of 1999 Exploration Costs on Baby Group of Claims**

<b>Drilling, Geological etc.</b>		
Diamond Drilling (Lone Ranger, November 23 to November 30, 1999)		8,118.75
Drill Operations Management (R.Allen)	8days x 0.5day x 160/day	640.00
Associated Transport	8days x 0.5day x 60/day	240.00
Core Logging (D. Ferguson, P.Geo., January 1, 2000)		
	1days x 550/day	550.00
Associated Travel Days	1days x 275/day	275.00
Drill Report and Maps	2days x 550/day	1,100.00

**Total Exploration Costs**

**10,923.75**