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SMF Consolidated Sea Gold Corp. 1268,3

GEOLOGICAL REVIEW REPORT

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MINFILE # 092HSEOLL

ON THE

YETI AND ZANDU CLAIMS

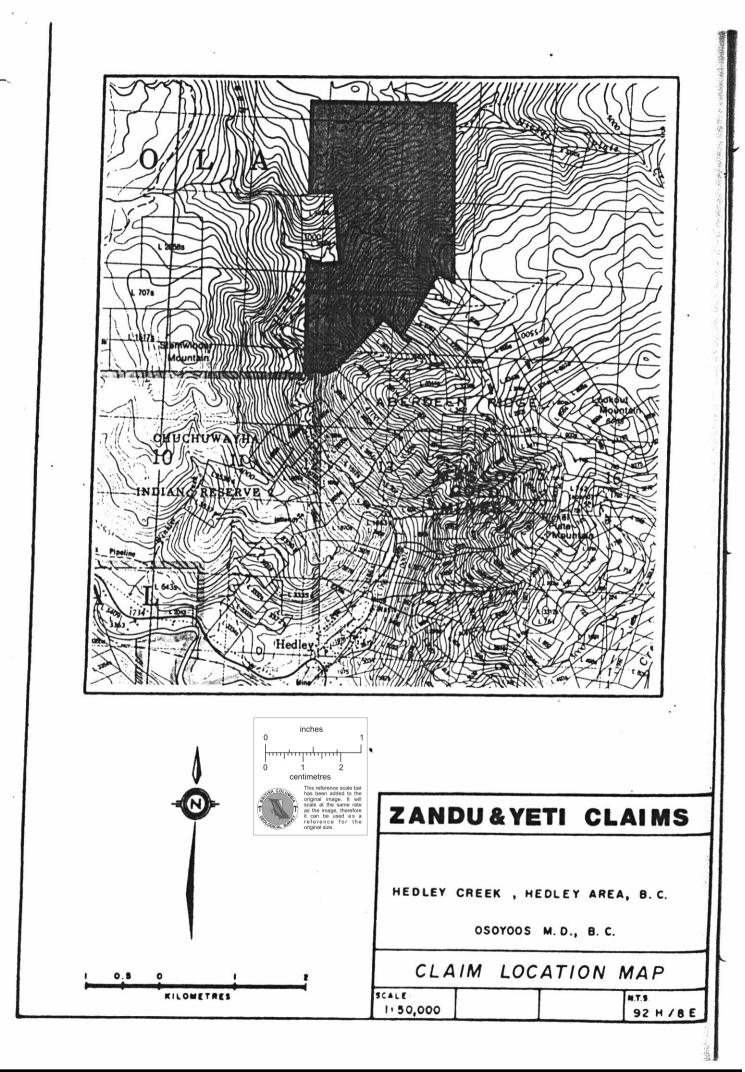
LOCATED IN THE

OSOYOOS MINING DIVISION

NORTH OF

HEDLEY, B.C.

PROPERTY		4 Km due North of Hedley, B. C. 49 24' N Latitude 120 04' W Longitude NTS 92 H8E
WRITTEN FOR	:	Consolidated Sea Gold Corporation
WRITTEN BY	:	M. R. Sanford, Geologist Box 225, HEDLEY, B. C. VOX IKO
DATED	:	September 3, 1986



I INTRODUCTION:

On August 8th, 1986, the writer was asked by Mr. C. Underhill on behalf of Consolidated Sea Gold Corporation, to examine the Yeti and Zandu claims, assess their potential, and propose an exploration program for the property if warranted. In the view of this author, the initiation of a modest program beginning at a grass roots level and developing on the results of this is highly recommended.

In late August the author inspected the property and has since reviewed existing maps and reports on the property. The following report is a summary of his findings.

II PROPERTY, LOCATION AND ACCESS:

The south-west corner of the property is located 4 km due north of the town of Hedley, B.C. and lies on Hedley Creek. It is comprised of two claim blocks encompassing 26 units, covering 650 hectares as follows:

Yeti, record #2143, 5N x 4E: Expiry date = Dec. 14, 1988 Zandu, record #2036, 2N x 3E: Expiry date - May 31, 1988

The western boundary intersects two Crown-granted mineral claims owned by Mascot Gold Mines Ltd., and the southern boundary of the property abuts the main property of Mascot.

The property has good drainage by Hedley Creek and its tributaries. Hedley Creek runs all year long and flows across the property from NE to SW. Two tributaries with their head waters on Lookout Mountain supply water to the property to the south-east of Hedley Creek. This comprises roughly sixty-five per cent of the land area of the claims. The north-west quadrant is supplied with water by an intermittent tributary of Hedley Creek flowing in a south-easterly direction.

The elevation ranges from 2200 feet in the south-west along Hedley Creek to 4500 feet in the south-east and north-west. Most of the property has good exposure of bedrock on steep to very steep slopes.

Access to the property can be gained by the four-wheel drive logging road into Hedley Creek from Nickel Plate Lake, or by foot along the old road up Hedley Creek that originates in Hedley. Access to most of the property is only by foot. 「「「「「「「「「「「「」」」」」

III HISTORY OF THE REGION AND PROPERTY:

Placer gold in the Similkameen River near Hedley was discovered in the mid-eighteen hundreds, and actively worked until the turn of the century. The first major discovery of lode gold in the region was on Nickel Plate Mountain in 1897, 3.5 Km south-east of the 7andu and Yeti claims. This deposit was mined from 1904 to 1955, producing 1.75 million ounces of gold, as well as some silver and copper. Mascot Gold Mines has recently outlined a new ore zone near the surface of the mountain, and will be in full production by mid-1987.

Gold in skarns and veins has also been mined or discovered in several other areas in the region, including the French Mine, the Good Hope Mine, Banbury Gold Mine, Peggy Mine, and Canty Mine.

The property has been mapped at a reconnaissance scale several times since the turn of the century; by Camsell in 1910, Bostock in the 1930's, and by Rice in 1947. It is presently being re-mapped at a reconnaissance scale by the B. C. Department of Mines.

In April, 1986, geological prospecting and geochemical surveys were conducted on the property by Shangri-La Minerals Ltd. Fifty-five rock samples were taken, and several were found to have anomalous gold, silver, and arsenic values. The geological work was confined to the southern part of the property, where diorite stocks, sills, and dykes were observed to be intruding limestones, quartzites, and argillites of the Hedley Formation. This concurs with the writer's observations while on the property.

IV REGIONAL AND LOCAL GEOLOGY:

The property is underlain by three major rock types. To the north and making up most of the area of the Yeti claim block, is granite. It is medium grained and siliceous, having few sulphides and on the whole being fresh and unaltered in appearance. Except where it contacts the sediments to the south and reactivation and concentration of sulphides and other metals may have occurred, it is thought by this writer to be unencouraging in terms of exploration.

To the south of the granite lies thinly-bedded limestones and argillites of the Hedley Formation. These rocks display considerable hornfelsing and, locally, skarnification and sulphide development. The sulphides are primarily pyrite and magnetic pyrrhotite, with minor quantities of chalcopyrite and arsenopyrite developed locally. It is in these rocks that the ore bodies of Nickel Plate Mountain lie, some 3.5 Km to the south-east.

The sediments, which occupy the Aberdeen Ridge, and the ridge immediately to the north of this east of Hedley Creek, are intruded by fine grained porphyritic sills and dykes of Hedley Diorite. The preliminary examination carried out by this author indicates that the dykes are widespread and extensive in this area. This is confirmed by Gerry Ray of the B. C. Department of Mines, who has completed traverses over the ground in 1985 and 1986 (personal communication). Some sills observed were at least three meters wide, and all were mineralized with two to four percent disseminated pyrrhotite and pyrite.

Along the extreme south boundary of the property, and along the north claim line of the Zandu Claim lie sizable stocks of mafic, medium grained Hedley Diorite. Both have an east-west elongation and between them they enclose the package of Hedley Formation sediments described above. The Toronto Stock, lying 2 Km to the south-east has been shown to be the source of the mineralizing fluids responsible for the Nickel Plate and Mascot ores. More intense skarnification, silicification, and alteration to marble of the Hedley Formation adjacent to the contacts of the two stocks leads the writer to believe that these stocks are of the same system as the Toronto Stock, and may well have had the same mineralizing effect upon the argillites, limestones, and quartzites on the property. いいのではないのないないないのです。

DISCUSSION, INTERPRETATION, CONCLUSIONS:

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The property, in this writer's opinion, has considerable exploration potential. Many key geological elements that form the controls for gold mineralization in the Hedley region are present, especially in the southern part of the claim group. These are, in order of importance:

1. a favourable stratigraphic sequence, i. e. the Hedley Formation. This has been shown to be a receptive host rock for gold bearing ore bodies in the Hedley region, and has provided the structure and chemistry conducive to gold mineralization.

2. the presence of Hedley Diorite dyke and sill swarm. These intrusions are critical in opening and preparing the country rock prior to gold mineralization. They were noted to be fairly abundant on the property, and further investigation should lead to an appreciation of their size, structure, and extent. The ore bodies of the Nickel Plate system were closely associated with these dykes and sills in several structural configurations. As well, the gold veins on the property of Banbury Gold Mines have been shown to be closely related to Hedley Diorite dykes.

3. the proximity to Hedley Diorite stocks. The two stocks seen by the author border and enclose the package of Hedley Formation sediments on the property. Other diorites of the area have been shown to be the source of mineralizing fluids of economic importance (Nickel Plate, Mascot, and French Mines) and other zones of high economic potential (Banbury Mine, Amalgamated Mine).

4. structure within the sediments. Minor folds were observed in the sediments, especially in the argillaceous limestones. Larger scale folds are indicated by the geological survey done by Shangri-La Minerals. Folding is an important control in the ores of the Nickel Plate system. The ore bodies generally occupy the nose or flanks of moderate scale folds within the Hedley Formation sediments.

In conclusion, the writer is of the opinion that the ground covered by the Zandu and Yeti claims are geologically very promising, and that a careful study, especially of the southern part of the property may well indicate areas of economic potential.

VI RECOMMENDATIONS:

A program for the exploration and assessment of the property is recommended, beginning at a grass roots level, and encompassing diamond drilling should the preliminary work warrant it. An outline of the program is herein presented:

- 1. Grid establishment: A grid with 100m lines and 50m stations should be established over the southern third of the property.
- 2. Geological mapping, prospecting, and sampling: The entire property south of the granite should be mapped at a scale of 1:2500, using the established grid. In particular, close attention should be paid to the following:
 - i) delineating abundance and structure of Hedley Diorite sills and dykes.
 - ii) mapping folds and faults within the sediments.
 - iii) noting the alteration within the sediments, especially skarnification, silicification, hornfelsing, and the development of marble.

Samples of all skarns, mineralized quartz-carbonate structure, gossans, mineralized diorites, and float from all old pits and trenches should be collected and sent for assay. Analyses should be done for the following elements:

Au, Ag, As, Co, Cu, Zn, Pb.

- 3. Soils geochemistry: The entire southern third of the property should be sampled at a 100m x 50m grid spacing. These samples should be taken from the "B" horizon and should be analysed for the same elements as the rock samples. A follow-up survey done on all anomalies outlined on 50m lines normal to the axis of the anomaly on 25m stations, should be carried out.
- 4. Mag and VLF surveys: These should be done in conjunction over the southern third of the property on E-W grid lines 100m apart with a 25m station spacing.
- 5. I.P. Survey: I.P. should be carried out in the areas of anomalous soils and mag-VLF results. Should positive results be obtained, other areas of geological interest should be tested.

VI RECOMMENDATIONS continued

- 6. Trenching: Anomalies of significance should be trenched. It will be necessary to use a dozer and backhoe, as access within the property is limited. Trenching in many areas may be difficult or impossible. Where trenches have been constructed they should be shovelled, washed down to rock with water, mapped, and sampled.
- 7. Diamond Drilling: Should an anomaly of significance be delineated, it should be diamond drilled, paying close attention to the geological controls set forth earlier in this report. The initial program should comprise 150m and the core size should be NQ.

The results of all aspects of the exploration program should be tabulated and kept in presentable form. Maps should be kept at the same scale - this author recommends 1:2500. The results should be compiled and summarized upon completion of the suggested program.

REFERENCES

BILLINGSLEY, Paul & HUME, C. B. 1941: Ore Deposits of Nickel Plate Mountain, Hedley, B.C. C.I.M.M. Transactions, Vol. XLIV.

BOSTOCK, H. S. 1930: Geology and Ore Deposits of Nickel Plate Mountain, Hedley, B.C. G.S.C. Summary Report, 1929, part A.

IBID.

1940: Map of Hedley Area, G. S. C. Map 568A

CAMSELL, C. 1910: Geology and Ore Deposits of Hedley Mining District, B. C. G.S.C. Memoir 2.

DI SPIRITO, F., HULME, N., DITSON, C. 1986: Geological and Geochemical Report on the Zandu Claim

RAY, G. E., et al.

1985: Preliminary Report on the Hedley Mapping Project B. C. Department of Mines Publications.

RICE, H. M. A.

1947: Geology and Mineral Deposits of the Princeton Map Area, B.C. G.S.C. Memoir 243.