ELLEN CLAIMS SHUTTLE ISLAND

QUEEN CHARLOTTE ISLANDS, B.C.

SKEENA M.D.

NTS 103B/12E

Lat. 52040'N

Long. 131⁰42'30"W

LOCATION, ACCESS, TOPOGRAPHY 1] 13]

The property covers most of the northern part of Shuttle Island, which lies between Moresby and Lyell Islands.

The island is about 2.5 m long, by about 300 m wice at its widest and 150 to 200 feet wide in the claim area. Maximum elevations are about 120 metres. The slopes are covered with dense second growth timber, of possible economic value.

Access for the examination was made by helicopter landing on the beaches. For operation and exploration, supplies and equipment would be barged in from Queen Charlotte City.

CLAIM GROUP

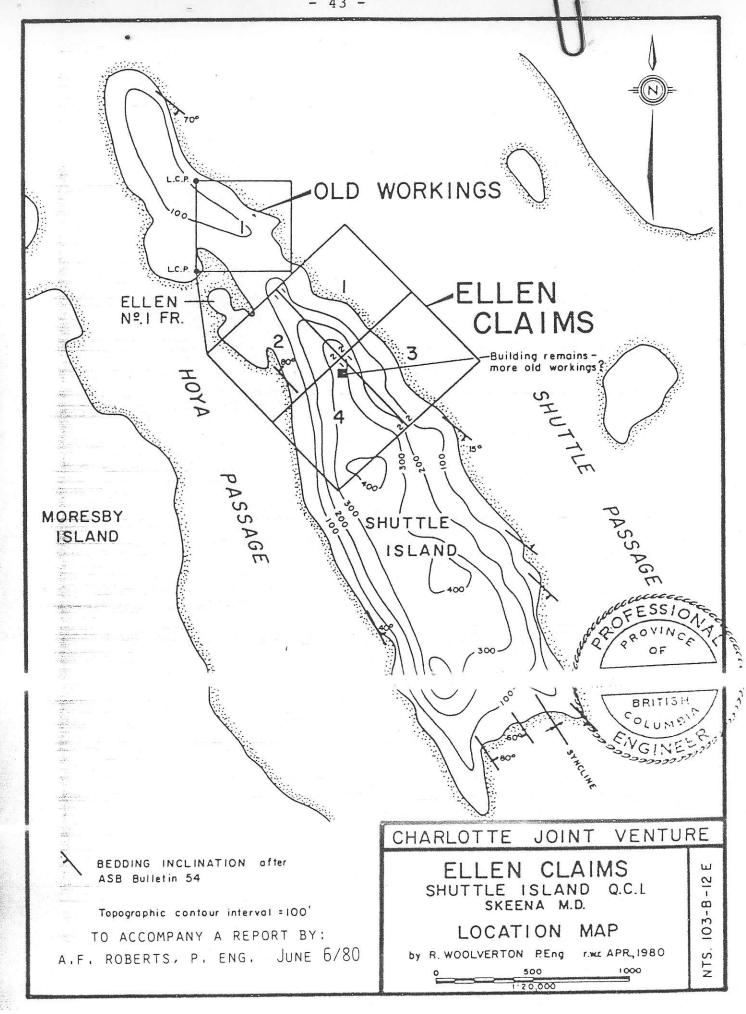
The Group consists of the following claims:

Namo	Ilni+c	Record No.	Exmirv Date
Ellen	1	1043	nugust 8, 1980
Ellen 1-4 incl.	4	1091-94 incl.	February 22, 1981
Ellen Fraction	1	Staked April 23, 1980	April ? 1981

L.C. Posts examined fulfilled the requirements

[Follows page 7]

^{13]} Claim and Topographic Map, Ellen Claims, 1:20,000



The exact location and the amount of ground covered can only be determined by a legal survey.

HISTORY 6] 8]

It was discovered about 1917-1918 by loggers taking out "airplane spruce", and worked over the next three years. It is reported that 50 tens produced 18 ozs of gold.

There was placer gold recovered from the beaches below the adits. The remains of that operation are still on the property.

GECLOGY 12] 14] 15] 16] 17]

The property is covered by rocks of the lower Karmutsen Formation, consisting of greenstone, limestone, and argillite.

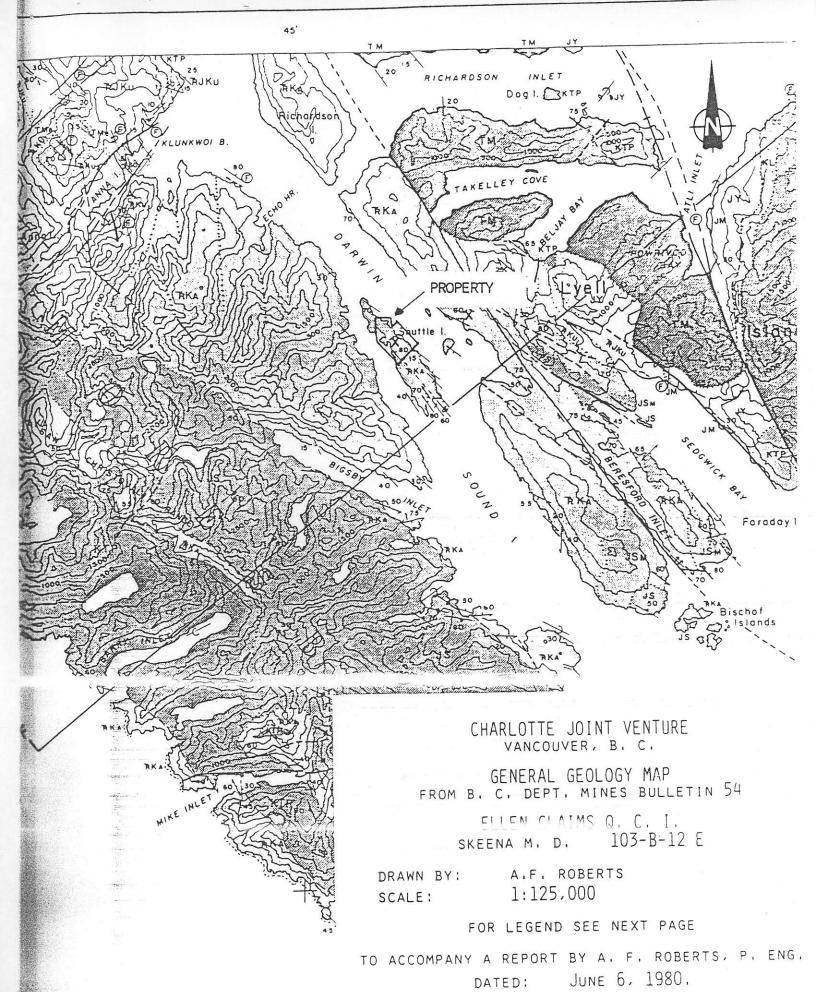
Limestone was seen on both sides of the island along the beach, overlain by greenstones.

The general geology map indicates an overturned syncline running lengthwise through the island.

The mapping also indicates major faulting paralleling the island, and there is a suggestion that the island lies in a major shear.

The magnetometer survey shows a moderate relief of only 500 gamma maximum, the contours roughly paralleling the island.

14]	General Geology Map, Ellen Claims, Bull. 54, 1:125,000, with Legend	[Follows page	8]
15]	Geology map, R. Wolverton, Ellen Claims, 1:800	[Follows page	8]
16]	Airborne Magnetometer Survey, Ellen Claims, 1:20,000	[Follows page	9]
17]	Transit survey of old mine, Ellen Claims, Wolverton, 2.5 cm = 35 m	[Follows page	9]



LEGEND

STR	ATIFIED ROCKS
QUATERNARY	
O Recent diluvium, Pieistocene till, marine dri	11, and outwash sands
O-S Ouglernary overlying Skonun Formati	
O-M Quaternary overlying Masset Format	100
TERTIARY OR QUATERNARY	
TOT TOW HILL SILLS: olivine basall	
TERTIARY MIO-PLIOCENE	
TS SKONUN FORMATION sands, mudstone,	andstone, conglomerate, and lignite
PALEOCENE - EOCENE ?	
TM MASSET FORMATION: subaerial basalt f TM-Undivided Masset Formation	lows and breccias, rhyolite ash flows, lesser dacite
Divided Tartu Facies	
TMc - Basalt member TMb - Rhyolite member	
TMa-Mixed member	
Hypobyssal Equivalents	
TMd- Feldspar porphyry	
TMe- Gabbro-diabase CRETACEOUS	
QUEEN CHARLOTTE GROUP (K	S, KHO, KHA)
KS. SKIDEGATE FOR MATION: shaly siltstone	, feldspathic sandstone, calcareous siltstone
KH HONNA FORMATION: conglomerate with g	ranitic cabbles, arkosic grits, minor shale
ALBIAN-TURONIAN	
KHA HAIDA FORMATION: green glouconitic on buff colcareous silts	d grey sandstone, grey suity shale and siltstone, one
NEOCOMIAN	
LONGARM FORMATION: dark grey calcare angular fine con	rous siltstone and fine lithic greywacke, glomerate, minor volcanic rocks
VANCOUVER GROUP (RKA, RKU, JI	Ku, JM, JY)
JURASSIC BAJOCIAN-CALLOVIAN	
JY YAKOUN FORMATION porphyritic andesit	e agglomerate and flows, calcareous scoraceous lapilli tuff,
volcanic sandstone	and conglomerate, minor tuffaceous shale, coal
PLIENSBACHIAN - TOARCIAN	
JM MAUDE FORMATION: grey blocky argillit	e and shale, grey green lithic sandstone
JURASSIC AND TRIASSIC	
TIJKU KUNGA FORMATION: mossive grey limest	one, flaggy black limestone, flaggy black orgillite-undivided
	JKu Flaggy black argillite member, minor limestone
	Kuz Flaggy black limestone member, minor orgillite
TKU Limestone members-undivided	KUI Massive grey limestone member
TRIASSIC	
KARNIAN AND OLDER	
THE KARMUTSEN FORMATION: basalt mass.	ve flows, pillow lavas, pillow breccia and tuff, related sills, m

PLUTONIC ROCKS

CRETACEOUS AND TERTIARY

KTP POST-TECTONIC PLUTONS- quartz monzonite, granite, granodiorite, quartz diorite

JURASSIC ?

SYNTECTONIC PLUTONS hornblende diorite, quartz diorite

JSM MIGMATITE: mixed hornblende diorite and amphibalite

As with the Early Bird, it is believed that the narrow veins, [two 20 cm veins], carrying the gold are the top of an epithermal deposit.

Previous work only cleaned out the one ore shoot, which did not reach the upper adit. The water filled shaft at the end of the adit, about 6 metres deep shows an apperent drift extending to the southwest.

No exploration work has been done since the vein was stoped out.

CONCLUSION

On the theory that the narrow veins are the top of an epithermal deposit, there is a good chance of finding other ore shoots at depth and along strike, and possibly other parallel veins.

The property is considered a good geological bet.

RECOMMENDATIONS

Under the conditions existing on the island, it will be necessary to do considerable trerching and strip-

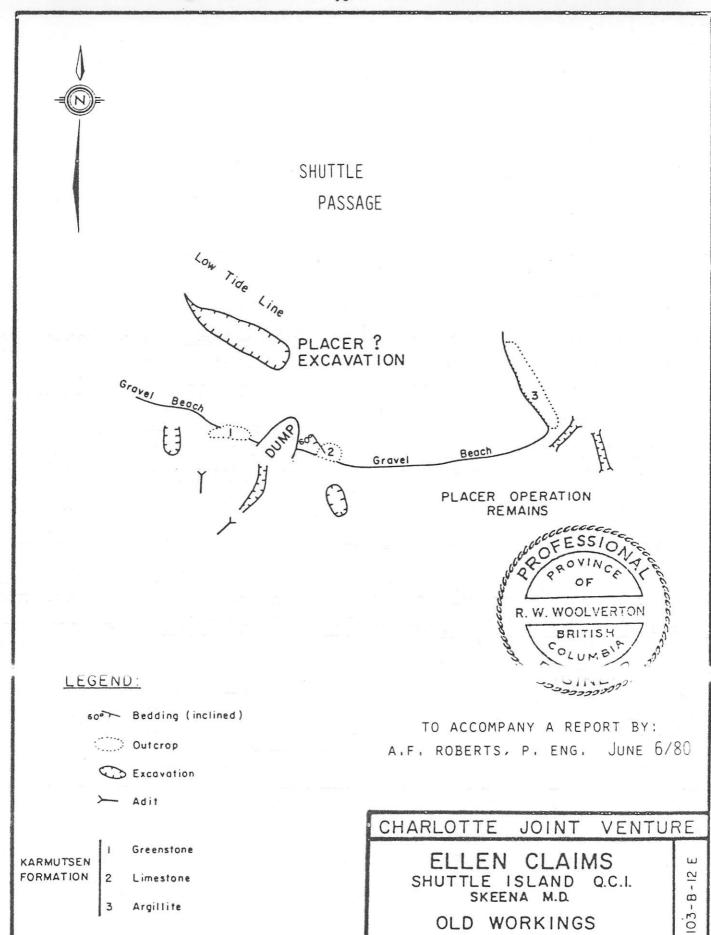
Phase I

Geological mapping, stripping, trenching, sampling.

Phase II

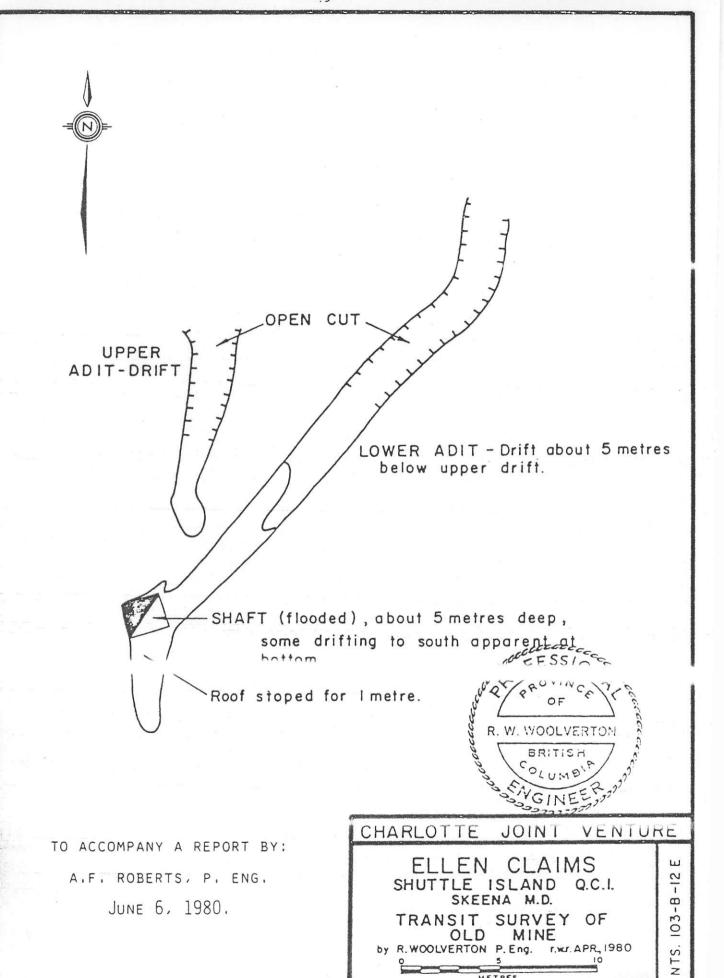
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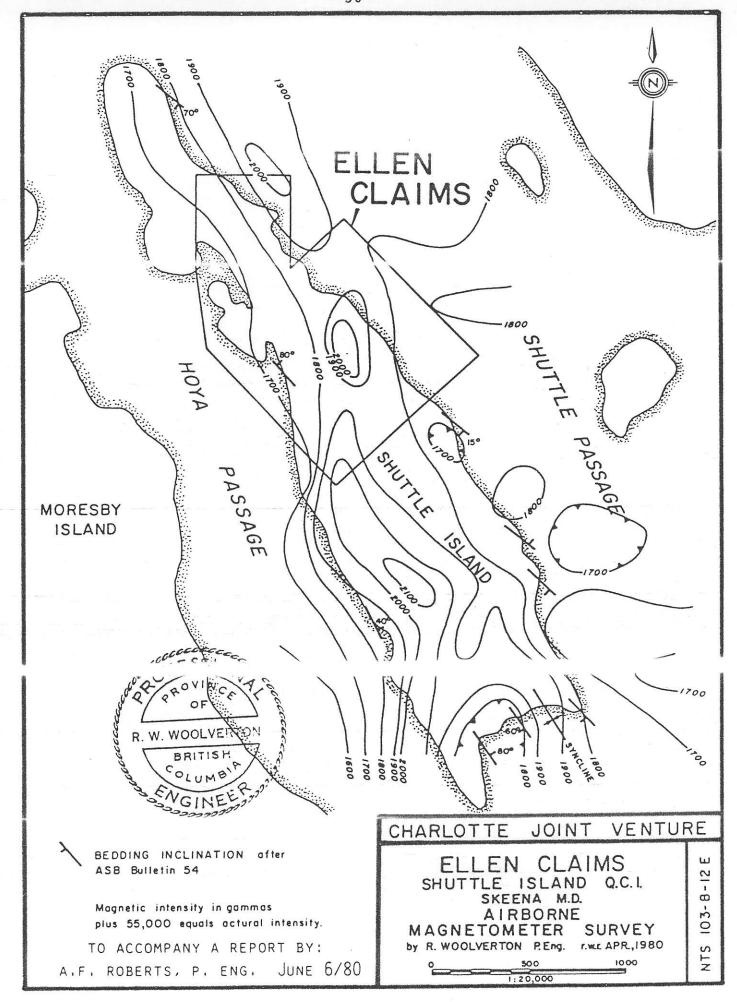
Diamond drill to depth below the old adits, and along strike, guided by the mapping of Phase I.



by R. WOOLVERTON P.Eng. r.w.c APR,1980

NTS





ESTIMATED COSTS

Phase I

Seaborne mobilization, demobilization, rentals, camp, etc. from Queen Charlotte City	\$ 15,000.00
Helicopter servicing from Sandspit 30 hours @ \$375.00/hour	11,250.00
Camp, board, room 3 men, 30 days, \$50.00/day	4,500.00
Back hoe rental, 200 hours @ \$95.00/hour	19,000.00
Assaying - 100 @ \$8.75	875.00
Trace metal assays - 100 @ \$4.75, 3 metals	475.00
Engineering, supervision, reports, etc.	5,000.00
Sub-total	56,100.00
15% contingencies	8,415.00
Total	\$64,515.00
Say - \$65,000.00	

Phase II

If justified by rhase 1, IT in	
consist of diamond drilling at least	
1,000 metres at \$100.00/metre, with	
camp and assaying, is estimated at	\$150,000.00