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REPORT ON A  
GEOLOGICAL EXAMINATION

and the

EXPLORATION POTENTIAL

of

BEAU PRE EXPLORATIONS

GOLD PROPERTY

Sooke, Vancouver Island, B.C.

VICTORIA MINING DIVISION

NTS: 92-B-5

Latitude: 48°30' North

Longitude: 123°54' West

November 6, 1984

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1. SUMMARY AND RECOMMENDATIONS

Gold is present on Beau Pre Explorations Vancouver Island property in narrow and widely distributed quartz veins within a sequence of aluminous pelitic sediments and meta-sandstones. Locally the gold occurrences are spectacular returning assays up to 34.95 oz/ton Au.

The auriferous quartz veins vary from 1 to 20cm in width and possibly are emplaced in a spaced axial plane cleavage related to the development of a gently eastward plunging antiform.

The veins are persistent both with depth and along strike although in only one instance was a significant assay result returned from drill core. 7.55 oz/ton Au over 1.6 feet.

Despite the near surface high grades and some horsetailing of one of the veins it is not believed that significant tonnages of economic grade gold can be proved up in these veins.

Superposed folding about a similarly oriented fold axis does suggest the possibility that open space saddle-like structures may have formed due to the competency contrasts between the aluminous sediments and the metasandstones. If present these would be best developed in the nose of the antiform and would be available for filling by the later stage hydrothermal fluids. The net result would be saddle reef deposits similar to those at Bendigo, Australia and in the Meguma Group in Nova Scotia.

It is not recommended that Kerr Addison undertake any work on the Beau Pre property at the present time. A small structural mapping program to define possible saddle-reef structures in the nose of the antiform could be contemplated in six to eight months providing the property can be acquired under very reasonable terms.

## 2. INTRODUCTION

The Beau Pre gold property situated northwest of Sooke, B.C., on Vancouver Island was examined by R. A. Dujardin, A.D. Clendenan and R. Fraser on November 3, 1984. The property had been originally examined by A. D. Clendenan during 1983 and again during September 1984. The property has remained of interest due to the presence of spectacular occurrences of gold in narrow but high continuity gold veins.

The property consists of 38 contiguous mineral claims comprising 308 units situated in the Victoria Mining Division, NTS 92 B 12/W, latitude 48°30'N, longitude 123°54'W.

The claims are situated in an east-west strip from the west end of Jordan Reservoir to the West Leech River. The town of Sooke is located approximately 21 km southeast of the claim group while Victoria is 43 km to the west. Figures 1 and 2.

Access to the claims is by a series of forest access roads maintained by Pacific Forest Products of Sooke, B.C. Permission is required from the company to travel on their road system.

Title to the claims and their status has not been verified but Beau Pre Explorations reports that assessment work has been filed to hold the bulk of the property until 1988.

### 3. PREVIOUS WORK

Prior to acquisition of the claims by Beau Pre Explorations little exploration work other than sporadic prospecting had been undertaken in the general Valentine Mountain area despite the presence of known placer gold occurrences. Placer gold was first discovered in the area in 1864 which led to the Leech River gold rush and the settlement of Vancouver Island.

Since 1976 Beau Pre Explorations has carried out a program of prospecting, trenching, bulk sampling and reconnaissance scale geological mapping. In addition 13 holes were drilled to test mineralized quartz veins and other structures deemed favourable for hosting gold.



Figure 1  
LOCATION MAP

Scale 1:250,000

# NTS 92/12W

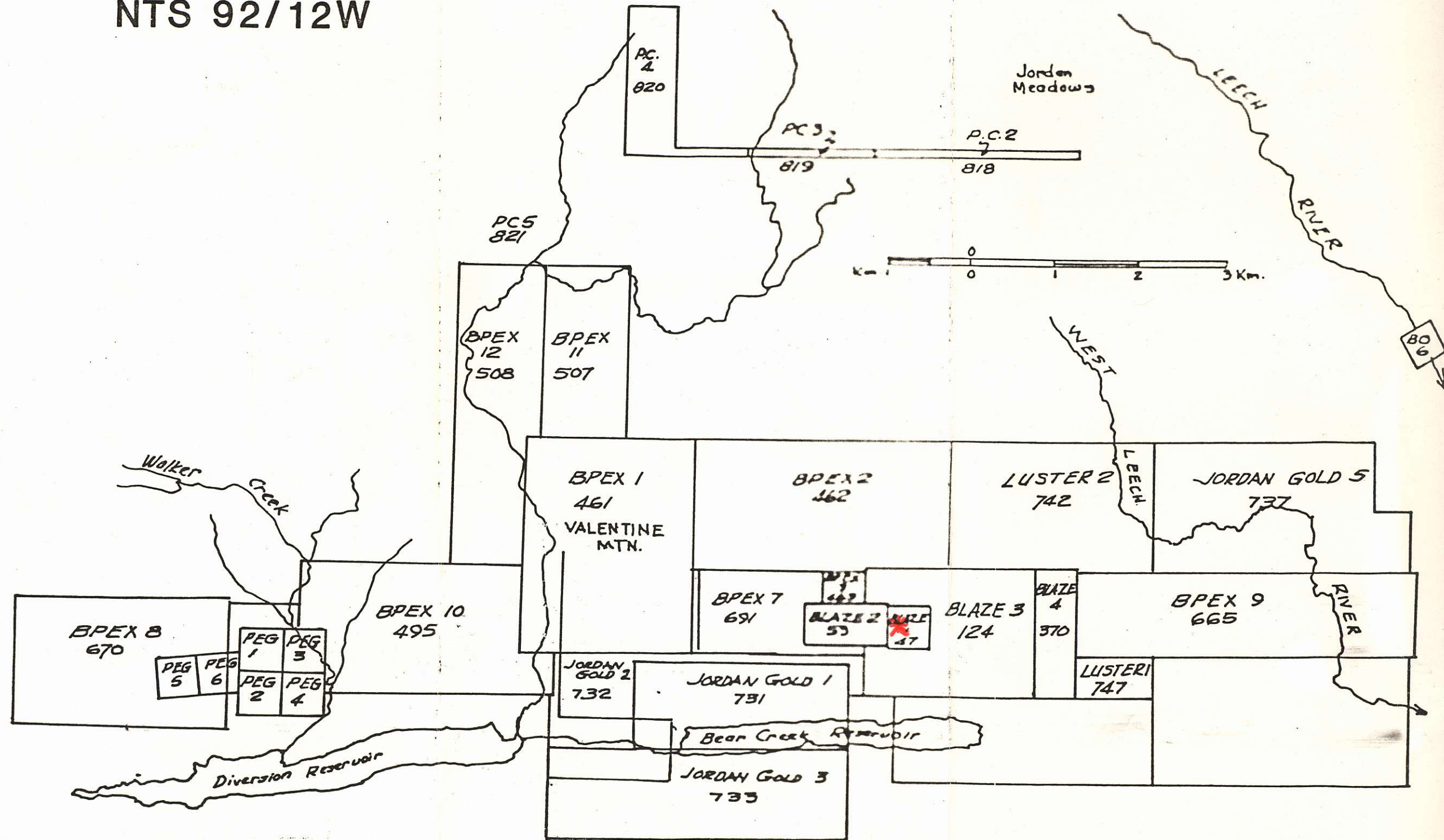


Figure 2 MINERAL CLAIM MAP

#### 4. GEOLOGY

The claim block is situated within the Leech River Formation, a series of metamorphosed sediments and volcanics consisting of metasandstones, aluminous and graphite rich pelitic sediments and amphibolites. Locally small pegmatite dykes and granitic sills have intruded the rocks.

The age of deposition of the Leech River Formation is upper Jurassic to Cretaceous.

The rocks have been metamorphosed to lower amphibolite facies with two accompanying periods of deformation. The first period of deformation consisted of tight isoclinal folding about a general east-west fold axis. Refolding of the rocks about a similar axis has created a complicated lithologic distribution pattern but generally is represented by a gently east plunging and trending antiform called the Valentine Mountain antiform. Foliation in the area is characterized by bedding and mineral banding generally trending 095°. Accompanying the second period of folding was the development of a strong axial plane cleavage trending approximately 080° and dipping from 70° to 80° to the south.

Metamorphism and deformation has affected all rock types and is early Tertiary in age. Mineralogical changes are most pronounced in the schists where staurolite and andalusite are commonly present, although often retrograded to clinochlore and sericite.

The Leech River Formation is entirely fault bound and there are no known analogous rocks elsewhere on the island or the mainland. The two principal faults, the east west



trending Leech River fault to the south and the San Juan River fault to the north are believed to be transcurrent faults related to crustal spreading thus making the Leech River formation allochthonous.

#### 5. MINERALIZATION

Mineralization on the Beau Pre property consists of generally east-west trending auriferous quartz veins varying from 1 to 20 cm in width. Spectacular occurrences of gold have been located along the "36" vein associated with pyrite and arsenopyrite or as vug fillings. The veins although narrow and showing much pinching and swelling are quite persistent and straight. A weak horsetailing effect is present at the western extremity of the trench on "36" vein.

The quartz veins are believed to occupy open spaces associated with the  $F_2$  axial plane cleavage and crosscut the main foliation at a low angle. The veins give the impression of being almost uniformly distributed at approximately 8 to 10 foot intervals which suggests the axial plane cleavage is a spaced cleavage.

Minor north south trending quartz veins are present but appear to be lacking in precious metal content.

In drill core the aluminous sediments contain numerous bedding parallel quartz veins and silica rich mineralogical layering. The bulk of these veinlets and layers are presumed to be due to metamorphic differentiation.

## 6. EXPLORATION POTENTIAL

The economic potential of the auriferous quartz veins uncovered on the Beau Pre property to date appears to be extremely limited. Although spectacular hand specimens of gold, grading up to 34.95 oz/ton Au have been found, the narrow character of the quartz veins and the low vein density inhibit the ability to prove any significant tonnage.

It is considered most unlikely that the gold is rich enough in grade or distributed evenly enough in the veins to prove up economic grades over a minimum mining width.

Diamond drilling of the "36" vein failed to encounter economic grades despite the persistence of the vein with depth and along strike. It has been suggested that the low assay results from drill core of the "36" vein is due to gold sample representivity which can only be partially rectified by using different sample preparation techniques. This is considered unlikely as the "36" vein has been intersected with enough drill holes that statistically one or more of the samples should have given indications of economic grade. Typical intersections range from 0.02 to 0.06 oz/ton Au. The "3650" Vein, south of the "36" Vein was intersected in several drillholes with low results similar to the "36" Vein intersections except for a 1.6 ft intersection which returned 7.75 oz/t Au. As such it is believed that there is either a lack of gold with depth in the veins or its very erratically distributed inhibiting any mining development.

The best potential on the claim group appears to be in the vicinity of the nose of the major anticline. Two periods of deformation preceding quartz vein emplacement have created superposed folding patterns. The first period of folding produced tight isoclinal folds in both the competent metasandstones and less competent aluminous schists. Refolding of the early isoclinal folds about a similarly oriented axial plane into an upright gently eastward plunging antiform may have created dilatant zones in the nose of the antiform. The competency difference between the metasandstones and the aluminous schists may have allowed slippage along the contact during folding and produced open saddle reef structures.

The open spaces would be a favourable area for deposition of auriferous quartz veins in a manner analogous to that at Bendigo, Australia and the Meguma group in Nova Scotia. The preferred structural lithologic sequence would be aluminous schists overlying metasandstones. See Figure 3.

It would be necessary to produce a detailed structural map of the nose area of the antiform and delineate precisely the antiformal axial plane. Drilling of this restricted area would then prove or disprove the presence of mineralized saddle reef structures.

7. CONCLUSIONS

The Beau Pre property does not warrant further work by Kerr Addison at the present time. The auriferous quartz veins discovered to date are too narrow, inconsistent in grade and too widely spaced to permit development of significant tonnages.

The potential for mineralogical saddle reef structures is slim and would not justify a large commitment by Kerr Addison. Should suitable terms be available in the spring, a small structural mapping program could be contemplated by Kerr Addison but no drilling commitment should be made.

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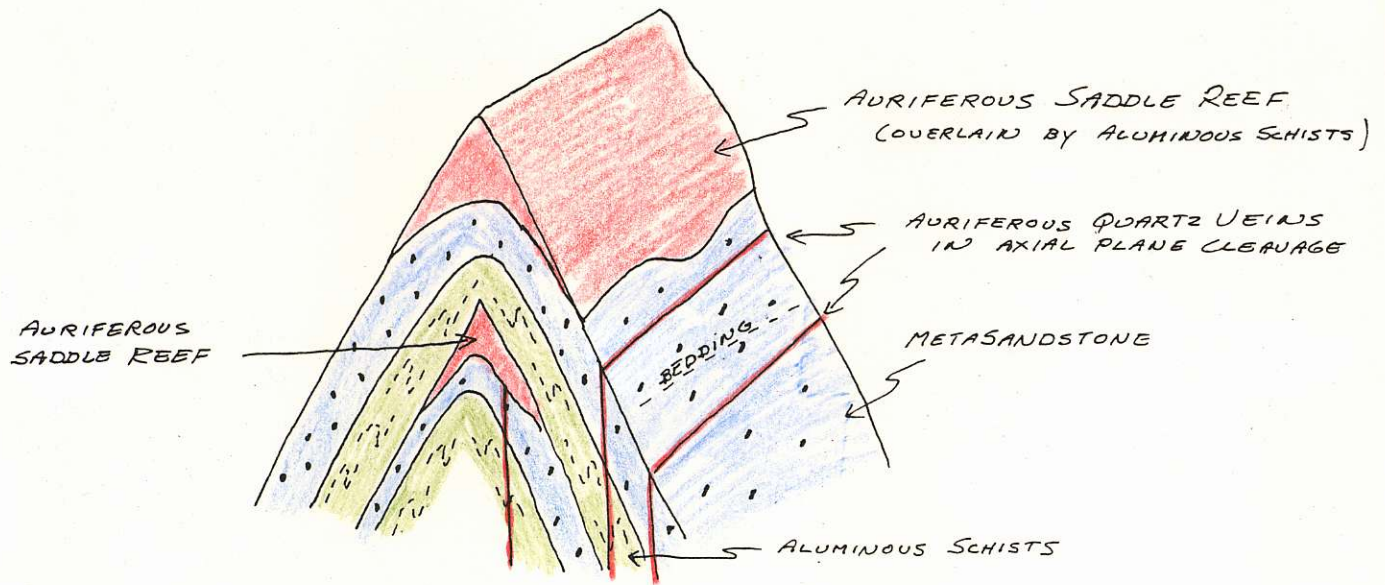


FIGURE 3. SCHEMATIC DIAGRAM OF POSSIBLE SADDLE REEF STRUCTURES.