Glacial History and Terrain Mapping in a Portion of the QUEST Project Area (NTS 093G, H[west half], J), Central British Columbia

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1. INTRODUCTION

The Quest Project area in central British Columbia has highly prospective bedrock geology (Fig. 1.1), but mineral exploration activity has been limited in some areas due to the thick cover of surficial material. Geochemical analysis of transported sediments can identify areas of mineralization below thick drift. However, there is a significant knowledge gap in the glacial history of the area; specifically, the ice flow history and dominant transport direction, which is vital for the interpretation of geochemical survey data. This project is designed to stimulate mineral exploration by providing a Quaternary framework, a regional and detailed geochemical survey and a context for companies to interpret their own data sets.

IGURE 1.1. Location map showing s area in relation to NTS map areas an JEST Proiect area (black outlir utline indicates extent of ice flow and green outline indicates the 6 1:5 areas of terrain mapping.



2.1 ICE FLOW HISTORY

- The ice flow history of the study area was determined by digitizing and compiling existing ice flow information from existing maps, usually macro-flow indicators (Tipper 1971; Clague 1998 a, b; Blais-Stevens and Clauge, 2007) with observations made in the field.
- Ice flow indicators measured at 56 field sites were mainly micro-flow indicators such as grooves, striations and rat

2.2 TERRAIN MAPPING

- Terrain mapping was based on the interpretation of high resolution, 1:40 000-scale, aerial photographs in conjunction with digital spatial data.
- Field checking was carried out to assist in identifying and delimiting the surficial materials that occurred in the area.







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Tipper, H.W. (1971a): Glacial geomorphology and Pleistocene history of central British Columbia; Geologic Survey of Canada, Bulletin 196, Map 1287A; 1288A, scale 1:250 000.



gently rolling surficial expression and is comprised of