GEOLOGICAL SURVEY BRANCH ASSESSMENT REPORTS

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ASSESSMENT REPORT ON THE

ROSEMONT-DICK GROUP

Mineral Claims

BEAVERDELL AREA

GREENWOOD MINING DIVISION

Lat 49° 32'N Long 119°:00'W

N.T.S. 82-E-10+11

OWNER/OPERATOR
R.H. Lonsdale
Suite 7 - 3575 West 4th Avenue
Vancouver, B.C. V6R 1N9

Ву

R. H. Lonsdale

June 15, 1995

GEOLOGICAL BRANCH ASSESSMENT REPORT

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INTRODUCTION AND SUMMARY

The Rosemont Crown Grant and surrounding Dick Group located mineral claims are held by R. Lonsdale of Cariboo Highland Metals Inc.

A gold bearing zone occurring in a roof pendant of meta-sedimentary metavolcanic (?) rock within a granitic intrusive has been traced for at least 250 metres (820 feet) northwesterly under shallow but extensive overburden cover on the Rosemont claim. Except for the portal area of a lower adit, sloughing and oxidation have prevented definitive surface examination of bedrock. Several shipments of higher grade (0.5 oz/Au/ton ±) were made from the property, the latest reported totalling 63 tons averaging about 0.5 oz/t gold during the period 1937-1939. The main production reportedly was from a structurally controlled quartz-pyrrhotite vein averaging several feet in width remnants(?) of which ares well exposed in an adit near the southeast corner of the Rosemont Claim. A similar (or the same) vein was mined earlier in the shaft/decline area 250 metres uphill to the north.

Numerous shallow trenches appear to have traced the vein, or paralleling zones(?), towards the latter water- filled shaft-decline complex near the centre of the claim from which 60 tons of auriferous quartz-pyrrhotite was also reportedly mined.

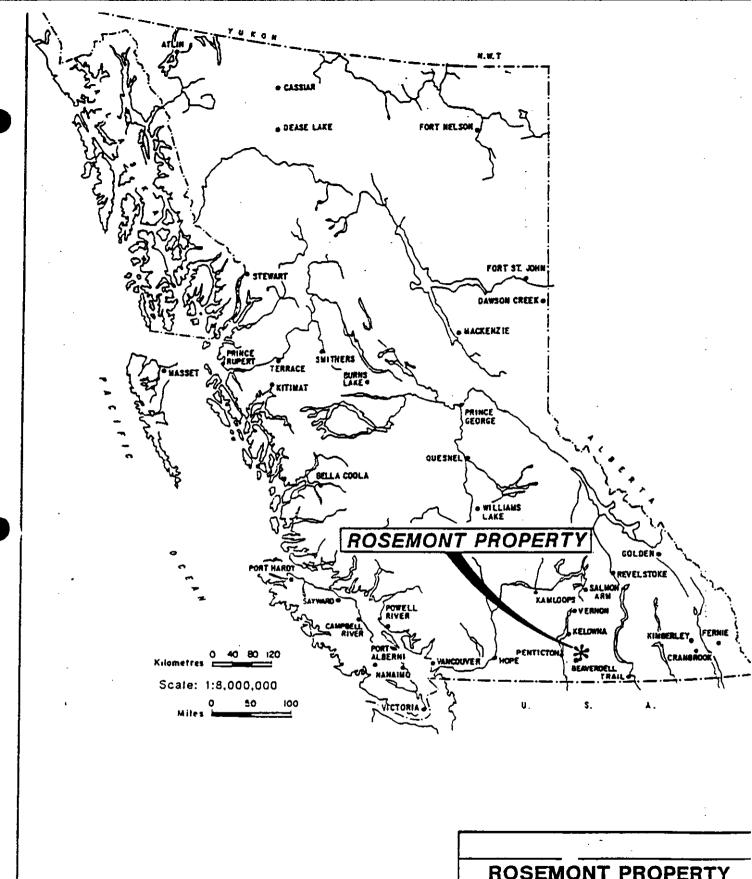
Geological and exploration data is lacking and considerable reliance is placed on reports appearing in the Minister of Mines annual publications. There is no record of the property having been drill-tested although geotechnical surveys have been

performed on surrounding claims to the north-northeast. Nothing is known about zone continuation onto the Dick Claims, particularly to the immediate southeast, although scattered but sloughed pits suggest some favorable rock was encountered.

It is recommended that geophysical surveys, such as magnetometer, VLF-Electromagnetic, and even Self Potential - all of which should react readily to moderately magnetic auriferous pyrrhotite mineralization known to accompany (sporadically) the quartz vein(s) - be employed, followed by shallow drilling to define zone parameters more accurately.

The field work on the Rosemont Property was conducted from June 20, 1994 to July 10, 1994 for a total of 3 days. The work was done by J.J.McDougall, Geologist, and Prospectors Steve Resika, Joe Sperling and R. Lonsdale, and consisted of surface and underground mapping and geochemical rock sampling.

The field work and results described within this report are intended to fulfill the assessment requirements for the Dick 1 to Dick 12 claims.



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ROSEMONT PROPERTY

BEAVERDELL AREA GREENWOOD MINING DIVISION, B. C.

PROPERTY LOCATION MAP

SCALE: As Shown N.T.S. 82-E-10 & 11 DATE: JUNE, 1994 FIGURE NO. 1

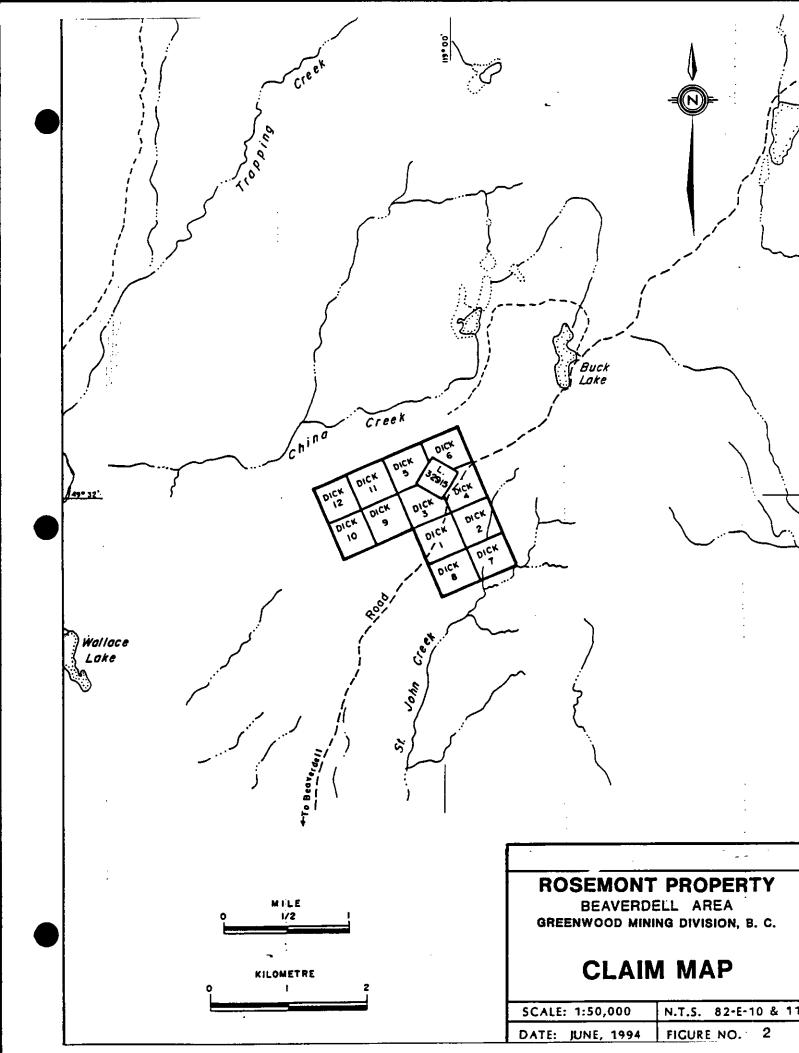
II. LOCATION AND ACCESS (Figs 1,2)

The Rosemont-Dick property is located about 16 gravel road kilometres northwest of the small settlement of Beaverdell, one of Canada's longest operated silver mines, recently closed, located on Highway 33 about 80 kilometres southeast of Kelowna, British Columbia. The property slopes easterly into the northernmost tributary of St. John Creek (a north tributary of Beaverdell Creek) less than one kilometre from its headwaters. It is located immediately east of a logging road about 2-3 kms southwest of Buck Lake campgrounds. (Rosemont Latitude 490 32'N, Longitude 1190 00'W). Elevations range from 1200 to 1400 metres. Access is via the Beaverdell-Buck Lake Road located west of St. John Creek. Some confusion in road location exists as most published maps fail to show a new and exclusively used logging road west of one long since abandoned. As with many early mining claims, even surveyed Crown Grants, the Rosemont is misplotted - in this case relative to Buck Lake, the most prominent local landmark.

The claim area is located within the moderate climate of the southern interior of British Columbia and is being actively logged. Scattered yellow pine along with fir occur on the slopes of St. John Creek. Snow accumulations of up to one metre prevent road access generally between late December and late March. Year round water is available in numerous small creeks.

Several other prospects are known within 5km of the Rosemont including "Knob Hill" and "Florence" to the west and "Ellsworth"

and "John" to the east. Maps show a mine symbol about 2km north of the Rosemont, but this may be a misplot due to the poor quality of earlier topographic maps.



III. PROPERTY (Fig 2)

The Rosemont Mineral Claim (Lot 3291, 47.06 acres) is a relocation of an older "Rosalie Claim" and was surveyed for Crown Grant in 1937. It was purchased by R.H. Lonsdale, B101-325 Howe Street, Vancouver, B.C. V6C 127, on behalf of his private company Cariboo Highland Metals Inc. in 1993 as are the 12 located "Dick" claims recently staked.

Details are shown in Table 1 following:

TABLE 1 (CLAIM DATA)

| Claim | Name | Tag# | Tenure# | Type | Date Located Anniversary date | Owner. |
|---------------------------------------|-----------|----------|-------------|------------|-------------------------------|------------------------|
| Dick 4 | <u></u> 1 | 665651M | .325107 , | 2 post | May 2, 1994 | Richard H. Lonsdale |
| Dick 4 | 2 | 665652M | 325108 | 77 | ** | ** |
| Dick | • | 665653M | | ** | May 1, 1994 | ** |
| Dick i | _ | 665654M | | ** | *** | ** |
| Dick I | • | 665655M | | ** | May 2, 1994 | ** |
| _ | | 665656M | | ** | May 2, 1334 | # |
| | | 624586M | | | June 10, 1994 | ** |
| | | 624587M | | 11 | 0 die 10, 1994 | 11 |
| | | | | 11 | 7 11 1004 | ** |
| · · · · · · · · · · · · · · · · · · · | _ | 624588M | _ | ** | June 11, 1994 | •• |
| Dick # | | 624589M | | 17 | ** | •• |
| Dick # | | 624590M | | | | |
| Dick # | 12 | 624591M | 326388* | ** | •• | ** |
| k Gove | rnme | nt compu | ter rejecto | ed "326387 | ** | |
| Rosemo | | 36358 | | | | ** |

IV. HISTORY AND DEVELOPMENT

The ground now occupied by the Rosemont mineral claim was originally staked as the "Rosalie", probably in the late 1890s. The Report of the Minister of Mines 1901 mentions several essentially undeveloped showings on the property, samples from which assayed "\$10 to \$40 in gold (i.e.±0.5 oz to 2.0 oz?). It was concluded that "there is unquestionably extensive mineralization at several places on this property, and very good values have been obtained, but at present the development is too superficial (as to concentration and quantity) to be classed as ore".

Some unrecorded development occurred between 1901 and 1937 as at the latter date the Minister of Mines Report referred to "a 60 foot shaft" and a number of cuts and trenches. "Some 60 tons of mineralized material, largely pyrrhotite, was on the dump (near the shaft) awaiting shipment". The same report states that "41 tons of ore had been shipped to the smelter yielding 26 oz gold and 28 ounces silver".

During the 1937-1944 period, Highland Bell, Limited optioned the property and either collared or mined an existing(?) drift near the south east corner of the claim. "A road was constructed upwards from St. John Creek and development work (30 feet of drifting and 100 feet of crosscutting) yielded 22 tons of ore containing 10 oz of gold and 4 oz of silver."

In 1941 Highland Bell recorded further development work including 50 feet of drifting, but shipments, if any (during wartime) were not recorded. Underground work to 1944 totals approximately 300 feet of sinuous drifting and crosscutting. (Fig.5)

Although the surrounding area was staked on several occasions, there appears to have been no serious work, except for a few geotechnical surveys (soil sampling, magnetic, EM etc.), carried out in the "mine area" to present.

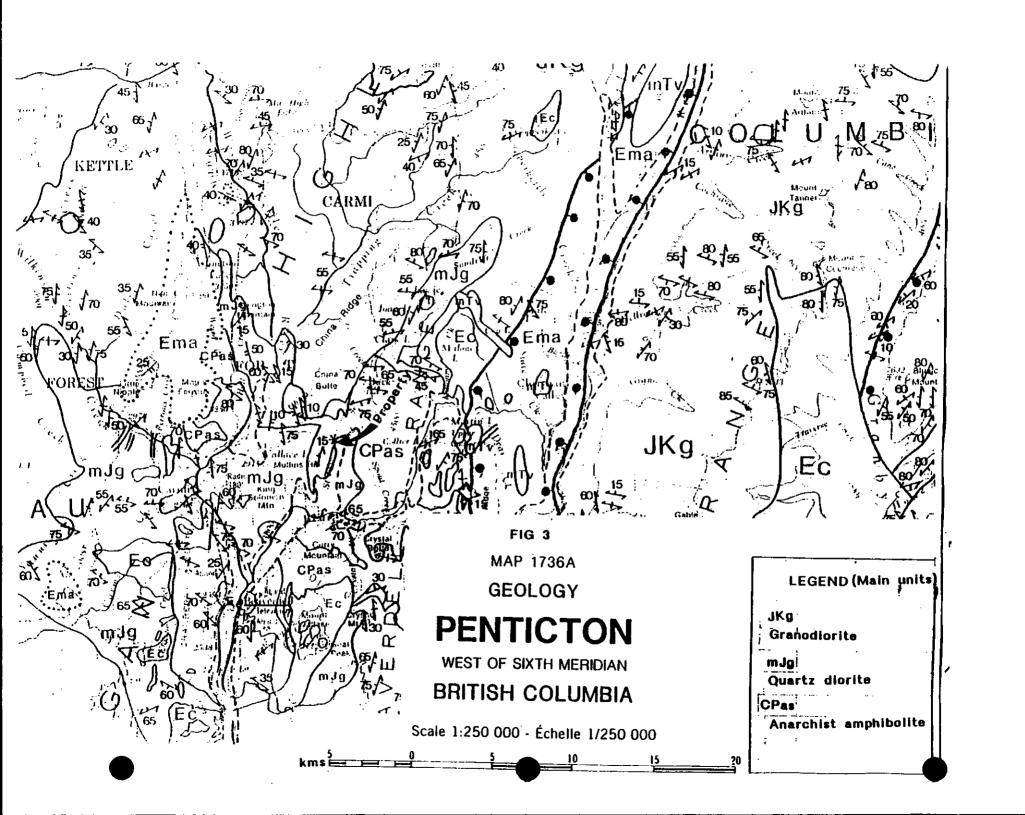
R. Lonsdale purchased the Rosemont Crown Grant in 1993 and located the additional 12 "Dick" claims in 1994, but no work has been done to-date other than limited sampling in the adit and shaft area.

V. REGIONAL GEOLOGY

The geological map of the Beaverdell area ("Penticton-West Kettle") has been further compiled and updated by Dirk Tempelman-Kluit of the Geological Survey of Canada (Fig.3). The local area was described in GSC Memoir #79 (Reinecke 1915).

The Rosemont property (as well as the Highland Bell Silver Mine) is centrally located within a roughly circular roof pendant enclosed within the Okanagan batholith (JKg) rocks which consist of quartz diorites and granodiorites of Cretaceous and/or Jurassic Age. Enclosed but generally fragmented units include the Carboniferous (or older) Anarchist Group (CPas) consisting predominantly of amphibolite, greenstone, schist and serpentinites, plus Mid Jurassic "Nelson" plutonic rocks (MJg) grading from granite to granodiorite. Also included are Eocene "Marron Group" (EMg) andesites, dacites and trachytes which have "capped" the pendant in local areas and occupy some valleys, and the Coryell Syenite (Ec), possibly a plutonic equivalent of the Marron Group.

Numerous north-south faults are common in the map sheet but few of consequence are shown near the pendant. However lineaments, such as several north-south valleys, are probably faults. Bedding, where rarely observed in the Anarchist system, strikes northerly and dips westerly at a low angle. Foliation attitudes are extremely variable but in the vicinity of the Rosemont property the strike is northerly and the dip shallow westerly, but a few kilometres to the north the common strike is east-west and the dip is steeply south.



VI. LOCAL GEOLOGY (Fig 4)

Rock exposures are limited on the property and detailed geological mapping has not been done or is not available.

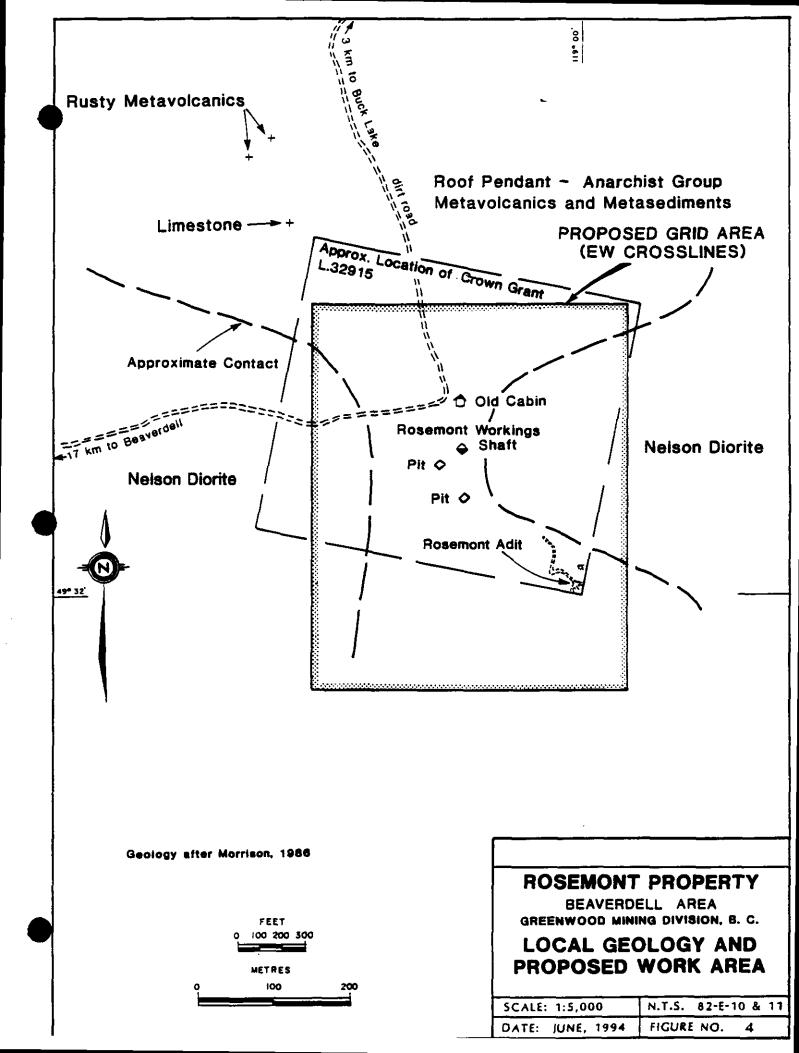
Local observations, mostly those of Morrison (1986) - geophysically determined in part - suggest that a north-south trending open-ended pendant of limey metasediments and metavolcanics (locally part of the Wallace Formation) is present enclosed by granitic rocks of the Nelson quartz-diorite. Rare limestone and "rusty metavolcanics" are exposed toward the northern end of the claim area. Mineralization known to date appears to occur in the limey metasediments or metavolcanics within 50 metres of the undulating eastern granitic contact which encroaches, as a nose, westerly in this area, locally constricting the metasediments to a width of about 175 metres.

Some sediments (and volcanics?) involved are highly altered to the point of granitization. They are silicified in part and epidote is common.

Mineralization consists largely of pyrrhotite, pyrite and chalcopyrite accompanied by more or less quartz. The sulphides occur largely as massive discontinuous pyrrhotite veins or lenses up to several feet in width, although numerous quartz stringers containing iron sulphides are also present as exposed in the adit. The sulphide-rich material (when present) occurs largely on the steep footwall (85°N dipping) of the quartz vein(s). The extent or continuity of any zone exposed in the adit, cuts or shafts on the property is not known, but the short

adit exposures show strong east northeast trending smooth, near vertical, vein walls (faults). Pyrrhotite exposed to surface appears to have weathered completely, unless protected by quartz, and is now part of the soil. Exposures must be freshly uncovered to allow meaningful mapping or evaluation.

Geophysical and geochemical surveys on strike in overburden terrain northerly beyond the claim boundaries defined several broad EM, magnetic and soil anomalies (Morrison), but the work reported did not cover the Rosemont property which was privately held.

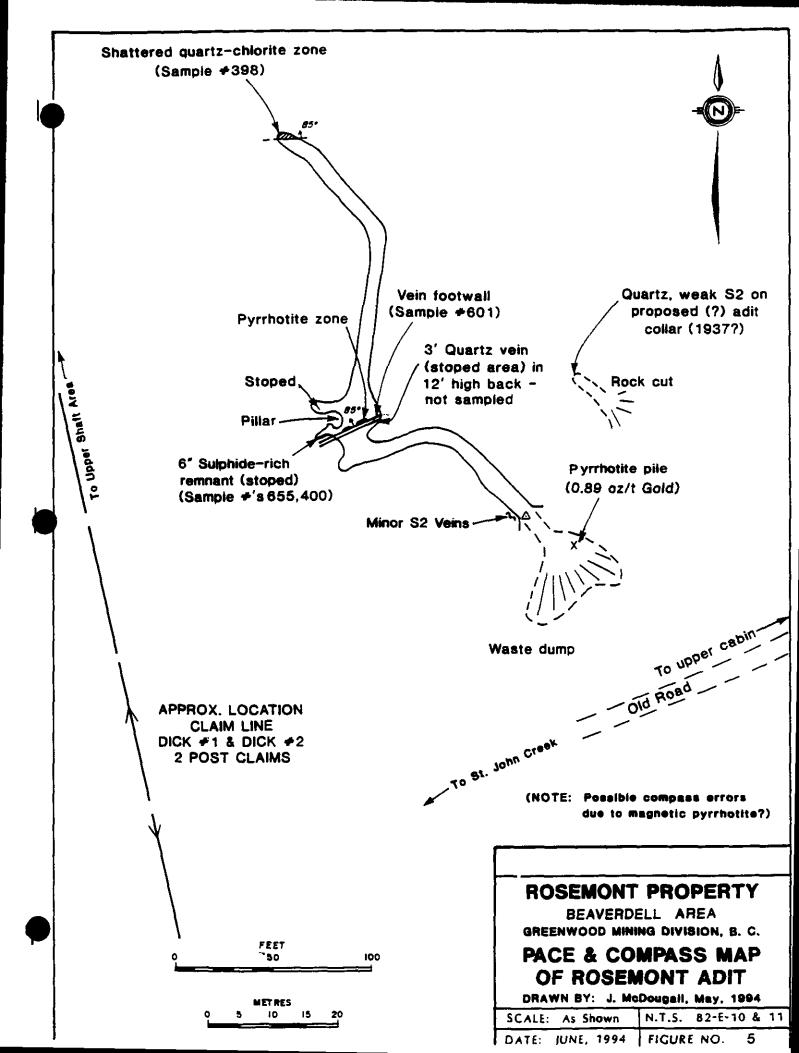


VII. DESCRIPTION OF MINERAL OCCURRENCES

(a) ROSEMONT CLAIM

At least 50 old shallow pits and trenches occur along several hundred metres of possible "zone" within the Rosemont property but sloughing and surface weathering involving oxidation has been widespread.

Relatively fresh exposures occur in the lower main but sturdy (open) adit, (which was examined and sampled by J.J. McDougall and Steve Resika) and in a paralleling rock trench, as well as in the waterfilled main shaft and connecting decline (some 200 metres to the northwest of the lower workings) which was not examined. Besides being flooded, the main shaft occurs in a tangle of bush and caved cabins, the latter constructed very close to the shaft. Without cleanup using a bulldozer and drainage of the water, little can be learned by examination thus the following Minister of Mines descriptions made about 57 years ago must suffice, although even at that time most surface material was not readily identifiable:



BEAVERDELL AREA.

This group of three claims is owned by W. R. Fowler and associates, of Rosemont. Okanogan, Washington. It is 7 miles north-east of Beaverdell on the west side of St. John Creek, at an elevation of about 4,400 feet. The nearly level plateau-surface here falls off rather sharply into the small valley of St. John Creek; the plateau has been largely burned over, but the timber in the valley has been unaffected. A rather steep road was constructed in 1937 from the Harrison Ranch in Beaver Creek Valley up to a good cabin near the uppermost workings.

The ground is in an area of Wallace formation about half a mile wide nearly surrounded by quartz diorite. The geology is so mapped by Reinecke, but actually there is considerable quartz diorite seen penetrating the older rocks which represent remnants of the batholithic roof. The Wallace here is represented by sediments, some of which are limy, and all are highly altered, even to the point, locally, of granitization. The mineralization is in rather obscure zones in Wallace formation and consists of sulphide impregnations accompanied by more or less quartz.

There are a number of scattered workings extending from the cabin, elevation 4,400 feet, eastward and downhill a distance of 900 feet with a difference in elevation of 180 feet. Near the cabin is a vertical shaft which is perhaps 60 feet deep and is now full of water. From the material on the old dump it may be judged that the shaft encountered no great amount of mineralization, although some mineralized quartzose stringers are seen just below the collar; recent work by the present owners has shown that these stringers open out, immediately to the north and for a distance of some 20 feet, into a band which dips 45 degrees easterly in Wallace formation. This band contains considerable pyrrhotite, less pyrite, and a little chalcopyrite in glassy quartz and silicified wall-rock. Some narrow bands of quartz containing flaky and cellular pyrite are said to carry consistently high gold values; a sample of such material assayed: Gold, 2.40 oz. per ton; silver, 0.4 oz. per ton; arsenic, trace. Some 60 tons of mineralized material, largely pyrrhotite, was on the dump awaiting shipment.

An open-cut 30 feet northerly on the strike fails to uncover the continuation of this band, which may, however, have an irregular strike. Other small open-cuts near by and near the cabin show Wallace formation containing pyrrhotite mineralization, the attitude of which is obscure. South and south-west of the shaft a distance of 150 feet are two open-cuts in Wallace formation near quartz diorite; in these there is some irregular mineralization. South-east of the shaft, along a Wallace-diorite contact, are a few open-cuts in which traces of mineralization are seen.

At the lower end of the line of showings are two open-cuts driven into the side-hill a distance of 22 and 34 feet; they are 70 feet apart and show pyrrhotite-pyrite mineralization in Wallace formation in and accompanied by quartz and silicified rock. A 12-foot shaft 620 feet south-east of the main shaft shows a quartz vein 3½ feet wide in a zone 6 to 10 feet wide; the strike is north 50 degrees west and the dip is vertical.

The finding of high-grade material, missed during the sinking of the main shaft by a few feet, is interesting; unfortunately, the degree of oxidation makes it impossible to tell whether the higher gold values are associated with quartz stringers of a second generation or are an integral, if spotty, part of the main mineralization. Considerable stripping and careful sampling could be done to prove continuity or otherwise of these apparently unrelated and as yet little understood showings.

Forty-one tons of ore shipped to the smelter yielded 26 oz. gold and 28 oz. silver.

The lower adit, not driven until 1937, is sinuous in outline and was apparently driven to allow mining of two separate sets(?) of quartzpyrrhotite veins which strike ENE and locally dip vertically to steeply north (Fig.5). Ore shipped appears to have been from an inconspicuous stope about 100 feet from the portal where a strong 3 foot wide quartz vein, 30 feet in length, is bordered on occasion by sulphides consisting of pyrrhotite, pyrite and chalcopyrite (Table 2). Although the quartz veins are identifiable in the roof, the adit or stope walls require cleaning before a proper sampling program is carried out. The highly altered wall rock is difficult to identify megascopically and appears to be a gray, highly chloritic and silicified metasediment or metavolcanic. Minor sericite and carbonate are recognizable. Backs and walls are self supporting due to widespread silicification. Judging by the amount of iron oxide in the dump, much of the host rock contains disseminated pyrite or pyrrhotite. A weakly mineralized but shattered quartz lode which has not been penetrated is present on the face at the end of the adit.

(b) DICK CLAIMS

Little is known about the Dick "located" claims which surround the Crown Grant. A few scattered and sloughed pits with oxide material on their dumps suggest some mineralization is present other than in the main zone but no systematic arrangement is suggested. It is possible that these showings represent small weakly mineralized random inclusions in the bounding granitic rocks. The Dick 5 - 8 claims do, however, cover the proposed strike extension southeasterly downhill towards St. John Creek for a distance of at least 700 metres beyond the adit.

VIII. ASSAYS AND RESERVES

The Rosemont prospect has not been systematically sampled and can not be until mineralized exposures are freshened-up or made safe. It is reported that at least 63 tons averaging about 0.5 oz/gold/ton was shipped in the 1937-1940 period as were earlier shipments of at least 60 tons of similar grade. There is no estimate of lower grade material obviously encountered.

The following table summarizes assay results available to date:-

TABLE 2 (ASSAY RESULTS)

(BCDM = B.C. Department of Mines)

| # | Location | Width | Date & Sampler or reference | | Ag oz/t | Other |
|----|--|-------------------|-----------------------------|-----------------------|------------|-----------------------------------|
| 1. | "Open cut near cabin" | 10'x12' outcrop | 1901 BCDM | 2.00 | 0.20 | 0.25% cu |
| 2. | Pit 600 feet downhill | 2'x4' 15' deep | | 0.10 6.20 pprox | | |
| 3. | Pyrrhotite rich easterly dipping band near main shaft | "Narrow bands" | 1937 BCDM | 2.40 | 0.40 | Tr.As |
| 4. | 41 ton smelter shipment | - | 1937 BCDM | 0.63 | 0.70 | |
| 5. | Pyrrhotite from main adit dump | - | 1993 J.McDougall | 0.88 | 0.06 | 0.54% As 0.16% Cu 271ppm Bi |
| 6. | Surface sample at proposed adit portal 70' NE of main adit (Location not confirmed) | ? | 1992 J. G abbs | 0.90 | | |

Assay results continued

| # | Location | Width | Date & Sampler or reference | Au oz/t | Ag oz/t | Other |
|----|---|---|-----------------------------|------------|------------|-------|
| 7. | Adit samples #398. Qtz.Chlorite Tr. S ₂ Shattered quartz Vein face at end of crosscut | Grab of 4' square exposure | June 1994 J.McDougall | 0.001 | | |
| | #655 30% Pyrrhotite, Pyrite; 2% cpy in quartz | Grab of 3' vein in back of stope | Ħ | 0.002 | | |
| | #400. As #655 but 5-8% S ₂ | Grab 1' of wall rock (?) | н | 0.001 | | |
| | #601. N contact of 3' vein with wallrock 80% qtz & Chlorite Tr S ₂ , oxidized | 4" slab probably representative of 3' qtz vein but only 1% diss. S ₂ visible | 11 | 0.001 | | |

As no recent exploratory or development work has been carried out, reserves are minimal except possibly for a few tons between the backs of the main adit and surface, only a few tens of feet above the adit stope.

Possible reserves exist at depth and along strike as there is no indication that controlling structures observed do not continue beyond extremities known to date.

IX. CONCLUSIONS

It has been well reported that mineralization on the Rosemont property is sufficiently high in gold to constitute a viable mining operation - probably underground - provided adequate reserves similar to that mined are present. The higher values appear to have been associated with near massive pyrrhotite as present in the adit and shaft dumps but not as yet re-identified underground. Possibly because of severe wartime restrictions in place at the time, there appears to have been no attempt to extend the presently known limits of mineralization by drilling in the vicinity of known mineralization on surface or underground or to carry out adequate geotechnical surveys on the claim. Mineralized structures exposed in the adit appear strong although gold distribution is confusing. The presence of lower grade but bulk mineable reserves has not been disproven as mineralized outcrops are numerous over wide areas.

The topographically-anomalous nose-like bulge between the adit and the shaft area may be caused by differential erosion of excessive resistant silica (quartz). It may represent an important untested mineralized zone.

Access to the property is good, although snow would have to be ploughed during the winter months.

X. RECOMMENDATIONS

Recommendations are that sufficient reserves be established by a two stage program employing surface geotechnical surveys and exploratory diamond drilling as follows:

- 1) Deeply weathered surface showings must be <u>freshened-up by</u> <u>bulldozer</u> to allow <u>geological</u> investigation, including mapping, of the property.
- 2) The existing "grown-in" road to St. John Creek via the lower adit area should be cleared by the bulldozer. This is a pre-existing road shown on Morrisson's maps and no permit delay should be involved.
- 3) A survey controlled NS-EW <u>grid</u> (Fig.4) should be established to cover suspect (known and indicated) mineralized areas especially to the southeast beyond the adit toward St.John Creek.
- 4) The lower adit and the accessible portion of the shaft-decline should be better mapped and sampled after walls are washed.
- 5) Efficient <u>geotechnical surveys</u> should be carried out given the presence of weakly, but distinctly magnetic, <u>gold-associated</u>

 <u>pyrrhotite</u> in addition to minor but anomalous copper and arsenic. The work should include a ground magnetometer survey and soil sampling, particularly downhill to the southeast. A VLF-EM survey would help to define structure.

- 6) Shallow drilling is required to establish trends in both the adit and shaft area as indicated by surface surveys, followed by deeper drilling (Stage 2) when targets are better defined.
- 7) Crown Grant claim boundary monuments should be located and plotted more accurately on existing claim maps.

Respectfully submitted

RIGH La

June 15, 1995

STATEMENT OF COST

Rosemont Property - June 20, July 2, July 10 1994

Personnel

| J.J. McDougall P.Eng. | 1 | day | @ | \$450.00 | \$450.00 |
|---|---|------|---|----------------|--------------|
| Steve Rusika | 2 | days | @ | \$200 (mileage | inc.) 400.00 |
| J. Sperling | 2 | days | @ | \$200 | 400.00 |
| R. Lonsdale | 1 | day | @ | \$200 | 200.00 |
| | | | | | |
| Room and board | | | | | 800.00 |
| Assays | | | | | |
| Truck Rental (4x4) | | | | | |
| Report (Writing, drafting, typing, copying) | | | | | |
| Total | | | | | \$3,080.65 |

I, Richard H. Lonsdale, do hereby certify:

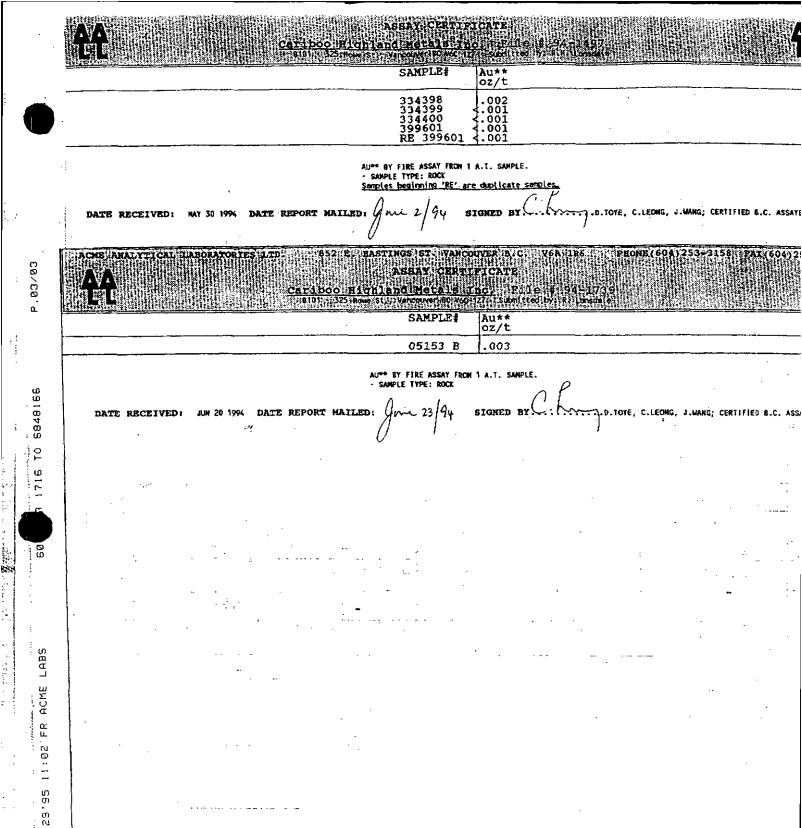
14. Londale

That I have been a prospector for the past 35 years and hold a current Free Miners License #115994.

R. H. Lonsdale

XIII. REFERENCES

- 1. <u>B.C. Minister of Mines Annual Reports</u> (1901) BCDM Publication -do- (1937) -do-
- 2. McDougall J.J. (1993) "Preliminary Report on Rosemont Mineral Claims" Unpublished Report for Cariboo Highland Metals Inc.
- 3. <u>Morrison M. (1986)</u> "Preliminary Geology & Rosemont Workings Auriferous 1 Mineral Claim" Assessment Report #16998, EM & PR
- 4. Reinecke L. (1915) "Ore Deposits of the Beaverdell Map Area" GSC Memoir #79
- 5. Tempelman-Kluit D. (1989) "Geology Map 1736A of Penticton Map Sheet"
 Publication of Geological Survey of Canada.



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