

Gold core L 5294 082FNW 185 82F14W
see Bismarck 1850-2130 m.

49 53 117.09
AR 12146: 494500 5526000

1982 - geoc. record

83 - sampler & geoc. record wrapper & orientation VLF

84 - geoc. info near surface sulph. marker

Access via Keen Creek Rd to Briggs Creek; then EWD
track to claim.

- underlain by squashed wedge of intrusive
stone (F1D, F1H, shrd, & water-saturated)
by major Nelson pluton. Intrusion responsible
for formation of replacement Pb-Zn-Ag-Cd
deposits. Most all workings on property.

Est. prod. prod 137 800 lb Pb, 19 600 lb Zn,
107 lb or Ag, 1898-1955

- located at N. margin of major batholith of
pinkish (orthoclase alteration), leucocratic, porphyritic
& non-porphyrific Nelson granite & granodiorite
Granite & aplite dikes intersect Stocker GP
primary & subsequent intrusions of Nelson granite

- Dark gran-block "leucoplyre" dikes of water to
ultramafic composition occur. They contain kld,
biot & pyroxene & appear to be associated with
the intruding event & perhaps sulphide mineralization
early.

- Stocker GP generally strikes N 50W / 70°NW
with Argillites ^{well indurated} even, thinly bedded dark fine-grained
silty & sandy layers with predominant slaty cleavage

slightly calcareous near limestone contact.

Phyllite surfaces due to flexural slips

2. Limestone matrix is recrystallized under argillite contact. Has coarse rhombs of $CaCO_3$ crystals white when fresh, grey weathered

@ iron stained pods of argillite

3. Qtz - well indented, grey, fine-grained

4. Schist & phyllite - mixture of metamorphic & sedimentary rocks consisting of minor amounts of andesite schist & phyllite

5. Nelson plutones underlie & flank Stoenes Gp

Stoenes Gp has been widely displaced in places doubly plunging syncline forming a gentle sedimentary roof-pendant in Nelson batholith. Formed mine workings lie near the axial plane, indicating a strong structural control over sulphide localization.

Original workings were 5 or 6 adits (now shafts) in at least 6 separate strands. Deep material is primarily argillite & mylonite predominantly py @ 2 or 3 m. Pb in gangue of quartz, calcite & argillite. The "vein" shows evidence of "brecciation" & exhibits replacement type ore textures. Original replacement of sulphide mineralization appears to have been along a plane of weakness paralleling bedding & tectonic layering. This plane is now a shear zone at the interface between argillaceous rocks & limestone.

D.S. Evans believes
 Sulphide mineralization believed to be } is of a
 brecciated, replacement, composite vein-body system
 mineralization event occurred during late stages
 of intrusion, hydrothermal events of Nelson,
 Ball Lake

structural & lithological controls are primary
 are some parameters @ mineral band within
 & along well defined fault & fracture
 systems, located along or near the argillaceous-
 carbonate contact or facies change

Lithogeochemical successful in explaining (with
 possible exception of Cd) Sal grade successfully
 identified 2 anomalies trends in Pb/Zn data

VLF failed to confirm "a continuous zone"
 although program weak, inadequate & strong
 conductivity in the area of the dumps &
 geochemical anomalies

Report on ~~the~~ Bismark Property, Secon N.P., Evans,
 D.S., 1985

- Access via Ken Creek & a rd road up Briggs Creek
- (part of a complex vein replacement system)
- 5 A.D., 6 small open cut pits (1985)
 reports a 1909 20 ton shipment averaged 100 oz Au,
 50% Pb. minor whole undertaken by Red Hawk
 Gold Mines Ltd. in 1950-51.
- includes Gold core, Fall 1216 & Green Point claims

- 1980 systematic group & group map by U.S.T. ...
... followed by Greenwell Resources Inc
82-84, & ST. JAMES MINES 1985

- Schistose phyllites found throughout Bismarck
properties & many so of explanation significance
zones refer to old literature describing the presence of
a "covered" zone within argillite units where they
bearing mineralization was present, & may reflect
faulting & shearing events. The schistose phyllite
is considered a metamorphosed or meta-sedimentary
argillite, & may contain minor and albite schist

- Granite & diorite dykes include some Cu, Ag,
prob late stage veins disconnected to mineralization

- Dark lamp dikes which weather to loose, granular
products are evident & may be source of Ni, Zn
in Bismarck

- Quartzites rarely found in mineralized areas

- Mineralization occurs at or near axial plane of the
syncline. As Pb-Zn bearing sulphide mineralization
occurs as limestone replacements, brecciated gal-
carbonate veins, & as replacement in shear zones
within argillites. Copper sulphide veins are
closely related to the ~~but~~ limestone / argillite
contact.

* ~~Sulphide minerals include ZnS, PbS,
Ag₂S, tetrahedrite, chalcocite, pyrite &
stibnite, & arsenic & quartz, celestite, & siderite~~

A substantial portion of previous production contained
A heavily oxidized material

* There are no available descriptions of mineralization
generally nature of material on edit dump is
similar to material on Bismarck dump where

5

17 Composite grab samples returned with metal average assay values of 14.3 oz Au, 2.9% Pb, & 1.7% Zn.

1982/83 soil samples on Full Fl. 5 & Crown Point claims of Gold Core Group identified 2 parallel anomalous bands defining the apparent trend of near-surface sulphide mineralization and noted by old adit sites as anomalous thresholds values determined from 274 samples to be 2.4 ppm Au, 80 ppm Pb & 180 ppm Zn. Strongly anomalous Au Pb values occur over a 420m strike length parallel but not exactly coincident with old workings "A series of high silver values (up to 786 ppm Au) across a width of 20m, close to the ridge crest on the Crown Point claim, provide a good initial drill target".