PROPERTY FILE 92F032 ROSE MARIE

006696

QUOTATIONS FROM REPORTS OF PROPERTIES IN THE KENNEDY LAKE AREA (LISTED BELOW)

PETER EASTWOODS FILES

CONTAINS NOTES ON:

92F032 ROSE MARIE (FILED UNDER)
031 LEORA (X-REFERENCED)
033 TOMMY K
047 JO JO
034 TOQUART
130 IRON MTN
035 CHIEFTAN
036 WANDERER, L.GRANT
045 IRONSIDES
044 BEAR
030 O.K.
048 GRANT
049 RUTH
046 OLYMPIC, TITANIC

X REFERENCED (CONT'D)

92F 050 BESSIE B
051 BLUEBIRD
052 GOLD QUEEN
GOLD KING
GOLDEN GLOW

Quotations from reports on properties in Kennedy Lake area

(excluding Draw Creek magnetite)

G.E.P. Eastwood, Feb., 1963.

PROPERTY FILE

Quotations from reports on properties in Kennedy Lake Area

Rose Marie 92F032

Brewer 1916: The Rose Group, consisting of the Rose, Maggie, Marie, and Sadie, owned by Anthony Watson of Port Alberni, is located on a portion of the ground located in 1897 as the Rose Marie Group of 8 mineral claims. A concentrating plant was erected in 1898 and worked for about 2 years by the Rose Marie Mines, Limited, but later the title was allowed to lapse and the present locations were made. The heavy snows of the winter of 1915-16 ruined the concentrator and camp buildings, as well as the machinery.

"The mine workings consist of open-cuts and an adit driven about 400 feet (along) the strike of a well-defined fissure vein, varying from 15 inches to 2 feet in width, in diabase rock with a slight porphyritic structure, at an elevation of nearly 1,000 feet above sea-level." The vein strikes 070° and dips 60° N. "The open-cuts are about 200' higher than the adit; they are made along the outcroppings, and the ore mined from them was treated in the concentrating mill in 1899. The outcrop of the vein can be traced by the open-cut and outcroppings beyond that work for ... approximately 1,000 feet. There is approximately 200 tons of ore on the dump at the entrance to the adit."

"The quartz vein is banded and mineralized with pyrite and some arsenopyrite. The oxidized quartz pans a fair prospect in free gold, and the vein-matter has the appearance of forming an ideal ore for treatment by concentration. The values in the ore vary very considerably, as is usual with gold-bearing quartz ores."

"The writer took a cold-blooded average across 16 inches, the width of the vein at the face of the adit in June, 1916, which assayed: Gold, 0.06 oz.; silver, 1.2 oz.; copper, trace.

Forbes 1913: Including the Rose, Maggie, Marie, and Sadie, owned by Messrs. Watson and others. The lower camp on Elk River is at an elevation of 50 feet above sea-level.

"The claims are located on a small quartz vein, 15 to 18 inches wide, ... The vein strikes N 34° E (mag.) and dips from 64 to 68 degrees to the northwest. The vein is in porphyritic diabase and contains pyrite, with traces of arsenopyrite."

"On the top of the first bench, 1,000 feet above the river, some prospecting work has been done by open-cuts; the ledge in places showing a width of 2 feet."

"The principal development work consists of a tunnel driven on the ledge at an elevation of 695 feet above Kennedy Lake. This tunnel has been driven for 438 feet N 34° E (mag.), the ledge varying in width from 15 to 18 inches of kindly-looking mineralized ribbon quartz. A sample taken from the face of this tunnel assayed 1.50 oz. gold to the ton. I was able to pan some free gold from the oxidized ore on the dump."

"The sample mentioned above was a fair average sample taken in the face of the tunnel at the time of my visit. It showed no visible free gold, consisting apparently of quartz carrying pyrite, the latter not

exceeding 1 per cent of the ore. The return obtained is, however, above the average value of the ore in the mine."

"The ore is amenable to ordinary "free-milling" and cyanide treatment and could be worked on the spot, more than sufficient water-power being available for all purposes. The mine is not large enough to stand expensive company management, but there is no reason why it should not have a successful future if worked economically as a small enterprise."

Dolmage 1920: "Gold-bearing veins were known as early as 1898 to occur in the Elk River section. The most notable vein is on a group of claims known as the Rose Marie, situated on the east side of the river .. Several attempts were made to develop this vein, and eventually a small concentrator was erected, but owing to a number of reasons it was never put on a successfully producing basis."

Relies mostly on Forbes 1899, 1912, 1913, for description. "No work has been done recently."

Bancroft 1937: ..."owned by Clarence Dawley and Andy Watson of Port Alberni .... In 1899 ore from a vein on the property was treated in a 4-stamp mill. Work was suspended in 1900, and later a rock and snow slide destroyed the concentrating mill, compressor plant, and other machinery."

"The vein has been drifted on for 350 feet, the adit is at altitude 760 feet. The vein is free and follows well-defined walls in green andesite; it strikes N 70° E and dips 70° W. The vein pinches and swells, but averages 6 inches in width. The vein contains pyrite, chalcopyrite, and sphalerite and shows ribbon structure in places."

Carmichael 1899:"This group consists of the Rose Marie Nos. 1,2,3, 4, and 5, and is owned by the Rose Marie Mines, Limited; head office, Vancouver; Barclay Bonthrone, manager."

"The mountain, upon the side of which the property is situated, rises abruptly above the water for some thousand feet, and about halfway up this slope there outcrops a quartz vein, of from 15 to 24 inches average width, exhibiting a banded structure, and having well-defined walls standing out clearly and distinctly against the bluff. The vein has been traced up the side of the hill and for a distance of over 100 feet across the more level summit. It has in places a width of 3 feet.

"Such development as had taken place at the time of my visit was confined to surface stoping and open-cuts, no underground work having been done.

"The quartz in the lode is mineralized with iron pyrites, occurring in streaks or bands parallel with the walls of the vein. These pyrites carry very fair gold values of about $12 to the ton of ore."

"A concentrator building had been erected on the river bank and at the time of my visit the machinery was being placed in position. This consists of one 7X12 Dodge crusher, two Tremain Steam Stamps (small size), and one Wilfley Table. It was also intended to put in a second Wilfley Table and a classifier."

Recorder 1899: Rose Marie Nos. 1-8. "Aforce of 10 or 12 men has been continuously at work on this property since May, 1898. A large concentrating plant has just been erected, the first shipment of concentrates being made about the end of December, and regular shipments are to follow." (However, he reported only assessment work in 1900 & did not mention the property in 1901.)

Recorder 1902: "Work has been carried on steadily throughout the year on the Rose Marie Group, owned by the Boseco Mines, Ltd., of Vancouver." "The values in gold are holding well, and the leads are widening with depth. It is rumoured that in the spring the company will put on a larger force of men and use the stamp mill which was erected on the property some years ago by the previous owners. Owing to litigation work on this property had been at a standstill for some time."

1903: ".... has had further work done during the greater part of the year ...."

1910: Mamie, Maggie, Sadie, and Rose, owned by C. Dawley and A. Watson. Tunneling 23 X 4 X 7 feet; open-cut at tunnel mouth 30 X 10 X 4 feet.

Carmichael 1912: "A quartz vein outcrops on the steep mountainside, but is covered at the bottom by an extensive rock-slide; the vein, which shows from 15 to 24 inches wide on the surface, had been prospected by the original owners by a series of open-cuts extending to the top of the mountain, at an elevation of 1,000 feet, and on to the top for 100 or 200 feet.

Owing to a dispute as to title, and other reasons, the property lay idle for a long time, but recently other parties started a tunnel several hundred feet up the mountain, where the vein showed the best ore. This tunnel has been driven directly into the hillside on the strike of the vein for 307 feet. The vein is clearly defined throughout the entire length and has an average width of 18 inches.

The mineralization is pyrite and arsenopyrite, with a few specks of chalcopyrite showing here and there. A sample taken recently by a mining engineer, and said to represent a fair average of ore in the tunnel, gave a value of $12 a ton, nearly all gold."

Recorder 1915: Bonded.

Brewer 1925: "... the Rose Marie Mines, Limited, a British syndicate heavily interested in South African mines. Later, after a rock and snow slide destroyed the concentrating mill, compressor plant, and other machinery, the property was allowed to go to tax sale and acquired by Clarence Dawley of Clayoquot and Anthony Watson of Port Alberni, who are not financially able to install new machinery, so keep the taxes paid up in the hope of selling."

Clothier 1927: "Ore for the mill was obtained by trenching along the vein croppings and sent down by aerial tramway. Later a tunnel was driven 350 feet on the vein 400 feet below the croppings.... I took a sample across 18 inches of slightly mineralized quartz in the face of the tunnel, which assayed: Gold, $1.60 to the ton; silver, 1 oz. to the ton. There are evidences that the tunnel has been thoroughly sampled.

Leora 92F031

Forbes 1913: "The Leora group of mineral claims (is) owned by Hanbury and Bowes of Victoria.... The principal development work consists of a tunnel 340 feet long, about a 1,000 feet from the river; this tunnel has been driven on a small ledge, from 6 to 12 inches wide, with diabase walls, striking N 72° E and dipping 55° northwest, exposed in the creek near the portal of the tunnel. At 117 feet in the tunnel a winze has been sunk on the ledge, in which it is said that better values and a wider ledge were found. This winze was full of water, and I was unable to inspect it. A small shipment has been made from this winze which yielded over $100 per ton.

Very little ore was visible after passing the winze in this tunnel, although the wall is well defined, dipping 45 to 55° northwest. It appeared to the writer that it is possible that the ledge had been left in the hangingwall at some point near the winze, and that it might be found by excavating in the hangingwall at the face.

The country rock appeared to be much shattered, very heavy movement having taken place along the strike of the ledge. Mineralization consisted of pyrite, arsenopyrite, and the gangue of quartz and calcite. A sample taken near the winze assayed 1.4 oz. gold to the ton.

Galloway 1932: "The property was worked during 1914 and 1915 by W.W. Gibson, the inventor of the Gibson mill, who must have treated a considerable tonnage judging from the stoped portion of the vein, and is reported to have recovered about $9 a ton.

Brewer 1916: "The claim is owned by D.W. Hanbury and associates, of Victoria. During 1914 and 1915 the property was operated by W.W. Gibson of Victoria, who erected a small quartz-mill, designed similar to the type known as the "Chilean" mill, in which he treated a considerable tonnage of free-milling quartz, and is reported to have saved about $9 in gold to the ton.

When the writer visited the property in June, 1916, all work was suspended, and there was no-one in charge. The mill and camp buildings had been wrecked by the weight of snow during the previous winter. The wrokings consist of a shaft, an adit 350 feet long, and a winze. The shaft was full of water and, although the drift-adit was examined, but little material information could be obtained, because all of the workable ore that could be found had been stoped, both from above and from below the adit-level, from the portal to the winze, 120 feet from the portal. The winze was full of water, as well as the underhand stope. The country rock is diabase and is very much altered and sheared. In places the shearing action has been so great that the rock is almost a schist. A quartz vein occurs filling a fissure that is very persistent. The width of the vein varies from 12 to 18 inches for the length it has been stoped, but it maintains its continuity for about 225 feet longer, or to the face of the adit. The width of the vein beyond the winze is much narrower than from the portal to the winze, and no attempt has been made to carry stoping beyond that point. The walls of the vein are well-defined, and there is a narrow seam of gouge between the wall-rock and the quartz. The strike is nearly true east and the dip about 50° north."

Bancroft 1937: "The Leora group of three claims ... was under development in 1902. In 1914 a shipment of 8 tons to Tacoma smelter brought $880. It is estimated the Leora produced about 2,200 tons of ore that averaged 0.45 oz. gold per ton, before it was closed down in 1915.

The main vein on the Leora strikes N 79° E and dips 58 degrees N. It was possible to examine its character along an adit for 106 feet. The drift apparently cut through into a creek bed and water filled the stopes. The vein in some sections was ribbon quartz averaging 8 inches in width, but maintained this width for only 75 feet southwest along the drift. Abundant pyrite, some chalcopyrite, sphalerite, and ankeritic carbonate occur in the quartz. There has been some effort to follow small branch fissures."

Stevenson 1944: "... the Leora was the largest producer. The total production is reported to have been 436 tons containing 312 oz., an average of 0.71 oz. gold per ton."

Recorder 1902: "From the Leora claim, owned by Messrs. Kenyon, Grant, and Russell, 10 tons of quartz were shipped in September to the Crofton smelter and gave a return of a little over $40 to the ton."

1910: "... owned by D.W. Hanbury and C. Bowes - sunk shaft 30 feet; built 1,500 feet of tramway from mouth of tunnel to east bank of Elk River, for the shipment of ore, at a cost of $1,000. to cover assessment work for four years."

Carmichael 1912: "Owned by Hanbury and Bowes, Victoria. ... the mine cabin is 300 or 400 yards back from the river. A small creek flowing into the Elk River has exposed a quartz vein a foot wide mineralized with arsenical pyrites. To prospect this vein a tunnel has been driven 210 feet east (magnetic) along the vein, which runs into the mountainside. The tunnel is for some distance in a shattered zone of diabase showing much slickensiding and with a calcite filling, carrying a little arsenical pyrites along a well-defined hangingwall.

At 75 feet from the tunnel portal a winze has been sunk 40 feet at an incline of 60°. At the bottom of the winze there is 60 feet of drifting on the vein, which swells at one point to 2 feet wide, but at the face is only 6 inches.

After passing the winze there is no distinct quartz vein, but there is a distinct parting on the hangingwall side. This may be the hangingwall of the fissure or only a parting in the filling. The face shows pyrite and arsenopyrite, principally in calcite, with a little quartz and slickensided country rock. The principal value is in gold; 8 tons of the best ore gave a smelter return of $110.

Recorder 1913: "Drove tunnel 94 feet, erected new cabin, and fitted up air ventilating system."

1914: "This group has been bonded by W.W. Gibson. A new shaft was started to tap the vein which was struck at a depth of 40 feet; This was then sunk on the vein for another 20 feet. At the bottom of the shaft a drift was driven for 80 feet.

About 100 tons of ore was stoped out and put through the mill. A shipment of 8 tons of the ore taken out of the shaft was sent to the

Tacoma smelter and brought $880; 100 tons of the ore stoped out of the drift yielded $900 in bullion. Returns of concentrates have not yet been received.

The mill was designed and built by Mr. Gibson. A 36-inch water-wheel, designed also by Mr. Gibson, furnishes the power. This also drives an air compressor which supplies the power for one air-drill, and also drives a pump which drains the shaft."

1915: "Leora and Sylvanite. Five years' work was duly recorded on these claims ... A new 65-foot shaft was sunk 5 X 8 feet, also drifted east and west 75 and 20 feet respectively."

Res. Eng. 1932:"W.W. Gibson, of San Francisco, who operated the property 25 years ago, reconditioned the old camp and trail, and installed a small compressor plant driven by water-power for the purpose of sinking a new shaft. Considerable ore was taken out in the earlier operations at shallow depths, but the work was handicapped by water. To avoid this the new shaft is being sunk on the hangingwall side of the vein to cut the vein at a depth of about 150 feet. Present work has been retarded by lack of water for power, but I understand is being continued."

1933: "This claim is owned by W.W. Gibson .... who .... states that over $20,000 was recovered from ore averaging about 0.45 oz. per ton. Two years ago Mr. Gibson started a shaft in the hangingwall with the object of intersecting the vein at about 150 feet depth. It is stated that a crosscut was driven from that depth to the vein during the summer of 1933, exposing 2 feet of shipping-grade ore."

Steverson
~~O'Grady~~ 1935: "The Leora group comprises the following mineral claims: Leora, Leora No. 1, and Leora No. 3. They were staked in 1902-03 and are owned by WW Gibson of San Francisco. The workings and camps are $\frac{1}{4}$ mile east of the river landing at the base of a mountain slope ....

Mineralization on the Leora has resulted in quartz that partly fills strong fissures in andesitic greenstone. Abundant pyrite with a little sphalerite, chalcopyrite, and ankeritic carbonate accompany the quartz. The presence of much gouge and several branch fissures indicated considerable faulting. The greenstone is traversed by serpentine dykes that range from a few inches up to several feet in width; the dykes antedate the fissures. Exploration work consists of two adits, one 80 feet in elevation above the other, driven on different fissures, and two shafts, one quite old and one started in 1931; both shafts were however inaccessible at the time of my examination.

The Leora has been worked intermittently since 1902 and small shipments of ore usually made each time. It is estimated that between 1902 and 1914 about 422 tons of ore was shipped. In 1911 a tramway 1500 feet long was built from the mouth of the adit to the river, but this has long since gone. The present owner, W.W. Gibson, bonded the property in 1914, started a new shaft, did considerable stoping, and ran 100 tons of ore through a small mill of his own design. Since 1931 he has started another new shaft about 100 feet northwest from and above the lower adit, and is reported to have done considerable lateral work from it. At the time of the writer's visit no work was being done.

A complete examination of the lower adit was prevented by a dam backing up water at 106 feet from the portal. Over this distance the

adit has been driven at S 79° E on the fissure which dips 60° N. Two short drifts on branch fissures have been driven at points 50 feet from the portal at S 45° W for 10 feet, and 72 feet from the portal at S 45°W for 12 feet.

From the portal to 30 feet the vein has been underhand-stoped for an unknown distance and stoped above to the surface. At 70 feet a small winze was sunk; ... (see Carmichael 1912).

The fissure followed by the main adit is filled in some sections by ribbon-quartz up to 8 inches wide, and in others by gouge and only small amounts of quartz, and in some by gouge alone. From 0 to 20 feet the vein contains ribbon-quartz that averages 8 inches in width; from 72 to 80 feet it contains an 8-inch width of quartz that contains abundant pyrite and just beyond the dam a lens of milky quartz 10 inches wide. Elsewhere the fissure is filled either by gouge, in one place 4 inches thick, or by a mixture of gouge, country rock, and small stringers of quartz. The first cross-working, 50 feet from the portal, has been driven on a short, sinuous quartz vein that strikes N 38° E and dips 55° NW. The vein is 4 inches wide and contains quartz with considerable pyrite and some sphalerite between frozen walls. The second cross-working from the portal has been driven on a strong fissure striking N 70° E and dipping 65° N, which branches from the main adit fissure at 72 feet. This branch fissure is filled with 1 to 2 inches of gouge to within 2 feet of the face, where 6 inches of quartz comes in but soon pinches to 1 inch. The adit is driven in andesitic greenstones cut by a basic dyke between 70 and 78 feet that is largely altered to a chocolate-coloured serpentine. Both the dyke and greenstone have been badly shattered so that the tracing of the contact is difficult, but it appears to strike S 5° E and dip 75° W. The dyke is older than both main and branch fissures at this place.

The upper adit is 200 feet northeast from the lower. It is 47 feet long, having been driven 32 feet at S 64° E and 15 feet at N 73° E. The adit follows a shear zone, strike S 60° E, dip 70° NW, for 34 feet and then turns and follows a narrowing branch fissure to the face, which strikes N 75° E and dips 75° N. On the north wall of the adit near the face a small fissure strikes S 55° E and dips 65° NE. These fissures vary from 1 to 2 inches in width and are usually filled with gouge, but for 6 feet from the portal and for at 40 feet there are lenses of quartz carrying only small amounts of pyrite. It is probable that the fissures in this upper adit represent hangingwall branches from the much larger break in the lower adit.

The rock types in the adit are serpentine and andesitic greenstone. The serpentine has resulted from the alteration of a basic dyke that strikes approximately S 40° E and is nearly vertical. At the portal the dyke is on both walls of the adit, but at 18 feet the NE wall of the dyke has disappeared in the SW wall of the adit. In the immediate vicinity of the fissure the serpentine has been bleached from its original purple colour to a very light grey. A second serpentine dyke that is only 6 inches wide cuts the andesite a few feet south of the portal. This dyke, strike S 50° E, dip 83° NE, is a continuation of one that outcrops lower down the creek that flows past the portals of both upper and lower adits. In some places these occurrences of serpentine possess very dense selvedges where in contact with the greenstone; this, in addition to their dyke-like habit, supports the view that the serpentine on the Leora represents dykes that have been serpentinized.

The old shaft is 40 feet northwest of the lower adit and at the

same elevation. The new shaft is 100 feet northwest from this adit and is 50 feet above it, and has evidently been sunk to intersect the hangingwall of the vein as exposed in the lower adit.

Tommy K. Group 92F033

Stevenson ~~O'Grady~~ 1935: It "includes the following mineral claims: Hidden Treasure, Tommy K., Kennedy, Young Pat, Waterfall, Big Boy, and Dorothy. They were staked in 1933 and 1934 and are owned by a private company, the Kennedy Lake Gold Mines, Limited, of which T.O. MacKay, 1214 Broad St., Victoria, is secretary. The workings and camp are about 4 miles up Kennedy River and a ¼ mile east. A good foot-trail leads from the Leora to the Tommy K. The group covers an area that is characterized by steep wooded slopes and low rock bluffs. An intermittent creek follows a canyonous course interrupted by waterfalls from the upper workings to the camp, from which it flows along a gentle gradient to the river.

Narrow, tight fractures in andesite breccia have been filled by quartz accompanied by small amounts of calcite, pyrite, chalcopyrite, and pyrrhotite. The breccia has been cut by altered quartz-diabase dykes and a few less altered aplite dykes.

The surface workings consist of open cuts and trenches on several different veins. At a place 1,400 feet up the creek from the camp and 480 feet above it in elevation, an open cut has been blasted in the S wall of the canyon on the so-called Hidden Treasure vein. This vein has been exposed for 15 feet in the floor of the cut and for approximately 100 feet up the bluff. The average width of the vein is 6 inches, but the habit is lens-like. The vein-filling is quartz, carbonate, and small amounts of disseminated pyrite. Mineralization has resulted in the lenticular filling of one major and several minor fractures by quartz, grey calcite, a little pyrite and chalcopyrite. The zone strikes S 30° E and dips 75° NE. The minerals occur in lenses that vary in width from 1 to 8 inches and in narrow veinlets that very from 1/16 to 1 inch in width. A sample taken across 8 inches of quartz showing a little pyrite and chalcopyrite assayed: Gold, 1.20 oz. per ton; silver 0.20 oz. per ton. The rock formation is an andesite breccia that consists of very angular light-green fragments up to 3 inches in diameter, set in a fine-grained dark green chloritic matrix.

A trench that is approximately 1,200 feet west from the Hidden Treasure vein and 150 feet east from the blacksmith shop shows a narrow vein that strikes N 60° E and dips 64° NW over 17 feet of exposed length. The vein is 2 to 3 inches wide and consists of ribbon-quartz, with a little pyrite, chalcopyrite, and pyrrhotite filling a parallel walled fracture in andesite breccia. On the footwall there is ½ to 1 inch of gouge, but the hangingwall is a clean slip surface. A bulk sample across 3 inches of vein matter in the northeast end of the trench assayed: Gold, 0.48 oz. per ton; silver, 1.4 oz. per ton. A rock cut has been started at a place 50 feet northwesterly down the slope from the last trench, the objective of which is to intersect the vein at greater depth.

There are surface showings on the property of several small, frozen quartz-calcite veinlets that vary from 1 to 2 inches in width and contain small amounts of pyrite, chalcopyrite, and pyrrhotite.

With the exception of two showings up the creek that strike east, these all strike northeast. Beneath the large falls in the creek a strong fissure, strike east, contains 2 inches of bluish gouge, but no mineralization is now evident. A composite sample was taken of three small veins from ½ to 2 inches wide that may be the continuation of the 2 to 3-inch vein described above. This sample contained quartz with small amounts of pyrite, chalcopyrite, and pyrrhotite, and assayed: Gold, 0.48 oz. per ton; silver, 1.4 oz. per ton."

Ann. Rept. 1939 records that Kennedy Lake Gold Mines, Ltd., operated a non-shipping mine for 365 days, employing 15 men. The work is not stated, but presumably it included driving the adit in which Merrett destroyed the old powder in 1961.

Bancroft 1937: nothing additional.

Stevenson 1944: says the Tommy K. has produced.

Ann. Rept. 1934: says Kenndey Lake Gold Mining Co. shipped.

A.R 1927-343

Jo Jo 92F047

Clothier 1927: "There are two mineral claims in this group - the Jo Jo and Jo Jo No. 1 - owned by W. Spittal, of Tofino, and W.S. Dixon. The claims are situated less than a mile above the old Rose Marie camp on the east side of the Kennedy River. The formation consists of belts of volcanics and sedimentaries. At 575 feet elevation several open cuts have disclosed a quartz vein striking N 40° E (mag.) and dipping slightly to the west with the slope of the hill. The quartz is well mineralized with pyrrhotite, pyrite, and some chalcopyrite and sphalerite, with here and there a trace of galena. The vein, which is about 2 feet wide, is well defined and has been traced on the surface for several hundred feet and altogether has a very favourable appearance. The chalcopyrite appears to be associated with the pyrrhotite and sphalerite and the galena with the pyrite; the whole when concentrated would probably be 8 into 1. A sample across the best-looking ore was however very disappointing, giving no gold or silver values and only small percentages of zinc and copper.

EMPR Bull 1 p. 133

Galloway 1932: "... owned by W.S. Dixon and the late Wm. Spittal. ... The general formation is a greyish dioritic rock with belts of limestone. Within the volcanic rock are quartz-filled fissures, mineralized with pyrite, some galena, zincblende, and chalcopyrite, as a rule carrying gold values.

Several open-cuts have exposed such a vein on this property about 2 feet wide, striking N 40° E (mag.) and dipping slightly to the west. It is well-defined, well-mineralized, and can be traced on the surface for several hundred feet. A sample, however, taken at the deepest open cut gave a small percentage of copper but low gold values.

Memoir 204 p 28

Bancroft 1937: "... The vein appears in volcanic and sedimentary rocks for some distance, giving rise to replacements of pyrrhotite and chalcopyrite. It strikes N 65° E and, entering a small granodiorite stock, maintains an average width of 2 feet and persists along the mountainside northeast for several hundred feet. The quartz contains blotches of pyrrhotite, pyrite, and lesser amounts of sphalerite, chalcopyrite, and traces of galena.

Faith and Doris

Stevenson 1935: "The Faith and Doris mineral claims extend inland from a part of the beach that is about 2 miles southeast from the Japanese village opposite Spring Cove, Ucluelet. They are owned by W.E. Saggers and A.E. Jacobs of Ucluelet and were staked in September, 1934. The mineral showings occur here and there over a 100-foot stretch of beach and consist of pyrite both in 1/16-inch quartz veinlets and also scattered in widely spaced curving joint planes. The rock is massive and highly altered, so that now, chemically at least, it is a dolomitized limestone. The rock contains numerous angular blocks of black chert that range from 4 to 10 feet across and a few areas of graphitic slate of similar shape and size. A sample of heavy pyrite taken at the intersection of two shears assayed: Gold, 0.11 oz. per ton; silver, trace.

Bancroft 1937: "... The mineral showings consist of abundant pyrite scattered through sedimentary strata where there has been slickensiding and slip walls developed along a north to northwesterly direction. This condition exists across a width of 62 feet in which the rocks are altered and consist of chert, dolomitized limestone, some graphitic slate, and some rusty quartz veinlets. The strike of the shearing planes is N 10° W and the dip 60° E. Assays of pyrite from these shears indicate: Gold, a trace to 0.22 oz.; silver, a trace. Sections of similar strata were seen elsewhere back in the mountains. Pyrite in every case is an important constituent of these beds."

Toquart Group 92F034

Bancroft 1937: "The Toquart group comprises four mineral claims (Toquart Nos. 1 to 4), staked in 1933 and owned by T. Tugwell and Hillier Bros. of Ucluelet. The group is situated on the northeast side of Lucky Creek, about 2¼ miles up the creek from Toquart Harbour on Barkley Sound. Under the name of Red Rover this property received some attention in 1905 and 1906. The workings are between altitudes of 250 and 400 feet.

The country rock is andesitic greenstone cut by dykes of quartz porphyry and dense feldspar porphyry. Recent open-cutting has laid bare a quartz vein that strikes north over a total slope distance of 375 feet, the sections of the vein exposed aggregating over 100 feet. Near the south end of the vein a 30-foot adit has been driven. The vein pinches and swells and is slickensided, so that quartz sections of various widths and lengths occur along its course. Assays indicate mining widths up to 2 feet holding values up to 1 ounce in gold. Mr. Hillier had in his possession some excellent specimens showing free gold in the quartz. The quartz has a somewhat brownish tinge and contains small amounts of pyrite and chalcopyrite. A sample of the quartz from the vein ... assayed: Gold, 0.27 oz.; silver, 0.07 oz., per ton. A sample of the wall-rock associated with the quartz assayed: Gold, 0.06 oz.; silver, 0.02 oz., per ton. These assays made by the Mines Branch do not represent average samples.

Stevenson 1935: "... The quartz vein attains a maximum width of 6 inches, but as it is of the replacement type the main vein is quite variable in width and often bordered by a zone of country rock 2 feet or less in width that is interlaced by numerous sinuous quartz veinlets.

Mineralization has been slight and has resulted in the deposition

of small amounts of pyrite and free gold in the quartz and country rock. Near the south end of the stripping a short adit has been driven for 30 feet at 20 degrees on a part of the vein, which however pinches toward the face. In the vicinity of the quartz vein the main country rock is andesitic greenstone, but this has been cut by two dykes of unknown width, one a light grey quartz porphyry and the other a dark green, dense feldspar porphyry."

Gold Commissioner 1905:"The Red Rover mineral claim is situated on Lucky Creek, ... about 2 miles inland from salt water; owners, Thos. H. Graham and Wm. Pooley. A good trail has been cut out to the claim. The vein can be traced 700 feet, and a considerable amount of stripping has been done. A shaft is down 10 feet, the actual vein being 3 feet wide at the bottom of the shaft. The quartz carries gold, about 40 assays having been made, many averaging $14 per ton in gold.

Carmichael 1906: "The Red Rover claim, owned by Messrs. Jay, Graham, and Poole, is situated about 2½ miles north of Toquat Harbour, with which it is connected by trail, and at an elevation of 375 feet above tidewater. A small creek flowing through the property has exposed a quartz vein from 2½ to 3 feet wide, striking N 30° W and dipping 65° E. Some 20 feet below this exposure an open cut some 30 feet long was run, from which some quartz was taken out, carrying $5 in gold per ton. From the exposure in the open cut it was seen that the vein was flatter than in the outcrop, consequently a tunnel was started at the end of the cut and under the vein as exposed. This tunnel gradually turns to the right, so as to crosscut the course of the vein, but in it the vein does not appear to be clearly defined. The vein is in a diabase country rock, with fairly tight walls, although in the open cut the hangingwall is well defined. The vein matter is somewhat brecciated in structure, containing enclosed fragments of the country rock. The owners claim to have obtained very good gold values from the vein and that the wall rock also carries values, but such values were not apparent in the samples taken by the writer for assay.

Iron Mountain, Chieftain, and Kaiser 92F130,035

Lindeman 1908: "About 1½ or 2 miles from the lake shore, on the left side from the mouth of the river, some mineral claims have been staked. In a deep and steep ravine several outcrops of magnetite were noted on the contact of crystalline limestone and granite. No development work however had been done to show the extent of the magnetite, and as the slopes in many places were too steep to climb no reliable measure of the outcrops could be obtained. Numerous boulders of magnetite were noticed farther down the valley, some of them reaching a considerable size. To judge from the development done, chiefly consisting of two tunnels driven on a quartz vein, the claim seems to have been staked more on account of its showing of free-milling quartz than for its iron ore. A sample of the magnetite gave the following analysis:-

Insoluble matter	7.64%	Phosphorus	0.016%
Iron	63.07	Sulphur	0.043

Recorder 1909: "On the Iron Mountain and Chieftain, owned by J. Dunsmuir and R.A. Dawley, work consisting of 50 feet of rock work was done to cover assessment work for 4 years."

Recorder 1914: "Owned by Rose Angeles Dawley. The surveys of these claims were duly recorded .... with a view to securing Crown grants."

(Crown Grants of Iron Mountain and Chieftain issued to Rose Angeles Dawley May 16, 1916. Crown Grant of Keiser issued to James Dunsmuir Jan. 31, 1910.)

Brewer 1916: "These mineral claims are owned by Mrs. W.T. Dawley of Clayoquot and were originally staked because of the discovery of a vein of gold-bearing quartz. Magnetite deposits of the contact-metamorphic type ..... This section is very mountainous, cut by deep precipitous gorges which are the beds of creeks. One of these creeks heads at an elevation of 2,700 feet and flows through deep canyons. The lowest occurrence of magnetite seen by the writer is an outcropping in the steep bank of the creek, at an elevation of about 1,800 feet, on the Chieftain claim. The exposure of magnetite is about 20 feet long, but whether this is along the strike or across the body cannot be determined until some work is done. An average sample of the outcrop assayed:-

Iron	30.10%	Sulphur	0.31%
Silica	51.5	Phosphorus	trace

This outcropping occurs under a limestone bluff, and overlies an igneous rock. Some development work is said to have been done farther up the creek on the opposite side, but the guide with the writer was unable to locate it because of the great growth of bushes and lack of a trail.

Outcroppings of magnetite occur at several points on the sides of steep ravines farther up the same creek, but no work has been done, and as the slopes are almost perpendicular, too steep to climb, no examination could be made.

The mineral claims were staked originally because of the occurrence of gold-bearing quartz at an elevation of 2,400 feet, which has been prospected by an adit.

The Iron Mountain claim adjoins the Chieftain on the (south) and occupies a part of the summit of the mountain about 1,000 feet higher elevation, where outcroppings of magnetite occur that need development work before any estimate can be made as to extent."

92F036 036

Wanderer and L. Grant

Brewer 1918: These "two mineral claims .... (are) located at the summit of a deep gulch about $\frac{1}{4}$ mile from the shore of Kennedy Lake, about 2 miles from the mouth of Elk River, and about 300 feet above lake level. (They are) owned by Lachlan Grant of Tofino."

The rocks are "igneous", "much sheared, fissured, and altered. In places the shearing action has been so severe as to give the rocks a schistose structure. The fissuring has resulted in the development of narrow quartz veins, which at and near the surface show quite good prospects in free gold by panning."

"The ore deposits ... belong to the shear zone type. The quartz veins which carry values in gold are narrow, but appear to be persistent, (striking) S 40° W (mag.) and dipping 72° NW (mag.). Some of the

oxidized outcroppings furnish fine specimens of quartz, with particles of free gold in the quartz gangue. If further development determines that the veins increase in width and carry fair values throughout, this property would be a good milling proposition."

"The development work done up to September 7, 1918, represented one assessment-work and consisted of two open cuts and short adits. The upper open cut is 12 feet long as an approach to an adit 6 feet long. A sample from 6 inches of quartz assayed: Gold, 0.32 oz.; silver. 0.4 oz. The lower open-cut is about 25 feet below the upper; it is about 15 feet long as an approach to an adit 4 feet long. (A sample from the adit floor) assayed: Gold, 0.64 oz.; silver, 0.8 oz. (Another) sample, taken from near the face, assayed: Gold, trace; silver, trace. A selected specimen assayed: Gold, 1.86 oz.; silver, 0.8 oz.; copper, 15%."

"The location line of the claim was followed northeasterly to the No. 2 post, where it appeared that the vein was persistent to that point, but this had not been determined by any work. This group of claims was only staked a short time prior to the examination."

Dolmage 1920: "This vein, examined by the writer this season, seems to be a similar occurrence to that of the Rose Marie.

It is situated in a small gulch, about ¼ mile from shore, about 300 feet above lake level ... Development work to date consisted of a few open cuts, some stripping, and 2 small adits. The vein is thus traced for several hundred feet, and the steep hillside through which it passes shows that it has a vertical extent of at least 200 feet and probably much more. Its width however averages only about 5 inches.

It consists of fairly pure, coarsely-crystalline quartz through which is sparingly scattered small grains of pyrite, galena, tetrahedrite, and in some places free visible gold."

Brewer 1919: "The work done during 1919 exposed a quantity of high-grade, free-milling, gold-bearing ore, also indications that the vein maintains its continuity with considerable persistence."

Brewer 1921: "The new development work consists of two short drift-adits in addition to open cuts and stripping, by which the quartz vein is exposed for several hundred feet along its strike. The upper of the two adits is 10 feet long under cover, with an open-cut approach in solid rock 14 feet long; the lower adit is also 10 feet long under cover, (with a shorter open-cut approach).

Two samples taken from the vein in September assayed: Gold, 0.10 oz.; silver 0.4 oz. Gold, 0.20 oz.; silver, 0.06 oz."

Brewer 1923: "Unfortunately, the recent work, a continuation of the lower adit, ... only showed a width of 2 inches in the present face."

92F045

Ironsides

Recorder 1903; "The Ironsides, the property of G.I. Dunn, is a comparatively new find and from work done the showing is most satisfactor

Crown Grant issued to Thos. I. Dunn Sept. 1, 1908.

Bear Group 92F044

Recorder 1902: "The Grizzly Bear and Cinnamon Bear were located last July by Messrs. Spittall and Sundvall, of Clayoquot, who transferred an interest to Capt. John Irving of Victoria. These claims have a continuous lead of gold-bearing quartz and the values are being well maintained as development proceeds. About 8 men are now working.

Forbes 1913: 500 feet above Kennedy Lake. "The group, which consists of three claims, Black Bear, Cinnamon Bear, and Grizzly Bear, is owned by W. Wilson, John Irving, and Spidal.

The principal development work has been done on the Cinnamon Bear, a tunnel being driven 246 feet on a strong quartz ledge 3 to 4 feet wide; strike S 60° W (mag.), dip 45 to 50° NW. The gangue is quartz, feldspar, and calcite, and the mineralization pyrite and arsenopyrite. The best ore is said to be 1 foot wide on the footwall. The diorite footwall and porphyry hangingwall can be traced on the surface for 400 feet. The hangingwall is soft decomposed vein-matter, in which the tunnel has been driven. The tunnel is in an unsafe condition, the soft material in the hangingwall having "winded" and several falls taken place. An average sample of the ore assayed 0.10 oz. gold.

As. R. 5112 - pros. 1974

O.K. Group 92F030

Brewer 1918: Consists of the O.K. Nos. 1-4; at about 4,000 feet elev. "There is practically no trail to the group, except up the bed of Sandy Creek, which is full of large boulders. ... the distance to the mine workings on the O.K. No. 3 claim is about four miles. ... The group is owned by T.G. Norgar of Victoria, who staked the claims about 1900, built a cabin on the summit, and worked on the property almost continuously until he obtained a Crown Grant ( ), since which time but little development work has been done. ... The claims are staked in a northerly direction from Norgar Creek, a branch of Sandy Creek, ...

The rocks on the O.K. Group belong to the Vancouver Series and consist of white and blue limestones and dioritic rocks, with the limestone occurring in extensive masses on the southerly part of the property and dioritic rocks on the northerly part. The bedding planes of the limestone strike east (mag.) and dip 40° N. The dioritic rock is sheared, fractured, and altered, especially so near the limestone contact.

The occurrences of copper ore belong to the contact metamorphic type, although they do not occur at the immediate contact of the igneous and sedimentary rocks, but are found enclosed by walls of the dioritic rock. The mineralization is chiefly chalcopyrite, with which is associated pyrite and some pyrrhotite and magnetite.

The outcroppings are characterized by the chalcopyrite occurring in masses of rather unusual purity and considerable size. These outcroppings are quite persistent for about 200 feet along the surface, where the mineral is about 3 feet wide, as shown by trenching. The strike is S 20° E (mag.) and dip 50° E. Samples from the outcrops can be taken which carry quite high-grade ore in copper values, but a sample from the underground workings assayed only: Gold, trace; silver, 0.8 oz.; copper, 4.7%.

The surface outcrops are on the O.K. No. 3 claim and gave promise that the property would develop into a mine that would produce a grade of copper ore sufficient to warrant shipping direct to a smelter, but in the underground workings, which are almost directly under the trench along the outcrops, it does not appear as though the ore deposit had maintained continuity or value to any appreciable depth. The ore occurs on the northerly side of the summit between the main Kennedy Lake and the Clayoquot Arm, where the mountainside is very precipitous, and float as well as some outcrops are found at other points on the mountainside, but no work has been done to determine their extent."

Development is confined to the No. 3 claim, "and consists of an adit about 105 feet long, in addition to about 200 feet of rather deep trenching. The adit was started as a crosscut and driven 60 feet. At a point 21 feet from the portal some ore is exposed and the course of the adit changed to the right or at right angles for 15 feet, where the course is again changed to the left at right angles for 30 feet. Some ore is crosscut in the last change in the course of the adit, and it appears as though this occurrence of ore is possibly an extension of the ore exposed near the portal in the main adit."

Clothier 1928:"The Group, which had reverted to the Government for unpaid taxes, was redeemed this year."

Grant Group 92F048

Recorder 1901: "W.N. Kenyon owns a group of four claims through which run three separate veins. These have been stripped and are shown to be continuous. The ore is free-milling, and an arrastra, to be run by water-power, is under construction and will be put in operation in the spring."

Brewer 1923: "This group contains the James Grant and Lachland Grant mineral claims, owned by Lachland Grant of Tofino and Anthony Watson of Port Alberni. The group is on Kennedy River, about 3 miles above where it flows into Kennedy Lake." It is reached "by launch to the mouth of upper Kennedy River, and from there by trail about 5 miles long to the southerly bank of an unnamed creek, a tributary of the Kennedy. From the last point to the outcrop of the main vein there is a stiff climb of about 500 feet up the mountainside near the creek, as the creek bed cannot be travelled owing to its being in a deep canyon.

The rock formations belong to the Vancouver group of volcanics, in a shear zone in which occurs a system of very persistent quartz veins. The most persistent of these is exposed in the bed of the creek, and strikes nearly east, while another strikes N 20° E and should form a junction with the vein in the creek bed, but the banks are so precipitous, forming a canyon about 200 feet deep, that it has not been possible to determine the point of junction or to prospect in the creek bed where the junction should occur.

There is apparently quite a wide shear zone in the country rock, the shearing movement having been so violent that near the quartz veins the structure of the country rock approaches a schist. The walls of the veins, which dip almost vertical, are slickensided, and usually there is gouge material between the vein-filler and the walls.

Gold-bearing quartz float was found on this mountainside and in the bed of the unnamed creek about 20 years ago by Lachland Grant and W.N. Kenyon on a claim staked by Kenyon, which is now called the James Grant and is owned by Anthony Watson. Kenyon constructed an arrastra, the ruins of which can be seen today," about 300 feet above and 1,500 feet east of the main Kennedy River trail, "and started work on a quartz vein 4 feet wide, with strike N 20° E (mag.) and dip vertical. After operating the arrastra for some months on the James Grant it was found that the proportion of the ore which was free-milling was too small to give satisfactory returns from treatment in the arrastra.

The workings from which the ore was taken ... were a deep open cut and shallow shaft on the vein known as the cross-lead. A sample taken from an open cut where this vein is 4 feet wide, and from the face of the cut about 8 feet deep, assayed: Gold, 1.30 oz.; silver, 0.70 oz.; copper, 1.6%.

There is a considerable flow of water in the creek, the bed of which is a series of precipitous falls and sampling the vein is quite a difficult proposition, so much so that I was only able to obtain two samples, one of which, across 18 inches, assayed: Gold, 0.34 oz.; silver, 1.2 oz.; copper, trace. The second sample, taken from the same fissure 2 feet wide and about 150 feet farther up the creek and nearly 100 feet higher elevation, assayed: Gold, 0.30 oz.; silver, 0.2 oz.; copper, trace."

Edith Group

Recorder 1902: 3 claims, owned by Lachlan Grant of Clayoquot.

1903: "... the property of T. Stockham and L. Grant, both of Clayoquot. Development work was performed on this group last spring and summer, with very promising results, over 100 feet of tunneling, besides other development work, having been done."

Island Belle

Recorder 1903: owned by J. Irving and W. Wilson of Victoria.

1909: payment in lieu on Island Belle Nos. 1 and 2 by W.J. Wilson of Victoria.

1910: owned by Wilson, Irving, and Lindsay; payment in lieu.

1912: payment in lieu.

Ruth 92F049

Forbes 1913: "The Ruth mineral claim is situated about 1,800 feet southeast from the Bear Group at an elevation above Kennedy Lake of 600 feet, and shows a quartz vein 18 to 24 inches wide, exposed for about 100 feet on the surface; a small diabase dyke accompanies the ledge on the footwall; the hangingwall is porphyry. Limestone occurs 6 to 10 feet east of the ledge. No development work has been done. Strike N 30° E; dip 75° E. (mag.) The gangue is quartz and the mineralization pyrite and chalcopyrite. An average sample assayed: Gold, trace; silver, 2.8 oz.; copper, 1.9%.

92F046 046

Olympic and Titanic

Forbes 1913: These claims "are situated half a mile west from Elk River and 4 miles from Kennedy Lake, at an elevation of from 350 to 400 feet. A quartz ledge shows up in these claims, having a strike N 73° E and dipping NW. No development work has been done; the outcrop shows a little pyrite and chalcopyrite. The claims are intersected by a creek running in a deep canyon and, owing to high water, it was not possible to visit the other outcroppings of this ledge. From an exposure farther up the creek a sample over a width of 20 feet is said to have yielded $20 in gold. A sample taken on the Olympic claim assayed 0.03 oz. a ton in gold."

92F050

Bessie B (Also Jessie B - Dawley)

Forbes 1913: "The Bessie B mineral claim is situated a ¼ mile west of Elk River and 2½ from Kennedy Lake, and at an elevation of 175 feet above the lake. No defined ledge has been found on this property, but some work has been done on a diabase dyke, in porphyry, bearing S 45° W (mag.), which contains some small quartz stringers from which good assay values in gold have been obtained.

The principal exposure is in a bluff some 50 feet high, in which the quartz stringers can be seen in the dyke, dipping 75-80° NW. It appeared to the writer that these occurrences were due to cooling cracks in the dyke, which had since been filled with quartz.

An open cut had been put in some 50 feet in length on one of these stringers, a tunnel driven 15 feet, and at the time of my visit, June, 1913, a winze had been sunk 16 feet, and was still being continued in the hope that the stringers exposed above would come together and form a body of quartz of workable size.

Blue Bird Group 92F051

Brewer 1923: "This group contains the Blue Bird and Blue Jay, the former being owned by Miss Winifred Dixon and the latter by William Spittal, both of Tofino. The group is located about 5 miles up the Kennedy River from the mouth and on the west side.

The ore deposits on the Blue Bird group occur as lenticular veins in a wide shear zone which in places is upwards of 40 feet wide. The main vein in the shear zone where exposed on the Blue Bird can be traced on to the adjoining Blue Jay, occurring between schistose walls dipping vertically, conformable with the shearing planes in the zone.

The vein is principally quartz and the mineralization consists of chalcopyrite and pyrite, with some arsenopyrite. A sample taken from an open cut in a steep bank of an unnamed creek assayed: Gold, 0.06 oz.; silver, 1 oz. to the ton; copper, 0.7%. Another sample, taken from apparently the same schistose shear zone and possibly from the same quartz vein ... but from a point 1,200 feet farther up the creek, assayed: Gold, 0.30 oz.; silver, 0.1 oz.; copper, trace.

William Spittal, who has done all the work on the claims, has also built a cabin on a bench near the river.

92F 052 052 052

Gold Queen, Gold King, Golden Glow

Clothier 1927: "These claims, owned by W. Spittal of Tofino, are situated about 6½ miles up the Kennedy River on its west side. There is a cabin on the claims a short distance from the river, but it has been badly damaged by a falling tree. It is at the 140-foot contour, ... The general rock formation is fine-grained, schistose greenstone, indicating a broad shear zone in the volcanic rocks. Conforming with the strike of the schists is a quartz vein varying in width up to 10 feet in places, but averaging probably between 2 and 3 feet. This vein is mineralized in spots. It has been traced for over 1,000 feet from the first cropping on the top of a knoll on the left side of a trail at 450 feet elevation. The vein crops going north along the bed and sides of a creek which crosses it just beyond the first cropping. The surface exposures show little mineralization except in one place on the east side of the creek, but here the vein pinched down to seams of iron sulphides, from which the owner claims to have had assays of $50 to the ton in gold. Farther up the creek on the north side the vein stands up perpendicularly and is apparently about 10 feet wide .... The vein here strikes east-west."

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