86-936-15467

PROSPECTING REPORT

ON

THE GLOUCESTER AND G.H. CLAIMS

GREENWOOD MINING DIVISION

BRITISH COLUMBIA

GEOLOGICAL BRANCH
ASSESSMENT REPORT

15,467

Type of Report: Prospecting

Claims: Gloucester (L2809) Record No. 1860
G.H. (L2810) Record No. 1859

Mining Division: Greenwood

NTS Location: 82E/9 (W)

Latitude: 49° 34.6'

Longitude: 118° 22.2'

Owner: R. MacKillop

Operator: R. MacKillop

Consultant: M.L. Malott

Author of Report: M.L. Malott

Date of Report: January 20, 1987.

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ILLUSTRATIONS

INTRODUCTION

The prospecting of the Gloucester claim on the days of September 25th to 29th, 1986 includes location of the property, examination of adits, shaft and outcroppings as well as the mapping and sampling of mineral showings.

PROPERTY DESCRIPTION

The two adjoining reverted crown grants:

Gloucester (L2809) Rec. No. 1860
G. H. (L2810) Rec. No. 1859

can be located on NTS map 82E/9 in the south west section at 49° 34' 30" N latitude and 118° 22' W longitude.

The more easterly G.H. claim strikes 30° east of north and is 457.2 m (1500 ft) square. The Gloucester strikes 47° east of north and abuts against the G.H. in such a manner that the northeastern one sixth of the claim overstakes the G.H. and is lost from the 457.2 m (1500 ft) square.

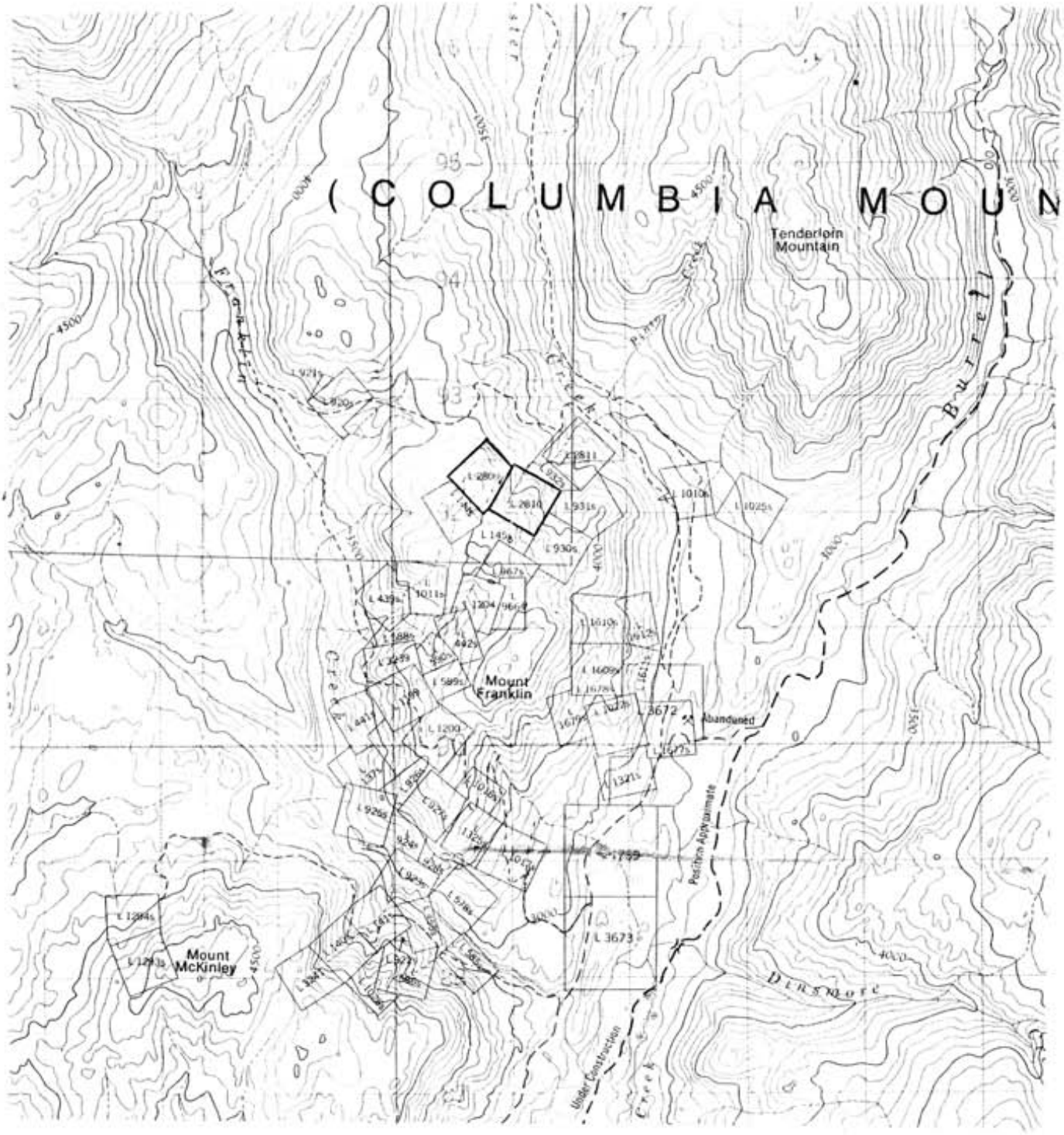
PHYSIOGRAPHY

The Gloucester and G.H. claims are situated on the north slope of Mt. Franklin. Their eastern boundaries strike toward Tenderloin Mt. The latter is separated from Mt. Franklin by the Gloucester Creek valley which the claims overlook.

The more westerly Gloucester claim has a maximum elevation of approximately 1300 meters and drops steeply 150m along both the northern and eastern portions of the claim.

Scale 1:2,500,000 B.C. Tourism Road Map

FIGURE 1
LOCATION MAP



Scale 1: 50,000 NTS 82 E/9

FIGURE 2

CLAIMS MAP

The G.H. claim straddles a northward projecting lobe of Mt. Franklin. The claim has a maximum elevation of 1300m and drops steeply 150m but along the western, northern and eastern portions of the claim. The steep western edge of the claim where the Gloucester abuts against the G.H.

ACCESS

Travelling north 80 km from Grand Forks, initially on the Granby River road then on the Burrell Creek road the claims are, at the date of prospecting, most readily accessable by taking the turnoff into the Union Mine. Pass directly in front of the Union Mine workings and take the upper Gloucester Creek trail which was recently upgraded by the exploration group currently working the Union. The upgraded Gloucester Creek trail is a narrow bulldozed road which allows four wheel drive access passing within a quarter of a mile of the Gloucester.

The claims can be reached from the north by taking the Burrell Creek Main logging road south from Edgewood which is approximately fifteen miles south of the Needles Ferry on Highway 6.

PREVIOUS WORK

The Gloucester and G.H. claims were staked in August of 1898 and legally surveyed apparently in 1902.

British Columbia Minister of Mines Annual Reports at the turn of the century (1900, 1901, 1904, 1905, 1906) indicate that the majority of work during those years

was completed on the Gloucester. In 1900, on the Gloucester, a 40 foot shaft following a chalcopyrite rich vein reportedly 18 inches wide at the surface widening to 5 feet at the base produced good copper and gold assay values. In 1901 the lead was traced for over 400 feet on the surface and the shaft taken down another 10 feet, then to 55 feet by 1904. Started in the fall of 1904 a tunnel was to tap the "ledge (of chalcopyrite and iron sulphide ore) underneath the present shaft". (1904). By 1905 the tunnel was stated to have been driven in 200 feet.

The reports from 1906 onwards are puzzling. There are a number of adits presently evident on the Gloucester and the old reports give no indication which of the workings they are referring to.

According to the 1906 report several hundred feet of shaft work was completed; however, there is no evidence of this.

British Columbia Minister of Mines Reports from 1913 to 1929 (1913, 1914, 1915, 1918, 1920, 1929) discuss further development on the claims. Again most of it being on the Gloucester. The 1913 qnd 1914 reports mention the 200 foot adit which was an attempt to tunnel in below and crosscut the vein. No ore was encountered even driving the adit 50 feet beyond where the 55 foot shaft of 1904 penetrated. A 93 foot raise at the end of the 200 foot tunnel was also non productive.

A notation of development work was made in 1915 and in 1918 there was mention of possible platinum occurrences associated with pyroxenite zones found in the region.

In 1920 the Gloucester and part of the G.H. were diamond drilled. Eight holes varying between 132 feet and 492 feet, with 2,888 feet in aggregate, encountered

> greenstone, cherty quartzite and an altered tuff, which became intermingled with granodiorite on its contacts. All through this formation small veinlets were cut containing pyritohedrons of iron, with occassional segregations of haematite and specks of chalcopyrite (1920, p.154)

Holes were drilled under an old tunnel and shaft with no results.

A forty foot hole was put through the magnetite cap on the G.H. claim. It showed specks of chalcopyrite, considerable hematite and magnetite carrying small Au and Ag values. The only other noted work on the G.H. was a 24 foot shaft sunk in 1901. The G.H. reportedly (1905) has a magnetite zone 40 feet wide that is traceable for hundreds of feet and contains copper and gold values.

The 1929 report of activities notes that the diamond drilling proved the mineral zones were entirely cut off a few feet below the surface by the granodiorite batholith.

C.W. Drysdale in his 1915 Geological Survey of Canada Memoir 56 states that to that date no work had

been done on the Gloucester since 1906. His assessment of the situation was that the ore occurs along the contact between the batholith and overlying Franklin Group rocks with concentrations chiefly in the latter. He states that the upper batholith contact relations which are exposed in steep ravines east of the Gloucester indicate the upper contact of the batholith pitches south. Consequently he claimed that had the contact relations been noted before attempting the crosscut tunnelling a lot of costs could have been averted.

An examination was made of the 1977 prospecting report by T.E. Lisle on the five claims comprising the Gloucester Claim Group. He was involved in exploration work in the Franklin Camp in the mid sixties and mid seventies. During the sixties he notes there was much roadbuilding, trenching and outcrop mapping with the latter confirming Drysdale's gross lithologies and rock distributions in the Franklin Camp. The 1976 prospecting work although hampered by snow cover examined the old adits and shafts on the Gloucester. As well numerous traverses were made across granodiorite outcroppings on the west side of the claim. An approximate contact was mapped between the granodiorite intrusive and the overlying Franklin Group rocks. Although no new mineralized zones were encountered Lisle suggested that more study of the Franklin Group lithology and structure might help decipher if economic deposits remain undetected.

In 1982 the author was associated with a cursory prospecting examination of the Gloucester claim. Conclusions of this work were that further geological mapping and tracing of the granodiorite/Franklin Group contacts were warranted.

OBJECT OF PRESENT WORK

The objective of this prospecting survey was to find closest road access, locate the claims and determine relative positions of workings in addition to sampling mineral showings and outcrop. Another objective was to trace the batholith/Franklin Group contact.

PROCEDURES

Initially access to the claims was tried by the Franklin Creek road which traverses the south and west sides of Mt. Franklin. Since this road is reportedly only marginally passable a local individual advised proceeding via the old Union Mine workings. Using aerial photographs and topographic maps the Gloucester was located in relationto the location of the recently reopened upper Gloucester Creek trail. Having determined the location of the Gloucester shaft traverses were run northwest to southeast in an attempt to crosscut what appeared to be a trend or contact running southwest to northeast through the shaft opening. Samples were taken at various showings along the contact with some pits being partially reopened to expose fresh mineralization. Efforts were made to determine the

nature and extent of all workings. Representative samples were sent out for assay.

Work was slow and tedious due to continuous snow and rain on the steep, slippery terrain. Due to time and weather constraints examination of the G.H.claim was not feasible.

RESULTS

The following old workings were located relative to each other on the 30° northeast facing slope of the Gloucester claim:

1 SHAFT

An inclined shaft with an apparent depth of 10m measures, at the portal, approximately 2m by 3m. A mineralized zone strikes 240° across the portal entrance and dips 68° SE. The shaft was driven down through fractured quartzite following a 68° SE dipping fracture which the mineralizedzone appears emplaced along. There are two other major fracture planes cutting through the portal region. One dips 30° E the other 50-55° SE; but no other features of their orientation could be determined.

Strong oxide colouration is visible in the south wall face of the portal. A vein filled shear containing distinct sulphide mineralization widens from several centimeters near the top of the portal wall to half a meter where the portal enters the mountainside.

Chalcopyrite and general copper staining was visible in dump material on the east side of the shaft. Sample #2 came from the dump material and assayed Cu 9.50%/

Au 2920 ppb (.085 oz/T) / Ag 64.0 ppm /Pt -20 ppb.

2 UPPER ADIT

There is an upper adit 33 meters upslope on a strike of 242^0 from the shaft. All but a half meter width of the portal is obscured by debris. The adit strikes, at 290^0, through chlorite rich quartzite for a distance of about 3 m. There is no observable mineralization. A fault plane to the left of the adit strikes at 267^0 and dips 65^0 SE.

3 UPPER PITS AND TRENCHES

Numerous pits and trenches were found along the mountainside above the upper adit. They are randomly spaced over a distance of 125 m with orientations varying between 200^0 and 242^0 relative to the upper adit. Again a chlorite rich quartzite was encountered throughout with only two instances of sulphide mineralization noted; one in the second pit 16m above the upper adit where thereis heavy iron staining and rich but finely disseminated pyrite; the second instance, an outcrop between 52 to 60m at 300^0 from the upper adit. Here, iron staining and disseminated sulphides are exposed in a narrow band.

Sample #1 came from the second pit, 16m, above the upper adit. Assayed values were Cu .108 %/ Au 72 ppb (.002 oz/T) / Ag 1.38 ppm / Pt -20 ppb.

4 MID ADIT

A mid adit was found 18m below the shaft on a

strike of 130°. The adit was cut approximately 15m into the mountainside on a strike of 295°. Upon examination of a pile of rock and pack rat debris at the end of the tunnel light was seen beyond. Although mostly obscurred from view, rocks dropped down the shaft were definitely discernable and this adit is thus known to intersect the shaft and appears to pass beyond it into the hillside an indeterminable distance.

The portal of the mid adit is cut through quartzites showing very little mineralization. Approximately half way into the adit (8m) the rock grades into granodiorite. Again little discernable mineralization is present although the lighting was poor.

Sample #3 was from mineralized material found inside the portal. Whether it is from the adit or the shaft is uncertain. It assayed Cu 2.20 %/ Au 508 ppb (.015 oz/T) / Ag 18.0 ppm / Pt -20 ppb.

5 LOWER PITS AND TRENCHES

At the same elevation as the mid adit on a strike of 5°, for a distance of approximately 55 meters, a series of pits and trenches were found. Re-exposing rock revealed a light grey granodiorite with, at some sites, stringers of quartz and/or calcite but little to no sulphide mineralization.

6 MAIN ADIT

The main adit lies on a strike of 255° approximately

40m below the mid adit. The entrance is blocked by rubble and a huge pack rat nest. The dump contains the same light grey granodiorite as found in the pits and trenches just uphill. As above there was next to no sulphide mineralization showing in the main adit dump material.

DISCUSSION

As mentioned in the section discussing previous work the reports of work done on the claims from 1906 to 1929 are confusing. All mention of adits in the early reports must refer to the main adit of this report. No where is there a record of the mid adit and in addition the fact that it cuts the shaft and passes beyond an indeterminable distance. Unless there has been considerable sloughing or infilling, the shaft is only 10m (33 ft) deep not 16m (55 ft).

The Franklin Group rocks overlying the granodiorite in the Gloucester and G.H. region have been variously reported as greenstones, andesites, quartzites and 'fragmentals'. Detailed mapping and sampling of outcrops and the contact with the batholith may resolve apparent discrepanies. The 'fragmentals', quartzites and greenstones may well refer to a common source rock that has been variously altered along the contact. For example: some of the 'fragmentals', discussed by Lisle (1977), contain abundant rounded quartz in a greenish chloritic intrusive matrix; the quartzites noted by this author, in places, are rich with chlorite;

greenstone owes its name to the richness of the chlorite it contains.

From the location of old workings relative to one another plus noting the orientation of fractures and mineralization it became apparent that the mineralization and contact with the granodiorite batholith trends approximately 240^0 or northeast/ southwest with a nearly 70^0 dip to the southeast. The association of the mineralization with the contact coincides with the findings of Drysdale (1915) as does the southeast dipping nature of the mineralized contact.. Therefore the Franklin Group rocks will most likely occur as a thin wedge in the southern one third of the Gloucester claim and overlie the granodiorite.

The areal and vertical extent of the Franklin Group rocks and the mineralized contact with the batholith may be limited due to shearing and possible subsequent fault displacement along the contact.

CONCLUSION

Further geological sampling and mapping on the southern portion of the Gloucester may more accurately delineate the extent of mineralization associated with the Franklin Group/ batholith contact.

It is possible that shearing or faulting has displaced other associated mineralization and a thorough examination of the G.H. claim, where no reported work has been done since 1929, may possibly provide further information. The copper/gold values

reported in a rich, extensive magnetite zone warrant additional exploration efforts on the G.H.

References

Allen, G., 1982, Prospecting Report submitted to BCDM&PR.

British Columbia Minister of Mines Annual Reports:

1900 p.872
1901 p.1066
1904 p.222
1905 p.187
1906 p.164
1913 p.169
1914 p.347
1915 p.201
1918 p.206
1920 p.154
1929 p.254

Drysdale, C.W., 1915, Geological Survey of Canada, Memoir 56, p.170.

Lisle, T., 1977, Prospecting Report submitted to BCDM&PR.

TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job # 86-357 Mary Lou Malott Date Oct.24, 1986

Client Project

Sample No.	Cu %	Au ppb	Ag ppm	Pt ppb	Au oz/ton
#1 2nd Pit	.108	72	1.38	-20	.002
#2 Shaft	9.50	2920	64.0	-20	.085
#3 Mid Adit	2.20	508	18.0	-20	.015

Note: Minus sign indicates less than figure given.

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STATEMENT OF COSTS

Field Personnel	
M.L.Malott Geologist 5 days @ 150.00	750.00
R.N.MacKillop Geol. Assist. 5 days @100.00	500.00
Mobilization/Demobilization	
Motel 2 nights (Sept.25 & Sept.29)	70.98
Meals (Sept.25 & Sept.29)	40.35
Mileage 1440 kms @ .30	432.00
Field Costs	
Camp costs 3 days Sept. 26,27,28 2 persons @15.00/person/day	90.00
Report Preparation	
1.5 person/days @ 150.00	225.00
Drafting/ Reproduction	75.00
Assay Costs	
Terramin Research Labs	42.15
TOTAL COST	$2225.48

STATEMENT OF QUALIFICATIONS

I, M.L. Malott of 8036 34 Ave. N.W., Calgary, Alberta do certify that I am a geologist and have practised my profession since graduation in 1977 with a B.Sc. in geology from the University of Calgary and subsequently from UBC in 1981 with a M.Sc. in geology.

My original experience in mineral exploration began in 1970 with work in S.E. British Columbia and has remained active since that time.

M.L. MALOTT

M L Malott

FIGURE 3

MAP OF G.H. - GLOUCESTER CLAIMS