825791 104B/9W

GEOLOGICAL REPORT

ON THE

**GNC PROPERTY** 

Skeena Mining Division NTS 104B/9W (Latitude 56°37'N Longitude 130°29'W British Columbia

November 16, 1988

on behalf of

Vancouver, British Columbia

by

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#### INTRODUCTION

This report was commissioned by Calpine Resources Incorporated and is based on the available published information together with historical material in the assessment files. The author has visited the nearby Eskay Creek Property, but due to adverse weather conditions, was not able to visit the GNC property.

This report summarizes the geology of the area and presents an evaluation of the property's potential for hosting economic precious metal deposits. Recommendations are made for a systematic exploration program designed to evaluate the property.

# Location and Access

The GNC property is located in northwestern British Columbia, approximately 100 kilometers northwest of Stewart (Fig. 1). The claims are situated within NTS map-sheet 104B/9W and centered about 56°37' North latitude and 130°29' West longitude. Access to the property is by helicopter from Stewart direct to the property or by float- or ski- equipped aircraft to Tom MacKay Lake (Fig. 1). The Bronson Creek airstrip (40 kilometers west) and the Bell-Irving crossing on the Stewart-Cassiar Road (25 kilometers east) can be utilized for the transhipment of equipment and supplies. A short airstrip, 10 kilometers south of the property, requires improvement before use by Otter or Beaver aircraft.

# Property Status and Ownership

The GNC property comprises 4 mining claims (72 units) located within the Skeena Mining Division. The claims are shown on Fig. 2 and are more fully described below:

#### CONCLUSIONS

The property exhibits good potential for hosting gold deposits similar to those known elsewhere from the Stewart-Sulphurets-Iskut Camp. Most of the property is underlain by volcanic rocks belonging to the Unuk River Formation which hosts the Eskay Creek showings. Linear topographic features and geologic contacts may be fault related and analogous to features which host the Eskay Creek Showings.

The northwestern part of the property, which is underlain by Salmon River Formation sediments, also displays some potential. The rationale for this supposition is presented below:

- Infolded "islands" of prospective volcanic rocks may be present on the property but were not observed during Grove's (1986) reconnaissance mapping. It is also possible that, in places, the sediments comprise a thin veneer covering the most prospective volcanics.
- If the mineralization is Post-Jurassic in age, the sediments of the Salmon River Formation could also represent prospective host rock.

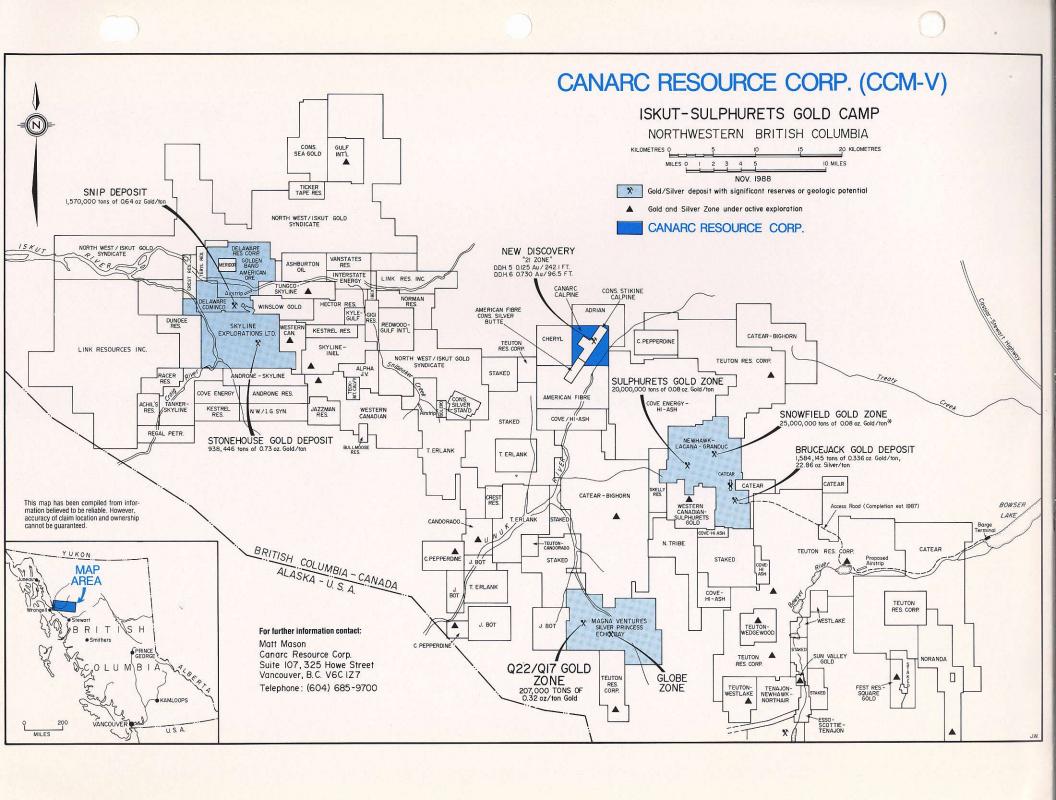
The presence of an anomalous gold, mercury, arsenic and antimony values in stream silt samples collected from the area enhance the precious metal potential of the claims.

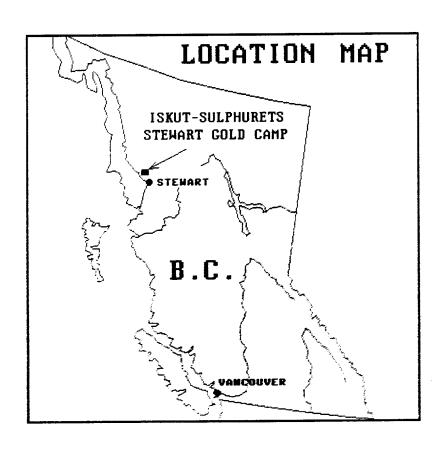
# **RECOMMENDATIONS**

It is recommended that the following two-phase exploration program be carried out on the GNC property. The initial phase is reconnaissance in nature and will be followed by a Phase II program which is contingent upon receipt of favourable results from Phase I.

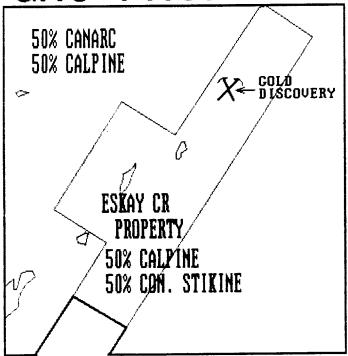
### Phase I

- 1) An airphoto interpretation is proposed in order to delineate linear features which may be related to prospective faults or shear zones.
- 2) A helicopter-borne electromagnetic/VLF/magnetic survey is recommended for the entire property. The recommended nominal line-spacing is 200 m with a norhtwest-southeast flight line orientation. The objectives of this work will include the delineation of conductors, fault traces, and "islands" of volcanic rocks.
- 3) Grid establishment should be done (flag, topo chain and compass) over the property. Line should be established at 100 m intervals with stations 25 m apart. Areas upstream from anomalous silt sample results should also be covered by grids.
- 4) It is recommended that geological mapping and prospecting be carried out over all of the grids. Particular attention should be focused on sampling of gossans. The Lower Jurassic-Middle Jurassic contact should be pinned down and any outliers or "islands" of Unuk River formation should be examined in detail.
- 5) Geochemistry The grids should be soil sampled in detail. Silt samples should also be collected upstream from any anomalous samples shown on the G.S.C. and Ryan Exploration surveys.
- 6) <u>Trenching</u> All encouraging showings should be trenched, mapped and chip sampled in detail.





GNC PROPERTY



# GOLD DISCOVERY

