Current Work and Results:

Soil sampling in 1975 outlined four zones of weakly anomalous copper and molybdenum response and one zone of anomalous lead response.

LAFORMA*
Rayrock Mines Limited
Ashland Oil Canada Limited

Gold, Silver
115 I 6
(62°16'N, 137°07'W)

References: Johnston (1937); Green (1966, pp. 29-31); Findlay (1967, p. 29); Tempelman-Kluit (1974a); Sinclair et al (1975, pp. 116-117).

Claims: DONALDA 1-9; MILL 1-3; GOOSE; JIM; BILL (Fr); CONNIE; BAKER; NEIL; MONA; PAL; KEY (Fr); YUKONIA 1-6; MAYFLOWER; LOON (Fr); LIZ (Fr); KIM (Fr): total of 32 claims and fractions.

Location and Access:

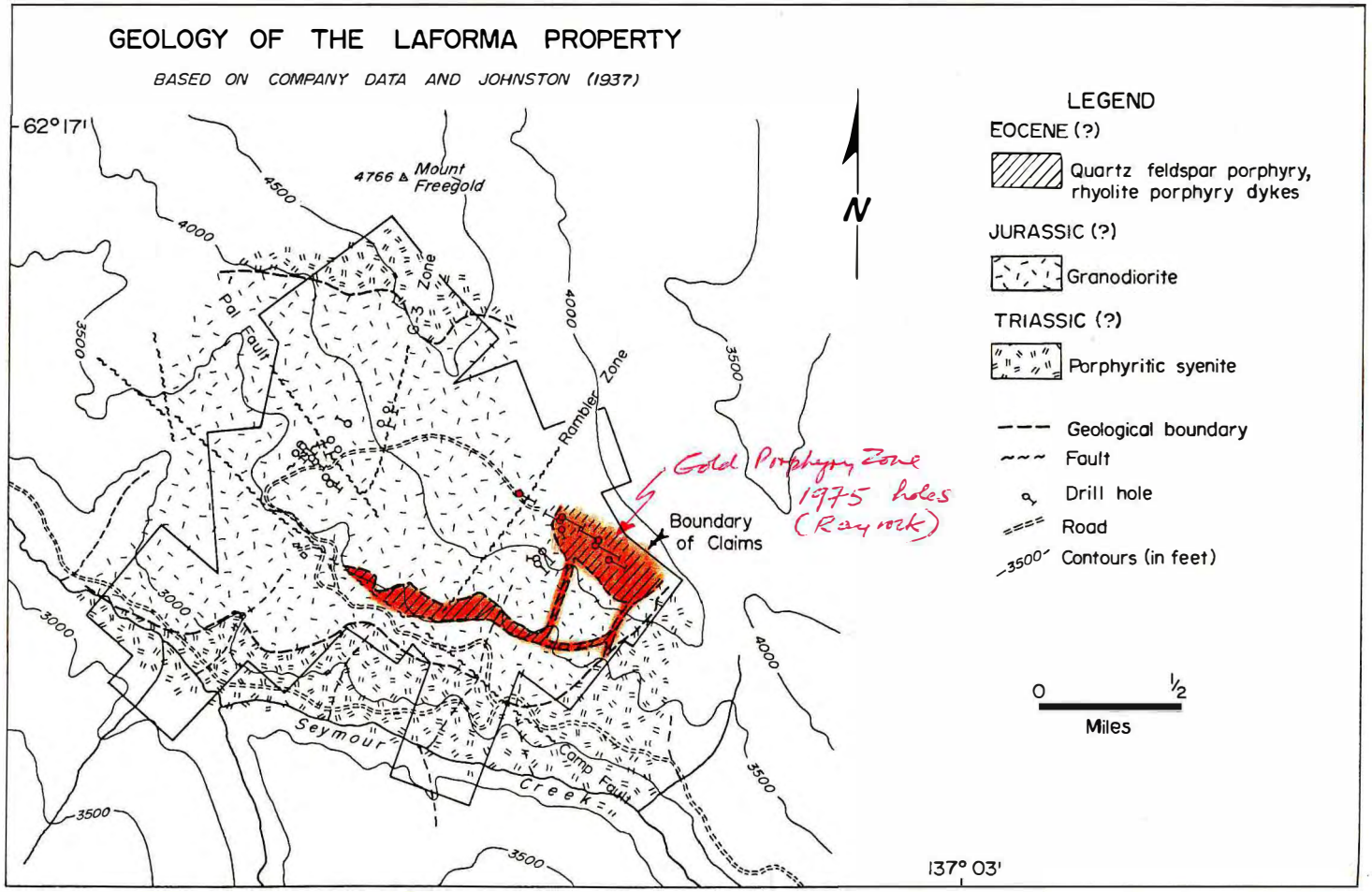
The property is situated 28 miles west-northwest of Carmacks on the southeast slope of Mount Freegold at elevations ranging from 3,000 to over 4,500 feet. Access to the property is by a road about one mile long that connects with the Carmacks-Freegold Road near Mile 41.

History:

The property was originally staked in the rush following the discovery of gold on Freegold Mountain in 1930 (the name of the property, LAFORMA, is a contraction of the names of the original owners, Langham, Forrest and Major). In 1934, the property was optioned by the N.A. Timmins Corporation and underground development began in 1935. Additional work was done by Yukon Consolidated Gold Corporation during the winter of 1935-36. In 1938, T.C. Richards of Whitehorse optioned the property and erected a small mill. From January 1939, to June 1940, Mr. Richards produced approximately 1,437 ounces of gold from 1,414 tons of ore. Ormsby Mines purchased the property in 1960 and began a re-examination in 1961. Discovery Mines Limited, formed by amalgamation of Consolidated Discovery Yellowknife Mines Limited and Ormsby Mines Limited in March 1964, operated the mine and a new mill from June 1965 to February 1966, during which period about 1,610 ounces of gold and 570 ounces of silver were produced. Operations were suspended due to rising labour costs, poor recovery and lower grades than originally estimated. In 1974, Rayrock Mines Limited and Ashland Oil Canada Limited began a re-evaluation of the property, starting with geochemical surveys which outlined a number of arsenic and gold anomalies.

Description:

The property is underlain mainly by granodiorite of Jurassic age or older (Tempelman-Kluit, 1974a) and closely related hornblende syenite. The granodiorite is grey, medium- to coarse-grained and composed of approximately 50 per cent plagioclase, 30 per cent quartz, 15 per cent potash feldspar and 5 per cent hornblende with accessory sphene and magnetite noticeable in hand specimens. The granodiorite underlies much of the central portion of the property. The hornblende syenite is conspicuously coarse-grained and porphyritic. It is composed of about 50 per cent potash feldspar, occurring mainly as salmon-pink phenocrysts varying from 2 to 6 cm in length, 20 per cent hornblende, 20 per cent plagioclase and up to 10 per cent quartz with sphene as a noticable accessory. The hornblende syenite occurs mainly along the margins of the property. Although contacts between the granodiorite and hornblende syenite are often gradational, regional evidence suggests that the granodiorite intrudes the hornblende syenite.


GEOLOGY OF THE LAFORMA PROPERTY
BASED ON COMPANY DATA AND JOHNSTON (1937)
62° 17'
137° 03'
4766 ft Mount Freegold
4500
4000
3500
3000
Pal Fault
Rambler Zone
Gold Porphyry Zone
1975 holes
(Raymark)
Boundary of Claims
Seymour Creek
Camp Fault
N
LEGEND
EOCENE (?)
Quartz feldspar porphyry, rhyolite porphyry dykes
JURASSIC (?)
Granodiorite
TRIASSIC (?)
Porphyritic syenite
Geological boundary
Fault
Drill hole
Road
3500' Contours (in feet)
0
1/2
Miles

The granodiorite and hornblende syenite, in turn, are intruded by andesite porphyry, quartz-feldspar prophyry and rhyolite porphyry dykes of probable Tertiary age (Tempelman-Kluit, 1974a). The andesite porphyry is fine-grained and dark grey-green with minor white feldspar phencorysts. The quartz-feldspar porphyry consists of euhedral hornblende, quartz and potash feldspar phenocrysts in a dark grey-green, microcrystalline matrix. The rhyolite porphyry is dark grey to creamy white, typically very fine-grained with minor small phenocrysts of rounded quartz and subhedral feldspar. The rhyolite porphyry appears to be gradational with rhyolite breccia composed of angular fragments of granodiorite and syenite porphyry in a fine-grained matrix of quartz and sericite. The fragments are typically 1 to 2 cm in diameter but in one drill hole, near the eastern corner of the property, fragments were up to 3 m across, separated by short sections of fine-grained rhyolite breccia. Rhyolite porphyry and rhyolite breccia occur in numerous dykes in the east corner of the property where they are observed mainly in drill core and in a prominent rhyolite porphyry dyke that trends east-west across the southeast portion of the property.

Two sets of steeply-dipping faults are present on the property, one trending northwest and the other northeast. One prominent northeast-striking fault, visible on air photos and referred to locally as the Camp Fault, is probably related to a major, northwest-trending lineament extending to the northwest along Big Creek. Two important north- to northeast-striking faults or shear zones, the G-3 and Rambler Zones, contain the gold-bearing quartz veins, the object of much of the earlier exploration and development.

The granodiorite and hornblende syenite have undergone varying degrees of hydrothermal alteration. Propylitic alteration, characterized by chloritization of hornblende and biotite, is widespread and may be due, in part, to supergene processes. Argillic alteration is more local and generally occurs in proximity to rhyolite porphyry and rhyolite breccia, and in the wall rocks of mineralized shear zones. The most conspicuous features of this are alteration of plagioclase to a greenish-white, fine-grained mixture of clay minerals and pervasive pyritization. Disseminated arsenopyrite is abundant locally. Quartz and chlorite veinlets and associated silicification mark the most intense alterations and generally occur in close proximity to rhyolite porphyry and rhyolite breccia.

Two types of mineralization occur on the property. The first consists of gold-bearing quartz veins in north- to northeast-trending shear zones cutting granodiorite. Sulphides associated with these veins include pyrite, present both in the veins and in the altered wall rocks, as well as arsenopyrite, minor galena and sphalerite and rare chalcopyrite and pyrrhotite. The second type of mineralization consists of disseminated pyrite and arsenopyrite in altered granodiorite and hornblende syenite, and in rhyolite breccia. Pyrite and arsenopyrite also occur, to a lesser extent, in cross-cutting fractures. Chalcopyrite, bornite, chalcocite and tetrahedrite are associated with this pyrite and arsenopyrite but are relatively rare.

Current Work and Results:

Work in 1975 was aimed primarily at locating and evaluating the possible extension of the G-3 Zone, terminated to the south by the Pal Fault, and at testing the broad arsenic and gold geochemical anomalies outlined east of the Rambler Zone near the eastern corner of the property. The work consisted of 23 diamond drill holes totalling 7,828 feet.

A northeast-trending shear zone in granodiorite, thought to represent the faulted extension of the G-3 Zone was located on the southwest side of the Pal Fault roughly 1,400 feet northwest of the G-3 Zone. Assay results for gold and silver from holes drilled on this zone were generally low. Similar results were obtained from holes drilled on the northern part of the G-3 Zone.

RAMBLER HILL

The holes drilled east of the ~~Rambler Zone~~ encountered altered granodiorite and rhyolite breccia containing disseminated pyrite and arsenopyrite. Pyrite and arsenopyrite are also present in fractures, as veinlets up to 5 mm across. Gold and silver assays from one hole ran 0.067 ounces of gold and 0.34 ounces of silver per ton over a core length of 69 feet but, in general, assays from other holes were lower. One hole carried 0.018 ounces of gold and 0.08 ounces of silver per ton for over 500 feet. The gold and silver content appears to increase with the degree of alteration of the granodiorite which, in turn, appears to be related to rhyolite porphyry and rhyolite breccia. There is no clear relationship between gold and silver values and the relative abundance of either pyrite or arsenopyrite. Copper mineralization is very weak, only minor copper sulphides have been observed, but appears to increase slightly to the east. Iron oxides and manganese staining are locally abundant along fractures and may extend to several hundred feet below surface. Some secondary chalcocite on pyrite grains has been observed but, in general, there is no evidence of intense leaching or development of a secondary enriched zone.

2,250,000
10
200,000