

FRANKLIN L. C. PRICE
Professional Mining Engineer

247


December 19, 1958.

Mr. Allan H. Ainsworth,
1500 Marine Building,
Vancouver, British Columbia.

Dear Sir:

Herewith enclosed is my report covering your "CU group of mineral
claims in central British Columbia.

Respectfully submitted,


Franklin L.C. Price

FLCP/e

GEOLOGICAL REPORT

CU GROUP

HIGHLAND VALLEY DISTRICT

KAMLOOPS MINING DIVISION

BRITISH COLUMBIA

FRANKLIN L.C. PRICE, P. Eng.

December 1958

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#1 Geological Map
1" = 300'

RECOMMENDATIONS:

It is recommended that a sum of not to exceed \$10,000. be expended on the CU group to trace and determine the extension of the mineralization located on Claim Numbers 13 and 14. The work should be carried out in the Spring of 1959 and should be directed to:

1. Complete the geological map of the group of claims. This will guide the future work and will allow the engineers to concentrate on the main structure.
2. A detail geo-chemical survey (suggested 100 foot stations along 300 lines). This work will be done on the better part of the group as determined by the geological mapping.
3. Surface trenching to expose the bedrock of any anomalous area.

LOCATION:

The CU group of mineral claims is situated near the summit of Gnawed Mountain in the Highland Valley area of the Kamloops Mining Division. They range in elevation from 5,950 feet at the summit to 4,800 feet near Gnawed Lake situated at the northwest portion of the group.

The area is reached by a fair gravel road some 45 miles northwest of Merritt, B.C. A newly constructed jeep-road has been built from the Highland Valley road to a point nearly one mile west of the summit of Gnawed Mountain. This road passes about a mile to the west of the group under examination. A trail has been blazed from the jeep-road to the claims. There are no living facilities or cabins on the claims, however, a fair camp has been established on Lynn Creek about three miles northwest. Also living facilities are available at Highland Valley Lodge located just eight miles away.

PROPERTY:

The CU group consists of 20 full size mining claims and 2 fractions, all held by location. They contain approximately 1000 acres, more or less. The registered owner is Mr. Allan Harrison Ainsworth, 1500 Marine Building, Vancouver, British Columbia. Details of claims are given below:

<u>Mineral Claim</u>	<u>Metal Tag No.</u>	<u>Record Number</u>	<u>Date of Record</u>
CU No. 1	211051	25067	13 Dec. 56
CU No. 2	211052	25068	13 Dec. 56
CU No. 3	211053	25069	13 Dec. 56
CU No. 4	211054	25070	13 Dec. 56
CU No. 5	211055	25071	13 Dec. 56
CU No. 6	211056	25072	13 Dec. 56
CU No. 7	211057	25073	13 Dec. 56
CU No. 8	211058	25074	13 Dec. 56
CU No. 9	211061	25002	5 Dec. 56
CU No. 10	211062	25003	5 Dec. 56
CU No. 11	211063	25004	5 Dec. 56
CU No. 12	211064	25005	5 Dec. 56
CU No. 13	211065	25006	5 Dec. 56
CU No. 14	211066	25007	5 Dec. 56
CU No. 15	211067	25008	5 Dec. 56
CU No. 16	211068	25009	5 Dec. 56
CU No. 17	211049	25075	13 Dec. 56
CU No. 18	211050	25076	13 Dec. 56
CU No. 19	211059	25077	13 Dec. 56
CU No. 20	211060	25078	13 Dec. 56
CU No. 1 Fr.	211069	25079	13 Dec. 56
CU No. 2 Fr.	211070	25080	13 Dec. 56

*These fractions
are P. 1, 2, 3
and 4 to B. 1, 2,
March 1957.*

HISTORY:

The history of the claims shows that considerable interest was shown and a few prospects pits were completed near the turn of the century. Old workings were inspected on CU 13, 14 and 16. However, no serious attention was shown in the area until the Bethlehem Group was staked in 1953. Prospectors worked in the area for several summers, and in 1956 the CU was staked as a group. It has been held by location since that date.

There has been no drilling on the CU itself but there has been some recent drilling in the immediate area. The ^{Minnix} Minnix group, adjoining to the south, drilled in 1957, and the Skeena property, two miles to the west, was drilled that same year. As far as is known no commercial ore has been blocked out by this drilling.

TIMBER:

The group of claims is covered with spruce and Jack Pine that could be used for any prospecting work in the area. The local timber is small but is useful for mining as the contractor at the nearby Bethlehem adit is using all local timber for stulls.

WATER - POWER:

The claims of the CU group are located on the flank of Gnawed Mountain at an elevation of nearly 5,000 feet, so the only water available is from the small creeks that drain off the mountain to the north. The lakes on the claims are all too small to be of any value.

There is no electrical power at the present time in the Highland Valley area. It will be necessary that any power be developed with a diesel or natural gas plant. The Natural Gas Line of the West Coast Transmission Company lies only six miles to the east.

GEOLOGY:

A. Regional

The Highland Valley is underlain by rocks of the Guichen Batholith. These consist of granite, granodiorite, quartz-diorite and gabbro masses. The Batholith is one of several that fringe the eastern margin of the Coast Range intrusions and has been fairly well dated as being Lower Jurassic in age. This is based on the fact that it intrudes Nicola volcanics of Triassic age and is overlain by upper Jurassic rocks in the vicinity of Kamloops.

The Batholith is some 40 miles long and 16 miles wide and has the long axis elongated north and south.

The Bethsaida granodiorite, named from its type occurrence on the Bethsaida Mines property is fairly coarse grained and shows euhedral books of biotite and subrounded quartz grains up to 3/8 inch in diameter, surrounded by grey plagioclase. The weathered outcrops show a typical rough and pitted surface.

B. Local

The claims of the CU group are as far as have been determined by the recent geological mapping all underlain by the Bethsaida complex of granodiorite composition.

Claim lines were surveyed by chain and Brunton and closely spaced geological traverses were made using the location lines as ties. The total outcrop area was found to be about 25% to 30% of the area, the remainder of the claims being covered by glacial debris. As mentioned

GEOLOGY (Cont'd):

above the outcrops are granodiorite and the weathered surfaces exhibit a rough and pitted surface. The only other rock type is a fine grained aplite dyke which occurs very frequently on CU No. 12 near the summit of Gnawed Mountain and on the northern edge of CU No. 13.

C. Rock Alteration

A weak propylitic alteration is present in most of the outcrops. It is apparently unrelated to copper mineralization except in time. The original hornblende and biotite are partially altered to chlorite and epidote. Commonly a weak development of sericite and kaolinite is noted on the plagioclase crystals.

On CU No. 13 and CU No. 14 one or two outcrops show more intense alteration, they exhibit more chloritization and epidotization along with the presence of secondary albite.

D. Mineral Occurrences

To date the only mineralization that has been found on the CU group is a vein type of occurrence as present on the CU No. 13, CU No. 14 and CU No. 16.

On CU No. 16 a small shaft, now water filled and partly sloughed, was sunk many years ago on a small quartz vein striking East and dipping steeply south. The dump shows the quartz to be mineralized with bornite, minor chalcopyrite, malachite, azurite, and sparse to fair molybdenite.

GEOLOGY (Cont'd):

The granodiorite present on the dump shows little mineralization except for development of secondary albite and in a few places obviously adjacent to the vein some molybdenite occurring as disseminations and narrow veinlets.

On the CU No. 13 claim three small shallow open cuts have exposed narrow quartz veins striking slightly north of east. The cuts now are largely sloughed. The quartz shows bornite, azurite, malachite, minor covellite and chalcopyrite and some molybdenite.

On the CU No. 14 is a short adit also exposing a small, narrow quartz vein showing fair copper mineralization across a width of 2 feet.

ECONOMIC POSSIBILITIES:

To date the only mineralization found on the CU group is a number of narrow quartz veins carrying small percentages of copper and molybdenum. The disseminated type of porphyry copper deposits as found on the Bethlehem property to the north has not yet been found on this group.

BIBLIOGRAPHY:

Cockfield, W.E. G.S.C. Memoir 249, 1948

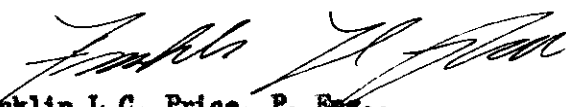
Dufell, S. and McTaggart, K.C. G.S.C. Memoir 262, 1952

Diron, G., American Smelting and Refining Company, personal information.

CU GROUP OF MINERAL CLAIMS

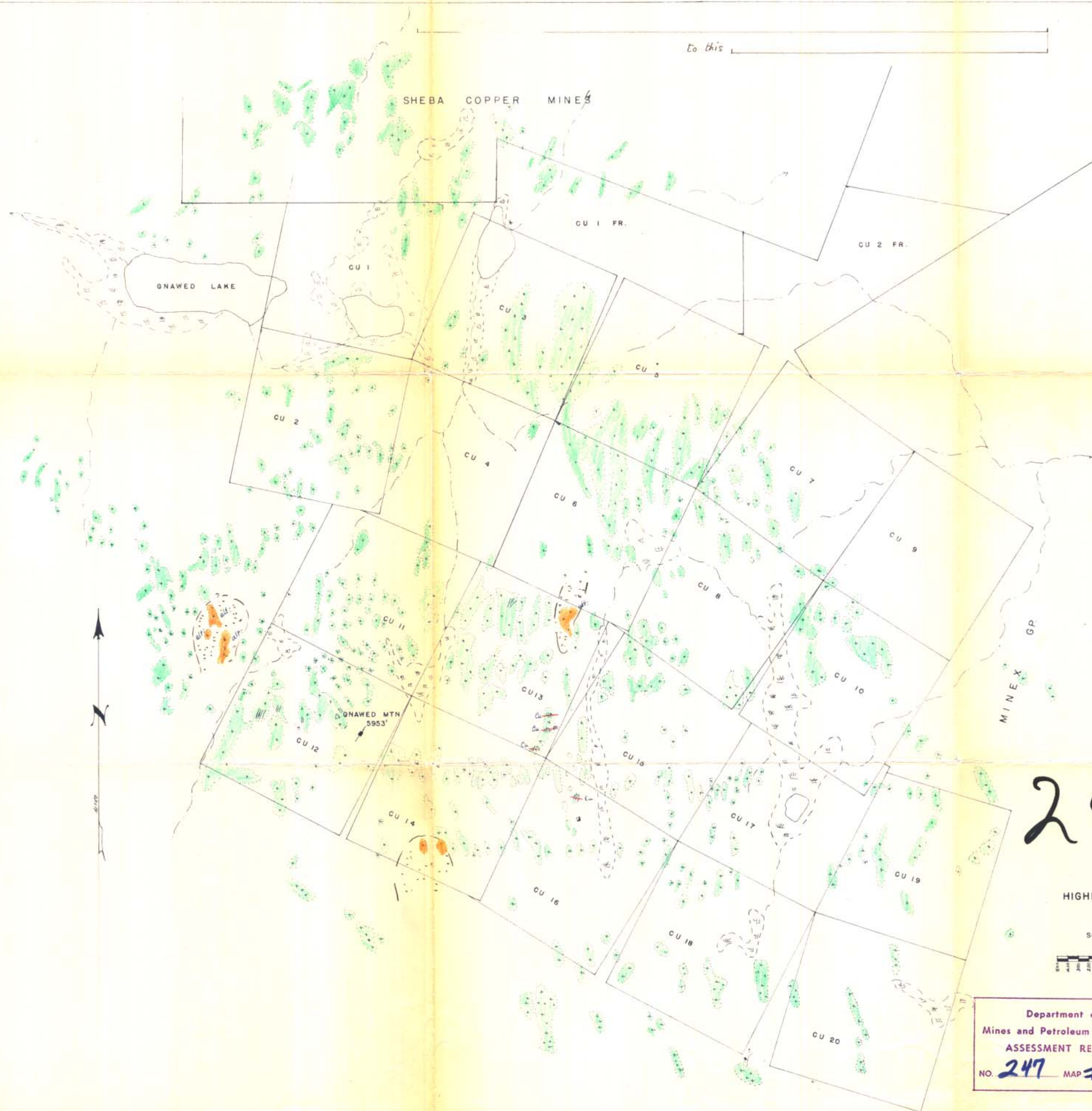
List of Expenditures Re Geological Examination of Claims

10 days Professional Engineers fees at \$35/day	\$ 350.00
2 Geologists - 30 days, surveying claim lines, mapping	900.00
2 Helpers - 30 days	800.00
Drafting, stenographer, blue prints, etc.	<u>70.00</u>
	<u>\$ 2,150.00</u>


Franklin L.C. Price, P. Eng.,
Consulting Mining Engineer

To this

SHEBA COPPER MINES



LEGEND

- BETHSAIDA COMPLEX
- APLITE
- WEAK ALTERATION
- MODERATE ALTERATION
- OUTCROP BOUNDARY
- JOINT
- TRENCH
- SHAFT
- ADIT
- COPPER MINERALIZATION
- SWAMP
- STREAM

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CU GROUP
HIGHLAND VALLEY DISTRICT
KAMLOOPS M.D.

SCALE: 1 INCH TO 500 FEET.



Department of
Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 247 MAP #1



R.E. Renshaw
December 1958
R.E. Renshaw
46#297