MEMO

June 4, 1987

V.A. Preto Manager

PROPERTY REPORT - HOWELL CREEK AREA

LOCATION: Lat. 49° 12′ Long. 114° 40′ (82G/2E & 7E)

The Howell Creek area is located in the Flathead region 50km south of Fernie. It encompasses the Howell, Twentynine Mile, and Harvey Creek drainages.

ACCESS: The area is accessible from Fernie, using well travelled logging roads. From Morrissey, 10km south of Fernie, the route follows the Lodgepole road over Harvey Pass to the Harvey road. At kilometre 47 on the Harvey road, the Howell road takes off to the south. The latter is followed over a small divide into the Twentynine Mile Creek drainage. The camp is located on this creek at a point 3.5km west of its confluence with Howell Creek.

CLAIMS: Claims belonging to Dome Exploration include:

Flathead 1 to 12 (236 units) covering Trachyte Ridge;

Howe 1 to 7 (116 units) covering Twentynine Mile Creek and Howell Creek;

Harvey 1 to 4 (72 units) covering Harvey Pass (upper Harvey Creek).

Claims currently belonging to Cominco, but for which Dome is currently negotiating an option include:

Howell 1 to 5 (88 units) covering Twentynine Mile and Howell Creek.

1987 EXPLORATION: Fox Geological Consultants are carrying out work on behalf of Dome. The proposed work program on the Flathead claims, which began in the latter half of May, includes 5.1km of road construction, 14 diamond drillholes (total 2400m) and 15 trenches. Changes in plans and the loss of one hole will result in the drill program being reduced to about 11 holes. Drilling, which is totally helicopter supported, is concentrated on Grid A in the Flathead 9 claim, west of Howell Creek. Drilling should be finished by the middle of next week.

Trenching is being conducted in the same area as the drilling program, and also on Grid B in Flathead B at the south end of Trachyte Ridge. Additional work on the Flathead claims includes 50km of magnetic survey and 500 soil geochemistry samples.

Cominco had proposed a program on the Howell claims involving 2km of road construction, 10 trenches, and soil and rock geochemistry. This has been abandoned because of the option deal with Dome, but Fox will likely carry out a similar program themselves this season.

In addition Fox intends to do some soil geochemistry on the Harvey and Howe claims.

The various programs should keep Fox in the area into August. The chief geologist on the property is Robert Cameron.

REFERENCES: Price, R.A. 1961. Fernie west half. GSC Paper 61-24. Price, R.A. 1965. Flathead map area. GSC Memoir 336.
Gordy, P.L. and Edwards, G. 1962. Age of the Howell Creek Intrusives. J. of the Alberta Soc. of Petrol. Geol., Vol. 10, pp.369-372.

DESCRIPTION: The camp was visited on June 2, 1987, and discussions were held with Robert Cameron. At the time the seventh drillhole was being completed.

The geology of the Howell Creek area is extremely complex. An intensely faulted series of Paleozoic and Mesozoic sedimentary rocks is host to a number of Cretaceous (?) plugs and stocks of alkaline igneous rocks, probably syenitic in composition, known collectively as the Howell Creek intrusions. They vary from porphyritic to aphanitic, and from fresh to relatively altered. The alteration consists principally of limonite staining after pyrite, mainly associated with fractures, although clay alteration and silicification are also common. Geochem anomalies are strongest over altered intrusions.

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Mineralization consists primarily of pyrite associated with fractures. Cameron believes he has seen visible gold in core.

No core assays are available as yet. The highest grab sample assay obtained is 1 ounce per ton.

7.5 g/t Au ever 1.5m with Needy assay obtained is 1 ounce per ton.

7.5 g/t Au ever 1.5m with Needy age date

Dome are looking at the possibility of a large, low grade deposit. The model they are applying is the <u>Pegasus mine</u> and related showings in <u>Tertiary alkaline intrusions in Montana</u>. Cameron seriously doubts that the established age for the Howell Creek intrusions is correct—he believes they are younger, i.e. Tertiary. He also suspects that there is more than one phase of intrusions, which perhaps may be differentiated on the basis of mineralization.

Other portions of the Flathead region are host to the same type of intrusions. Their occurrence does not appear to be

2

structurally controlled.

Robert Cameron indicated to me that publication of an article in Exploration in B.C. would be very unpopular with the company. He is going to check anyway, but I am not optimistic. We should therefore remove the Howell Creek area from our list of potential write-ups for this year. Perhaps when this year's assessment work is open filed the company will be more receptive.

The option arrangement with Cominco will commit the company to spending \$200 000 for a 100% interest in the Howell claims. They will definitely be back next year for that work, not to mention other work on their own current holdings which they want to carry out.

Attached are a location map and an outline of the Flathead claims. If you are interested in visiting the area this summer let me know—it can easily be done in a day trip, perhaps with a number of other stops in the Flathead.

D.Grieve

District Geologist

Fernie

c.c. T. Schroeter