

NAME OF PROPERTY **LITTLE GEM (GEM) (NORTHERN GEM)**

OBJECT LOCATED - Symbol on Map 546 A.

UNCERTAINTY RADIUS: 200 metres. Lat. 50°53'50" Long. 122°57'35"

Mining Division **Lillooet** District **Lillooet**

County Township or Parish

Lot S: 7566 to 7568; 7727 to 7731 Concession or Range

Sec. Tp. R.

OWNER OR OPERATOR

### DESCRIPTION OF DEPOSIT

These claims lie near the eastern contact of the Coast Range batholith and are underlain by quartz diorite which is intruded by feldspar porphyry dykes. The rocks are intersected by an irregular system of fractures which strike east-northeast and are vertical or dip steeply south. These fractures contain pegmatite lenses mineralized with cobalt, gold and uranium. The cobalt and gold values are closely associated with mixed sulpharsenides (danaite, arsenopyrite and loellingite-safflorite). The uranium occurs as uraninite. The pegmatite lenses range in width from a few inches to 7 feet, and in length from a foot to 16 feet. Most of the lenses occur in a zone of sericitized granodiorite 40 feet wide and 130 feet long. Channel samples have ranged from one across 24 inches averaging 0.24 oz/ton gold, 1.1 oz/ton silver, 0.02% U<sub>3</sub>O<sub>8</sub> and 0.3% cobalt; to one 7 feet long containing 0.32 oz/ton gold, 0.0025% U<sub>3</sub>O<sub>8</sub> and 5.1% cobalt.

Associated minerals or products - Silver, gold, uranium.

### HISTORY OF EXPLORATION AND DEVELOPMENT

"This property ... consists of the mineral claims Little Gem No. 2 (Lot 7566), Little Gem No. 4 (Lot 7567), and Little Gem No. 6 (Lot 7568), recorded in 1934 and brought to Crown grant in 1948, and the following claims held by record: Little Gem No. 11, recorded in 1935; Little Gem No. 15 and Little Gem No. 16, recorded in 1946; Little Gem No. 17 and Little Gem No. 18, recorded in 1947. The claims are owned jointly by J.M. Taylor, 2419 Forty-ninth Avenue West, and R.R. Taylor, 1320 Walnut Street, Vancouver. The claims were located to cover cobalt-gold-bearing mineralization, with which, in 1948, uranium was found to be associated.

The ground covered by the claims extends from Roxey Creek, a northerly flowing tributary of Gun Creek, easterly over a high ridge into the upper basin of Jewel Creek, also a northerly flowing but smaller tributary of Gun Creek." (Annual Rept., Dept. of Mines, B.C., 1948, p. 112). By road the camp is 3 miles from Gun Creek and 15 miles from the Bridge River road.

The mineral occurrences were discovered by W. Haylmore and W.H. Ball in 1934. J.M. Taylor acquired the claims in 1937, and in 1938 optioned them to the United States Vanadium Corporation. This option was relinquished in 1939 after the mineral occurrences had been explored by two adits at elevations of 6,192 and 6,250 feet. In 1940, for part of the year, Bralorne Mines Limited held an option, during which time the lower adit was extended and two short raises were driven from that level. No further extensive exploration was done until Estella Mines Limited drilled twelve diamond-drill holes from the lower adit. This company relinquished its option in 1953.

In 1956 Northern Gem Mining Corporation Ltd. acquired an option on the Crown-granted claims and ownership of the adjoining Palang and Paul groups of recorded claims. Ten claims comprising the O.K. group were recorded in 1956. In all, their holdings consisted of eight Crown granted claims and 26 recorded claims. Work commenced on June 1st and continued until October 27th. (Annual Rept., Dept. of Mines, B.C., 1956, p. 40). This work consisted of four diamond drill holes totalling 697 feet put down from the lower adit, and some development in the upper adit. The following year, 363 feet of drifting and 50 feet of cross-cutting with 400 tons of slashing were done in the lower adit. In the upper

Mineral Policy Sector, Department of Energy, Mines and Resources, Ottawa

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p.t.o. ....

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)  
adit, 435 feet of drifting and 70 feet of cross-cutting with 640 tons of slashing were done. A total of 2,600 feet of diamond drilling was one in these adits. Assessment work was carried out in 1958.

In 1951, Pacific Gold and Uranium Mines, Ltd. held 23 claims around this group. Cobalt, gold and uranium values were found in shear zones traced for 1,500 feet by eight cross-cuts. It is possible that this deposit is an extension of the Little Gem and that part of the ground it covered was included into the Little Gem when the Northern Gem Mining Corporation Ltd. acquired adjoining properties in 1956.

"Previous work indicated an estimated 20,000 tons averaging 0.65 oz gold per ton, 3.0% cobalt, and 0.25% U<sub>3</sub>O<sub>8</sub>" (Canadian Mines Handbook, 1960, p. 185).

Anvil Resources Ltd optioned the Northern Gem claims in about 1984; geophysical surveys and trenching were reported. Test shipments were sent to European ore buyers.

MAP REFERENCES

- Map 43-15 A, Tyaughton Lake, (Geol.), Sc. 1": $\frac{1}{2}$  mile - accomp. Paper 43-15.
- #Map 546 A, Tyaughton Lake, (Topo.), Sc. 1:50,000; Dept. of Mines and Technical Surveys, 1939.
- Map 92 J/15 W (M), Mineral Claim Map, Sc. 1":1 mile; B.C. Dept. of Mines and Petroleum Resources.
- Map 92 J, Pemberton, (Topo.), Sc. 1:50,000.
- Map 13-1973, Pemberton, (Geol.), Sc. 1:250,000 - accomp. Paper 73-17, Geol. Surv. of Canada.
- \*Map 92 J/15, Bralorne, (Topo.), Sc. 1:50,000.
- Map 8552 G, Bralorne, (Aeromag.), Sc. 1":1 mile.

REMARKS

Comp./Rev. By		DMacR	DMacR				
Date	7-73	11-78	05-86				

REFERENCES

- Reports of Minister of Mines, British Columbia: 1935, p. F-56; 1936, pp. F-16-17; 1938, p. F-67; 1948, pp. 112-119; 1953, p. 100; 1956, p. 40; 1957, p. 23; 1958, p. 15.
- Mineral Policy Sector; Metals Files: 167-C2-2-55; 167-C2-2-48.
- Mineral Policy Sector; Corporation Files: "United Estella Mines Ltd."; War Metals Advisory Committee File: 1/5; "Northern Gem Mining Corporation Ltd.".
- Cairnes, C.E.; Geology and Mineral Deposits of Tyaughton Lake Map-Area; Paper 43-15, pp. 20-21, Geol. Surv. of Canada, 1943.
- Jones, R.J.; Cobalt in Canada; Rept. 847, p. 28, Mines Branch, Ottawa, 1954.
- Lang, A.H.; Canadian Deposits of Uranium and Thorium; Economic Geology Series No. 16, p. 43, Geol. Surv. of Canada, 1952.
- Stevenson, J.S.; Uranium Mineralization in British Columbia; Econ. Geol., Vol. 46, No. 4, pp. 353-366, 1951.
- Warren, H.V., and Thompson, R.M.; The Mineralogy of Two Cobalt Occurrences in B.C.; Transactions of the Institution of Mining and Metallurgy; Vol. 54, pp. 209-214, London, 1945.
- Mines Branch, Ottawa; Investigations in Ore Dressing and Metallurgy: IR 59-49.
- George Cross News Letter: 1985, No. 175.