To:

Ministry of Energy, Mines and

MEMORAN

014018

December 12, 1983

Our File:

Date:

MGE-Please Circulate.

All Geologists MPE

Re: November 30 MEG Meeting - Summary

The QR (Quesnel River) Gold Deposit, P.E. Fox

Summary:

The QR gold deposits represent a new type of poorly understood bulk low-grade gold deposit. They are associated with large 'propylite' zones near alkalic diorite intrusions.

Location/access:

The deposits are on the north bank of Quesnel River. Access to Quesnel River is currently by road from Hydraulic, then by air to the property. Future plans call for road access from logging roads in the north.

History:

The core property was located in 1975 to cover a number of soil gold anomalies >40 ppb, one @ 1400 ppb Au. In 1976 a large anomaly with >80 ppb Au was percussion drilled resulting in discovery of the main zone. Drill results yielded 36 m with 3.86 g/t and 40 m with 5.86 g/t. Soil anomalies overlying bedrock sources are well defined in pebbly, rusty till. Anomalies have a northwesterly trending glacial dispersion. Arsenic is the only other element that mimics gold distribution; >125 ppm is considered anomalous, 50 ppm is threshold.

Economics:

- Mineable reserves discovered to date are ~1 mt 0.20 oz/t Au.
- Potential up to 2 mt is indicated.
- Au: Ag is 1:1, gold is up to 1 micron in size and easily recovered.
- Discovery plus exploration costs to date are \$3.74 M, thus present cost of ore in the ground is ~\$3.75/ton.

Geology:

- Triassic basaltic rocks are overlain by calcareous sedimentary rocks and Jurassic felsic flows, tuffs and epiclastic rocks.

 The basaltic rocks are intruded by a zoned monzodioritic stock.
- Large zones of 'propylite' alteration containing much pyrite and epidote also contain gold and traces of chalcopyrite and sphalerite. 'Ore' zones are defined by ≥5 g/t contour; average copper content is ~0.02%. The 'ore' zone is a long, thin, tabular zone.
- Peripheral rocks contain only calcite veining.
- Some lithologic control of propylite alteration by calcareous sedimentary rocks and breccia or clast-rich units is evident.
- Thrust faults and steep northeasterly trending normal faults disrupt alteration zones.
- Pyritic, epidotized rocks hardly resemble 'ore;' all ore is defined by assay boundaries.

A. Panteleyev



Ministry of Energy, Mines and Petroleum Resources

MEMORANDUM

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MPE

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Our File: 93A-12W

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