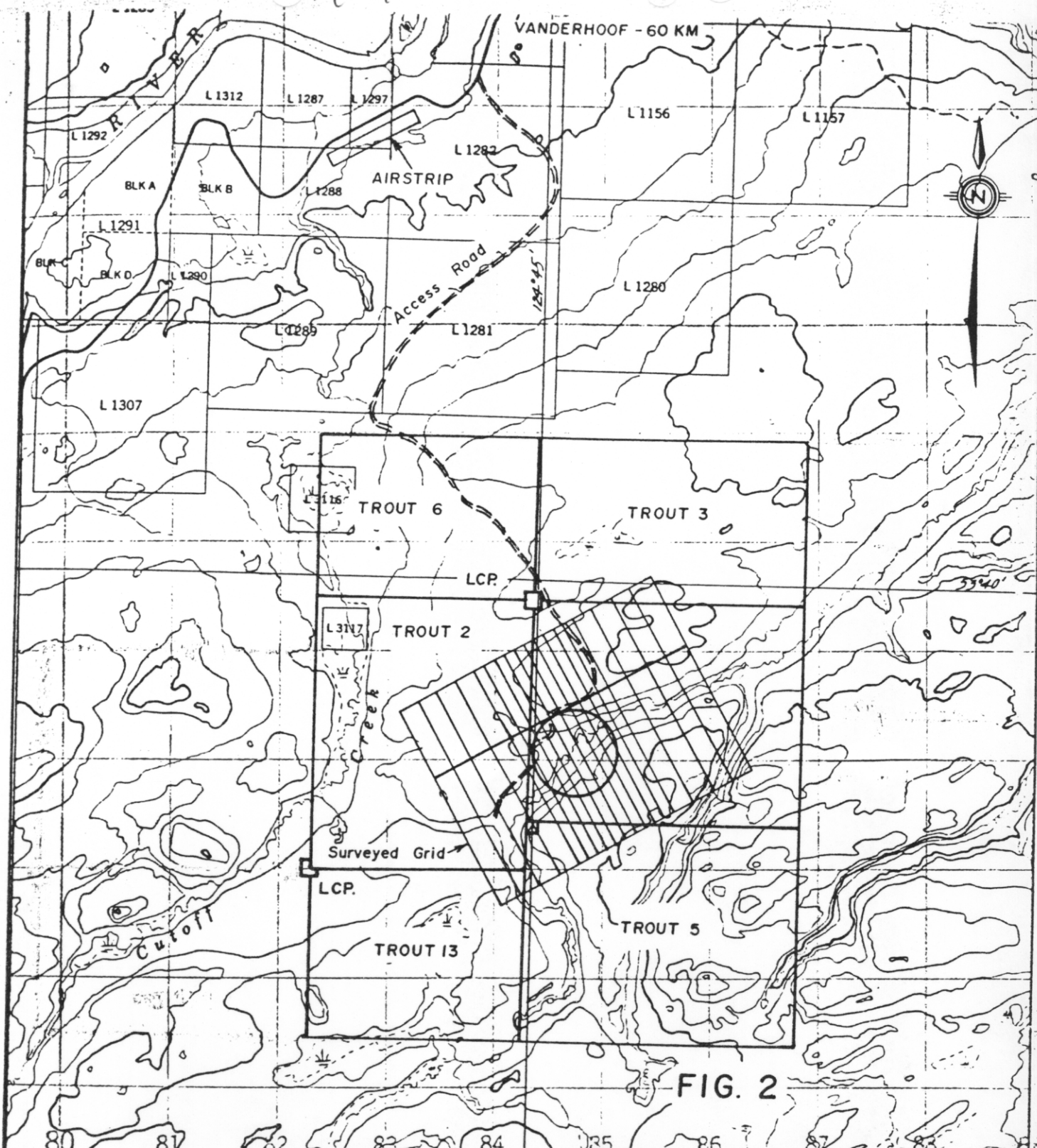


#H6733

TROUT

FRAME 87



WELCOME NORTH MINES LTD.	
TROUT CLAIMS	
OMINECA MINING DIVISION	
PROPERTY MAP	
888984	
SCALE - 1 : 50 000	DATE - October 1987

6. REGIONAL GEOLOGY

"The geology of the Nechako River area is described by Tipper in GSC Memoir 324 (1962).

The oldest rocks of the map area are andesites and basalts of the Takla Group. These were laid down in an island-arc environment during Upper Triassic and Lower Jurassic time. Plutonic rocks of the Topley Intrusions have invaded the Takla terrane over much of the northeast corner of Tipper's map. These included granite, granodiorite, diorite and quartz diorite.

Marine volcanics and sediments of the Hazelton Group were deposited on the Takla assemblage during Middle and Lower Jurassic time. Lithologies within the Hazelton include andesite and related tuffs and breccias, chert pebble conglomerate, shale and sandstone.

Marine sedimentation (argillite and argillaceous limestone) occurred during the Upper Jurassic. This was followed by a period of intrusive activity during which the Mesozoic strata were invaded by small plutons of granite, granodiorite and diorite which are presently exposed in the southern and western parts of the map area.

Uplift and erosion was dominant during the Cretaceous Period.

Sub-areal volcanic activity was widespread during the early Tertiary. Paleocene and Eocene volcanism produced the Ootsa Lake Group which Tipper has locally divided into two informal sub groups. The lower of these comprises basalt, andesite and related fragmental rocks with minor rhyolite and dacite. The upper sub-group includes rhyolite, trachyte, dacite and related fragmentals. Ootsa Lake rocks are overlain by sub areal basalts and andesites of the Eocene Endako Group.

The effects of Pleistocene glaciation were intensive erosion and widespread blanketing by till and outwash gravels." (Potter, 1985).

7. PROPERTY GEOLOGY AND MINERALIZATION (Figure 6)

Geological mapping (scale 1:1000) was carried out by McClintock in May, 1987 over the principle area of interest, on the Trout #1 claim. Geological observations were later supplemented by the detailed mapping (scale 1:200) of the bedrock exposed in the excavator trenches, and the information obtained from the rotary drilling program.

The central portion of the property is apparently underlain entirely by the Eocene Ootsa Lake Group volcanics, with minor volcanoclastic sediments. Principle rock types observed include maroon andesitic tuffs (often poorly consolidated), and andesitic porphyry flows and agglomerates. North of Swanson Creek are pink silicified and auto-brecciated trachyte porphyries. Several wide (+20 metre), dark greenish-grey, feldspar porphyry units may be intrusive cross-cutting dykes, while a wide, northeast trending light coloured rhyolite porphyry unit is probably a sill. South of Swanson Creek more acidic (rhyolite, rhyodacitic) ash flow tuffs (non-welded) and tuffs (densely welded) units are located.

The Discovery or Main Zone, is made up of a distinctive silicified andesitic polymictic explosion breccia; rounded heterogenous lithic fragments are closely packed, with rims of banded chalcedonic quartz/adularia. The coexistence of fragments of differing textures and degrees of alteration in contrast to the predominant andesites, suggests considerable mechanical mixing during emplacement.

Native gold and argentite have been identified within quartz-adularia veins in the Discovery Zone and significant gold values were found by the trenching and drilling programs, invariably associated with brecciation and

silicification. The 'discovery' hand trench averaged 0.57 opt Au over 5 metres, while a deep excavator trench just a few metres south located an additional 7 metres of 0.24 opt Au. Interesting, but not economic, gold values were also located by trenching within the geochemical anomalies within brecciated trachyte porphyry north of Swanson Creek.

The most prominent geological structure is a northwest trending fault system just south of the Discovery Zone; it is partly defined by the valley of Camp Creek. Mapped faults showing significant displacements or dislocations in the core area trend EW, NS, and NE. The important mineralized Discovery Zone is bounded on the south by a very strong fault striking EW and dipping 65 degrees to the north.