

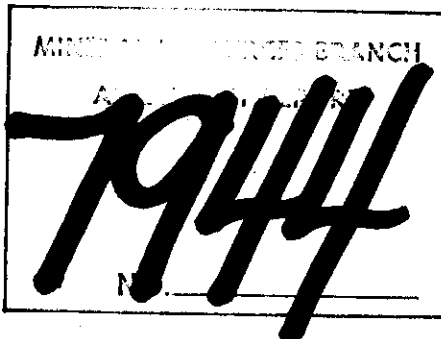
REPORT ON PROSPECTING SURVEY OF
GRASSHOPPER 1 & 2 MINERAL CLAIMS

- SIMILKAMEEN MINING DIVISION

- NTS Location : 540897

- ^{Long 53} Lat. 120 ^{Lat} 50' ^{Long} 49 33'

- OWNER/OPERATOR: RON BILQUIST



-AUTHOR - RON BILQUIST

20 DEC. 1979

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45'

49° 00'

121° 00'

45'

INTRODUCTION: This report concerns the initial prospecting of the Grasshopper 1 & 2 mineral claims, record numbers 500 and 501. These claims are situated west of the town of Tulameen a distance of 8.9 kilometers. Apart from one corner of the claims which straddles and lies south of the Tulameen River the greater portion lies north of the river. The summit of Grasshopper Mountain is near the south boundary of Grasshopper 2. The elevation varies from 2800 feet at the Tulameen River to 4877 feet at the summit of Grasshopper Mountain. The majority of the claims cover an extremely steep south slope which in 1000 meters has a vertical rise of 523 meters. The map pertinent to this area is 92H/10, the 1:50,000 Tulameen map sheet.

Access to the claims is by road following the Tulameen River a distance of 31 kilometers northwest of Princeton.

The Grasshopper claims consist of two ten unit mineral claims located by Ron Bilquist on the 25 November 1978 and recorded on the 12 December 1978. The current owner/operator is Ron Bilquist.

In general the claim area seems to have economic potential. In a historical sense the Grasshopper Mountain area over the years has been interesting, with copper, zinc, gold, and telluride mineralization having been found here. The presense of platinum in association with chromite (Mem. 243, Geology and Mineral Deposits of the Princeton Map Area, B.C., H.M.A. Rice, 1960, p.59) also adds considerable interest to this locality. During preliminary prospecting traverses mineralization was discovered in a number of places on the claims.

The entire claim area was loosely prospected to determine whether or not the property would warrant more detailed work. The results

at this time seem favorable.

A total of 11.8 line kilometers was cut in a loose 500 meter by 50 meter grid, covering the property in order to provide control for prospecting traverses as well as for follow up surveys. A total of 63 rock chip samples were taken in order to provide background rock geochemical values as well as for specific analysis for gold, platinum, copper, and chromite.

One day was spent testing a VLF-EM on the property to find if the use of this instrument would be practical. A distance of 1700 meters was tested at 25 meter intervals. As yet the data has not been looked at by a geophysical expert so the information is not included in this report.

PROSPECTORS REPORT (Technical Data and Interpretation)

PURPOSE: Originally the claims were staked to cover the northern part of the Olivine Mountain body of ultrabasic rocks described by Camsell (1913, pp. 49 - 76) as consisting of three types; peridotite, pyroxinite, and an augite syenite. Along with this the claim group was meant to cover the northern contact of the ultrabasic rock unit with the Nicola Group rocks. This area was mapped by Rice (Map 888A, which accompanies Mem. 243; Geology and Mineral Deposits of the Princeton Map-Area, B.C., by H.M.A. Rice; 1947) as "varicolored lava; argillite, tuff, limestone; chlorite and sericite schist". It is in this specific area where a number of economic minerals have been found. This all lends to a multi purpose program. Occurrences of chromite, copper, gold, platinum, and telluride minerals as well as associations between some of these (ie. copper/gold, chromite/platinum) have created interest in this area for years.

The primary purpose in prospecting the claims was to locate mineral occurrences with special emphasis on quartz veining and old workings. Almost without exception, mineralization found in old workings within the claim area are directly related to quartz veining.

The second purpose in prospecting this locality hinges directly on whether or not it would be feasible to search for an economic deposit of platinum here.

RESULTS and INTERPRETATION:

Geochemical analysis for platinum of nearly all rock chip samples was carried out to determine if this type of sampling would aid in determining areas of interest within the claim boundary. Due to the high cost of processing samples for platinum they were arranged and analysed in composite form so that general areas of interest could first be found. The result of this work was that three quarters of the claim area has background values of less than 50 parts per billion platinum in the rock. The remaining southwest corner of the claims is represented by composite samples with results ranging from 150 ppb to 50 ppb platinum. Along line 2500W. on the southwestern boundary of the claims, four rock chips taken over a distance of 750 meters in composite form resulted in a value of 150 ppb platinum. On line 2000W. three rock chips taken between 550S. and 2000S. gave a composite value of 50 ppb platinum. Three samples from line 1500W. between 350S. and 800S. also gave a composite value of 50 ppb platinum. Finally, one chip sample taken from an outcrop at 1000W. 1450S. also was 50 ppb platinum. Although there are not a large number of samples taken the results of this work does point to an area of higher background platinum. With a tighter spaced grid and greater density in chip

sampling, specific target areas could be located.

During prospecting traverses old workings were encountered. These were prospected carefully and samples were selected to be analysed for platinum, gold, copper, and in one case chromite. At station 1000W. on the base line a number of extremely old trenches were found. These appear to have been put in to try follow a malachite stained quartz vein. Four rock samples taken here gave no appreciable values in platinum, gold, or copper. Another old working at 1000W. 500S. on a large quartz vein showed no mineralization at all and no samples were taken. This vein is approximately 1 meter wide and should be followed along strike to see if perhaps it might intersect a fault or some other structure that may have brought mineralization in. The other old working is another large quartz vein on the Tulameen River near 1200W. 1950S. Rock samples from here produced no gold values but there was 265ppm chromite and greater than 4000ppm copper. This vein is heavily pyritized and seems to trend north into the claim. This could possibly be traced by float prospecting and perhaps geophysical means.

Close attention was paid to quartz float during prospecting traverses. Some float samples were taken and analysed producing encouraging results. At approximately 150 meters west of station 1000W. and 1300S. large angular quartz boulders were found. These displayed chalcopryite and malachite staining. Two rock samples, SS 1 and SS 2, were taken here with values of 3100 ppm and 5200ppm copper. Gold and platinum values were negligible. The source of these boulders should be located and the vein properly sampled to determine economic possibilities. A highly pyritized zone was found near the eastern claim

boundary along line zero between 800S. and 950S. The outcrop here resembles that which is described as the Nicola Group rocks. Although there is no apparent manifestation of economic minerals in place, a piece of milky white quartz float displaying chalcopyrites was discovered down slope from here. This rock, labelled GH-1 F was geochemically analysed to contain 3150 ppm copper and 2150 ppb gold. The source of this float has not been found at this time. Other rocks analysed for gold and copper on this line showed no interesting values except for one rock chip (R - 3, a fine grained, rusty weathering, heavily pyritized metamorphic rock) which did contain 168 ppm copper. Any other quartz float found was marked and the location noted to aid in future prospecting on the claims.

CONCLUSIONS and RECOMMENDATIONS:

1. Systematic rock chip sampling on a widely spaced grid and select composite geochemical analysis of these chips for platinum resulted in the location of an area of higher than background platinum values.

It is recommended that a tighter spaced grid (perhaps 100meters by 25 meters) be established to enable a greater density of chip sampling. This should help to isolate specific target areas.

2. Three old workings were located and sampled with one (Tulameen River showing) having good values in chromite and copper.

It is recommended that all these old workings be prospected further to find possible extensions with higher values. Float prospecting, hand trenching, and geophysical prospecting could be used here to trace mineralized quartz veins and shears.

3. Analysis of float discovered while prospecting resulted in good copper; 3100 ppm and 5200 ppm. Other interesting quartz float was found and the locations of these were recorded in a note book.

It is recommended that all interesting float be traced to its source to determine whether they need further exploration.

4. In summary, since encouraging results were obtained from grass roots prospecting, it is recommended that a more extensive systematic program be carried out. This will include:

- a. Grid expansion
- b. Greater rock chip sample density
- c. Exploration and tracing of mineralized quartz veins and structures using basic prospecting and possibly geophysics.
- d. Finally, the definition of and drilling off of drill targets.

Respectfully submitted,



Ron Bilquist

Prospector

STATEMENT OF AUTHORS QUALIFICATIONS

- Employed by Stokes Exploration Management Company from 1969 to 1975 as Field Party Chief and Prospector.
- Wrote an examination for the Ministry of Energy, Mines, and Petroleum Resources in 1975 to qualify myself for the Prospectors Assistance Grant.
- Employed as Prospector for D. G. Leighton and Associates from 1975 to the present date.

STATEMENT of COSTS

Linecutting - 31 Oct. to Nov. 2, 1979 -

| | |
|------------------------------------|----------|
| L. Allen - 3 days @ \$75./day..... | \$225.00 |
| R. Bilquist - " " " " | \$225.00 |
| C. Allen - 3 days @ \$50./day..... | \$150.00 |
| K. Allen " " " " | \$150.00 |

Prospecting - 30 Oct. to 4 Nov. 1979

| | |
|-------------------------------------|----------|
| L. Allen - 3 days @ \$75./day | \$225.00 |
| R. Bilquist - " " " " | \$225.00 |

| | |
|--|---------|
| VLF-EM - 30 Oct. 1979 - C. Allen (operator)- 1 day @ \$50./day | \$50.00 |
|--|---------|

| | |
|--------------------------|---------|
| K. Allen (assist.) - " " | \$50.00 |
|--------------------------|---------|

Truck Rental (GMC 4x4) - 30 Oct. to 5 Nov. 1979 -

| | |
|--------------------------|----------|
| 7 days @ \$28./day | \$196.00 |
|--------------------------|----------|

Room & Board (motels) - 30 Oct. to 2 Nov. 1979

| | |
|---------------------------------------|----------|
| 4 people @ \$35./man for 3 days | \$420.00 |
|---------------------------------------|----------|

Field (camping - room & board) - 3 Nov. to 5 Nov. 1979 -

| | |
|---------------------------------------|----------|
| 2 people @ \$20./day for 3 days | \$120.00 |
|---------------------------------------|----------|

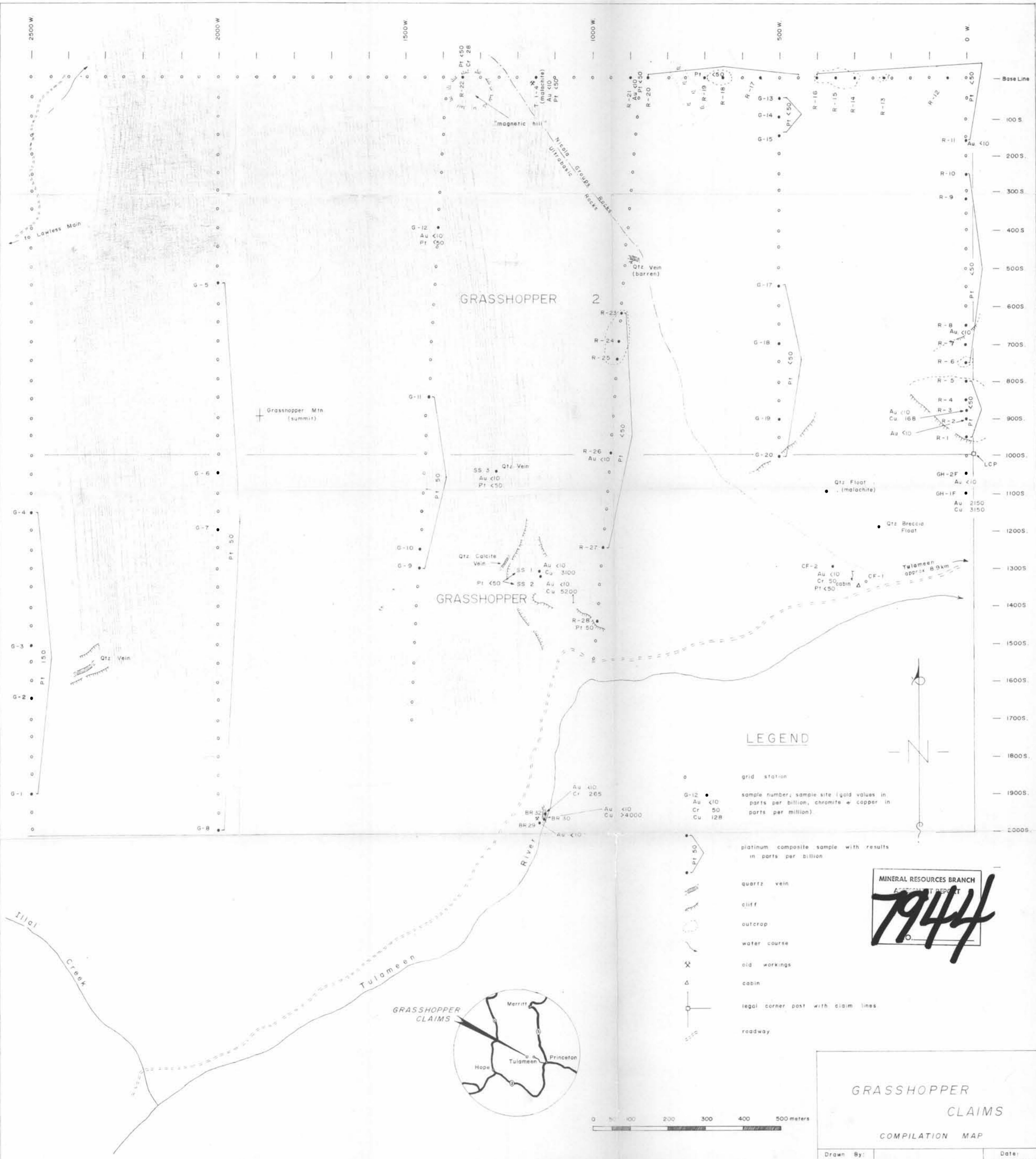
| | |
|---|----------|
| Assay Costs - Preparation and analysis of 63 rock samples ... | \$374.25 |
|---|----------|

| | |
|--|----------|
| Report Preparation - 2 days draughting @ \$50./day | \$100.00 |
|--|----------|

| | |
|-------------------------------------|---------|
| 1 day compilation @ \$50./day | \$50.00 |
|-------------------------------------|---------|

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|--------------------------------|---------|
| 1 day typing @ \$50./day | \$50.00 |
|--------------------------------|---------|

| | |
|-------------|-----------|
| Total | \$2610.00 |
|-------------|-----------|



LEGEND

- o grid station
- G-12 Au <10
Cr 50
Cu 128 sample number; sample site (gold values in parts per billion, chromite + copper in parts per million)
- o Pt 50 platinum composite sample with results in parts per billion
- ▬ quartz vein
- ▬ cliff
- outcrop
- ▬ water course
- ⊗ old workings
- △ cabin
- legal corner post with claim lines
- ▬ roadway

MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
7944



GRASSHOPPER
 CLAIMS
 COMPILATION MAP

| | |
|--------------------------|-------------------|
| Drawn By: R. Bilquist | Date: Dec 1979 |
|--------------------------|-------------------|