CUNNI.-GHAM CK.

FAME '87
#16,743

882186

Chlorite Schists-Meta Tuffs: These rocks are exposed on the west side of the property. Locally these rocks contain disseminations of magnetite. They are probably of volcanic origin. There relation to the chlorite schists interbedded within the limestone sequence is uncertain.

Diorites: These are the only intrusive rocks in the area. Because of their ankerite content, they weather a buff brown and are sometimes difficult to discern from quartzite outcrops. Their massive, locally cross-cutting nature is evident in creek exposures.

2.3 Structure

The rocks have a northwest strike of approximately Az. 320° and a dip of 70° to 80° northeast. Regional mapping by government geologists indicates the rocks are isoclinally folded. Foliation, crenulations, and local "kink" or isoclinal folding, and lensing of units, attest to strong structural deformation. Foliation is generally at a slight angle to bedding. Faulting is common. Previous mapping indicated a major fault (Copper Creek fault) cutting across the property. Although no direct evidence was seen for this fault, rock units appear to be slightly offset along this presumed structure. Quartz veins occupy various fracture systems, several veins show evidence of movement along the walls.

3. MINERALIZATION

3.1 Introduction

The Cunningham Creek property is well mineralized. The most promising showings occur within a belt of quartzite, limestone and argillites trending NNW through the centre of the mining lease. Several types of mineralization are recognized, gold bearing quartz veins are the most prominent. "Replacement" type mineralization is less recognized to date, but is the most important type in the gold mines at Wells. Significant amounts of tungsten mineralization (scheelite) occurs in quartz veins near the junction of Pearce & Peter Creeks.

A 1987 Summary Map showing the location of the more significant gold mineralization, is presented on the following page (Figure 6).

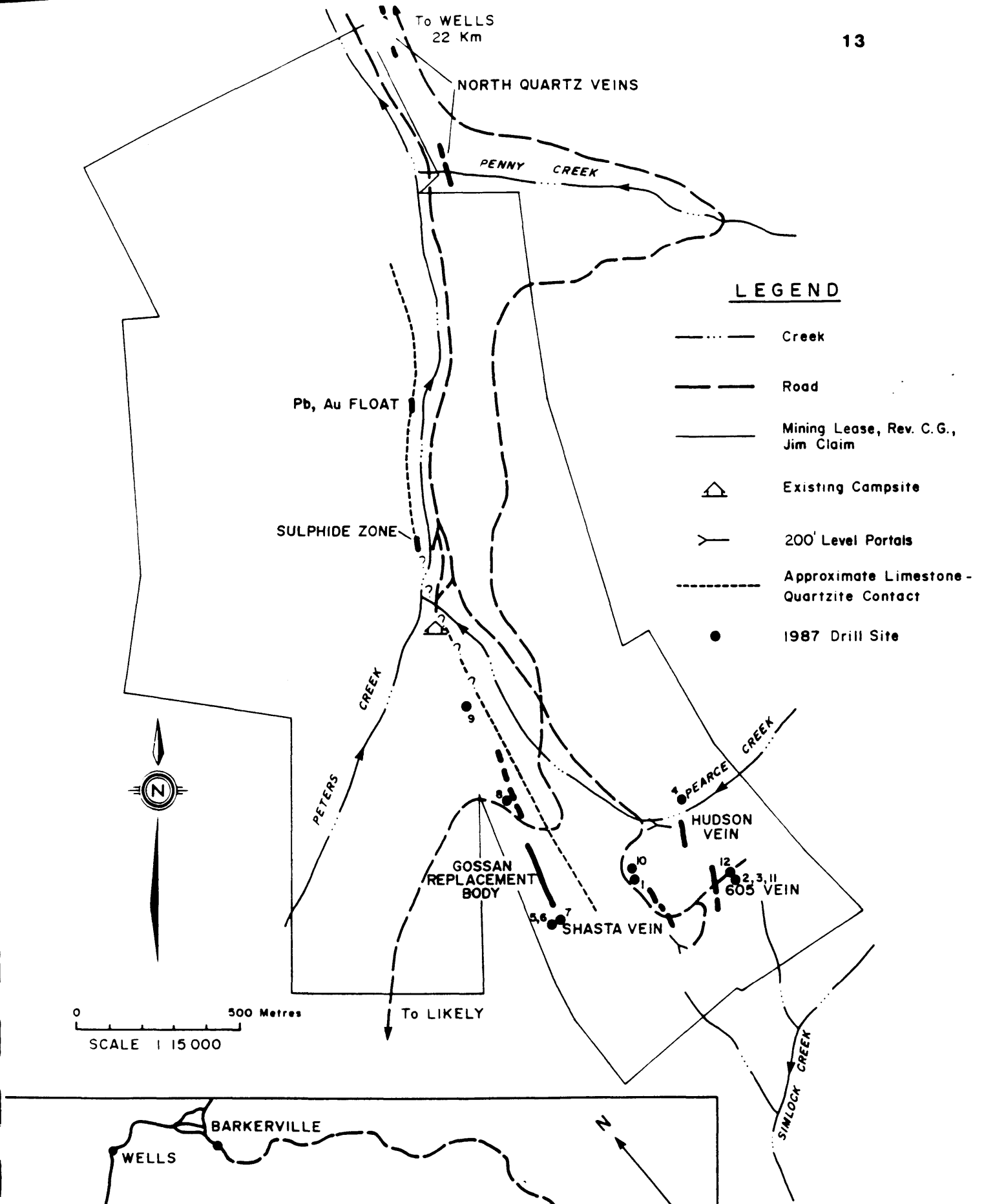


FIGURE 6

CUNNINGHAM CREEK

1987 Summary Map

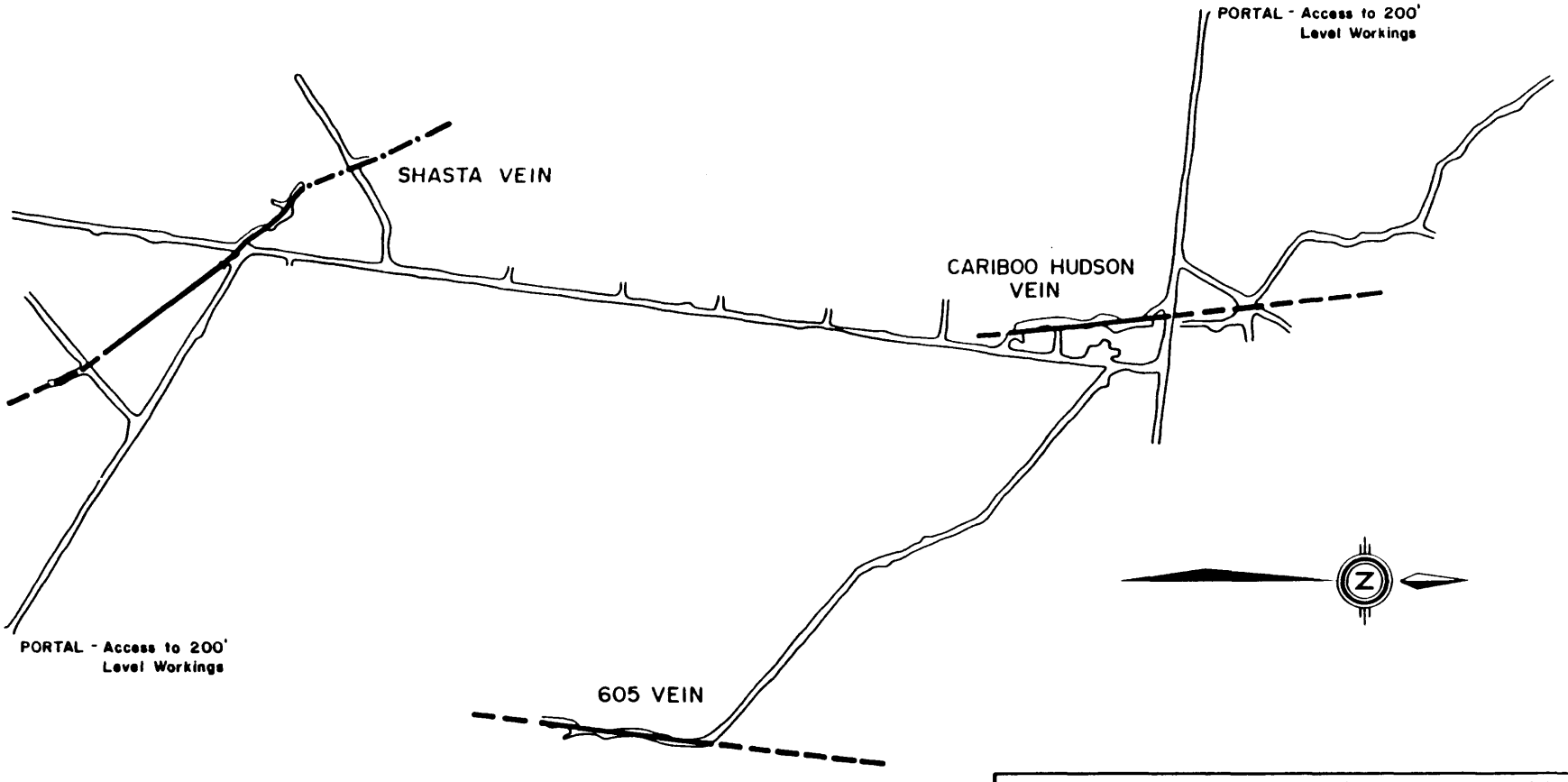
3.2 Quartz Veins

Quartz veins are most conspicuous and have been the principal target for gold exploration. The veins range from a few centimeters to few meters wide and from a few meters to several hundreds of meters long. The strike of the veins fall in three main classes - north, northeast and east; veins striking northwesterly along foliation are generally less persistent. The north trending veins are most productive for gold mineralization. These veins, including the Shasta, Hudson and 605 Vein, occupy faults or shears which dip steeply to the east. Branching, splaying, pinching & swelling of the veins are common. These quartz veins are best developed in the more brittle quartzites.

The vein quartz is massive, milky white. Crystal-lined vugs and comb texture indicate relatively open fracture deposition. Ankerite is a common gangue mineral, frequently occuring along the vein walls. Sulphide content of the vein is variable. Pyrite, and less commonly sphalerite, galena and chalcopyrite, occur as irregular masses, bands and disseminations. Pyrite is usually coarsely crystalline and is frequently leached out on surface exposures. Gold mineralization appears to be intimately associated with the sulphides, and a general correlation is noted between the sulphide content and gold content of the vein. Gold bearing ore shoots are associated with concentrations of sulphides within the vein system. The geometry of these steeply plunging shoots is often controlled by the intersection of structures.

3.3 Shasta Vein

In 1938 underground exploration workings on the Cariboo Hudson mine were carried through to Simlock Creek to investigate the Shasta Vein, some 150 meters to the west (Figure 7). Interest in the potential of the Shasta Vein was renewed in 1978 when an exploration hole intersected 13 feet averaging 0.89 oz/t Au. Subsequent exploration drilling in 1979, 1983, 1984 and 1986 focused on this vein (see Summary, Figure 3). Approximately 32,000 tons of 0.37 oz/t gold were outlined above the 200' level (S. Quinn 1984); and continuity of the vein was established to 600' below surface. The vein is exposed discontinuously over a strike length of 250 m and dips steeply to the east. The width is extremely variable from less than 0.5 meters to 4.0 meters. The grade of mineralization is equally erratic with the best values accompanying concentrations of sulphide along steeply plunging ore shoots. Trench S-2 exposes a wide lense of quartz with good gold values accompanying concentrations of galena and pyrite. The zone probably extends to the 200



LEGEND

Intersected Vein: Drilling and Workings

Projected Vein: Partially Drilled

CATHEDRAL GOLD CORPORATION

CUNNINGHAM CREEK

FIGURE 7 N.T.S. 93A/14

200' LEVEL PLAN

Cariboo Mining Division, British Columbia

25 0 25 50 75 100 125

Metres

SCALE: 1:2000	GEOLOGIST: P. DELANCEY
DATE: FEBRUARY, 1988	DRAWN BY: S. HAWORTH

3.4 Hudson Vein

The Hudson Vein strikes approximately N-S and dips approximately 85° to the east. The vein averages 2 to 2.5 m wide and is continuous for approximately 75m before it horsetails, with veins running parallel to foliation. Ore shoots and pods are characterized by irregular masses and bands of sulphides, chiefly pyrite, pyrrhotite and locally sphalerite and galena. In 1938 the vein was extensively explored on four levels down to 600'. Mining was carried out from the 250' level to surface; 12,938 tons of ore were extracted, from which 5,186 oz of gold were recovered before the mine closed in 1939.

3.5 605 Vein

The 605 vein lies east of the Hudson and Shasta Veins. The Vein was explored in 1938 by extending the 200' & 600' levels from the Carriboo - Hudson workings. Sampling on the 200' level, at that time, averaged 0.25oz/t Au over 150' drift length. Five drill holes tested the 605 vein during the 1983-84 programs and another two holes, in 1986, tested the south extension. Results are particularly encouraging along the southern extension; DDH 86-20 cut 2.5 meters of quartz/sulphide vein grading 0.8 oz/t Au. 1987 drill testing of this southern extension indicates the vein pinches and swells (two intersections of 5m); best intersection was 0.1 oz/t over 0.4m.

3.6 Other Quartz Veins

Numerous other quartz veins transect the area. In the past sampling of veins has been somewhat random and less than thorough. Most veins are barren of mineralization. Anomalously high gold valves were obtained from several "newly discovered" veins and other gold bearing veins are suspected in areas of high gold soil anomalies.

A local concentration of pyrite and chalcopyrite was found in lensy quartz veins cutting chlorite schist immediately west of the north end of the Shasta Vein. Assays returned high grade gold values up to 20 oz/t. Subsequent examination indicated considerable visible gold, and some native copper. Drill testing (holes 87-1, 87-10) of this anomalous zone of chlorite schists indicated several sections of ± 0 .1 oz/t Au. (see Figures 19 and 25).

A ± 1m wide quartz vein is exposed in Peters Creek between lines 12+00W and 12+50W. The quartz vein contains banded quartz and pyrite. A grab sample ran 40,900ppb Au (1.2 oz/t). Other grab samples in the same general area are also anomalous. Host rocks are limestones and sericite schists. A drill site was prepared to test this vein but winter conditions prevented completion of the program.

An extensive quartz vein system (Hill Vein) is exposed along the eastern boundary of the claims. The vein is poorly exposed but is well outlined by a soil anomaly. Values up to 3750 ppb Au have been obtained from grab samples. Although a drilling site was spotted, no drill testing of the vein was carried out during the 1987 program.

A quartz vein with local pyrite is exposed in a tributary of Simlock Creek immediately southeast of the 605 Vein; highest gold value is 3485 ppb. Steep topography prevents easy drill testing of this target.

A system of north trending quartz veins with local concentrations of fine banded pyrite are exposed along the north boundary of the property. These veins include two veins previously explored by short adits. Selective samples have values averaging 1.8 oz/t Au.

3.7 "Replacement" Type Mineralization"

It was not until 1983 that the potential for discovery of "replacement" type gold deposits on the property was recognized. This is the most important type of mineralization at the Island Mt. and Mosquito Creek Mines near Wells. This "replacement" mineralization tends to be high grade (0.7 oz/t Au) and occurs as shallowly plunging pencil-shaped masses of pyrite in limestone (Figure 4). The so-called "sulphide and "IP" showings on the Cunningham property occur within a limestone/argillite unit just north of the junction of Pearce and Peter Creeks. These mineral occurrences are characterized by small pods and irregular masses of pyrrhotite, pyrite and/or galena. High but erratic gold and/or silver values accompany the sulphides. Results suggested the IP anomaly to be due to graphite. North of the Cunningham Claims, similar silver-bearing galena pods have been the target of extensive trenching and drilling (Chaput's Claims).