



# British Columbia Geological Survey

## Geological Fieldwork 1984

### REGIONAL GEOCHEMICAL SURVEY 12 PRINCE GEORGE (EAST HALF) AND McBRIDE (WEST HALF) (93G/E, 93H/W, 93H/2)

By H. R. Schmitt

The British Columbia Ministry of Energy, Mines and Petroleum Resources conducted a regional geochemical survey during July and August of 1984 which covered the eastern half of NTS 93G and the western half of 93H and included part of 93H/2 (Fig. 56).

The Ministry funded organization, supervision, and sample collection activities while the Department of Energy, Mines and Resources in Ottawa funded commercial sample preparation and analyses, and data processing. Field supervision was carried out by H. R. Schmitt under the direction of W. J. McMillan.

Survey results in the form of sample location and value maps, a listing of sample data, and a summary of basic statistical parameters will be released in June, 1985 in Prince George and/or Quesnel, Vancouver, and Victoria.

To date a total of 20 map-areas covering approximately 264 750 square kilometres have been sampled in British Columbia; average sample density ranges from one site per 12.5 square kilometres to one site per 15 square kilometres.

Field sampling for RGS 12 was carried out under contract by McElhanney Engineering Services Ltd. of Vancouver, with an average crew of five. Access is excellent through much of the survey area so most sample sites were accessed by truck and motorcycle. Base camps were situated at Quesnel, Hixon, Purden Lake, and Wells. Helicopter services were provided on a casual basis by Northern Mountain Helicopters Inc. of Quesnel and Prince George. The survey commenced on July 10, 1984 and concluded successfully on September 2, 1984.

A total of 1 167 sites were sampled, resulting in a mean site density of one site per 12.6 square kilometres over the 14 750-square-kilometre area.

Water samples are analysed for uranium, fluorine, and pH. Stream sediments are analysed for zinc, copper, lead, nickel, cobalt, silver, manganese, iron, arsenic, molybdenum, tungsten, mercury, uranium, and antimony.

The survey encompasses diverse geologic terranes which include rocks of the Cache Creek, Takla, and Slide Mountain Groups. Exploration for gold and silver is presently concentrated in the Wells-Barkerville area, and adjacent to the trace of the Pinchi fault in the western survey area. Polymetallic vein deposits associated with the Cretaceous Naver intrusions are also being explored. It is anticipated that the geochemical survey results will enhance these efforts and broaden the scope for exploration in overburden covered areas.

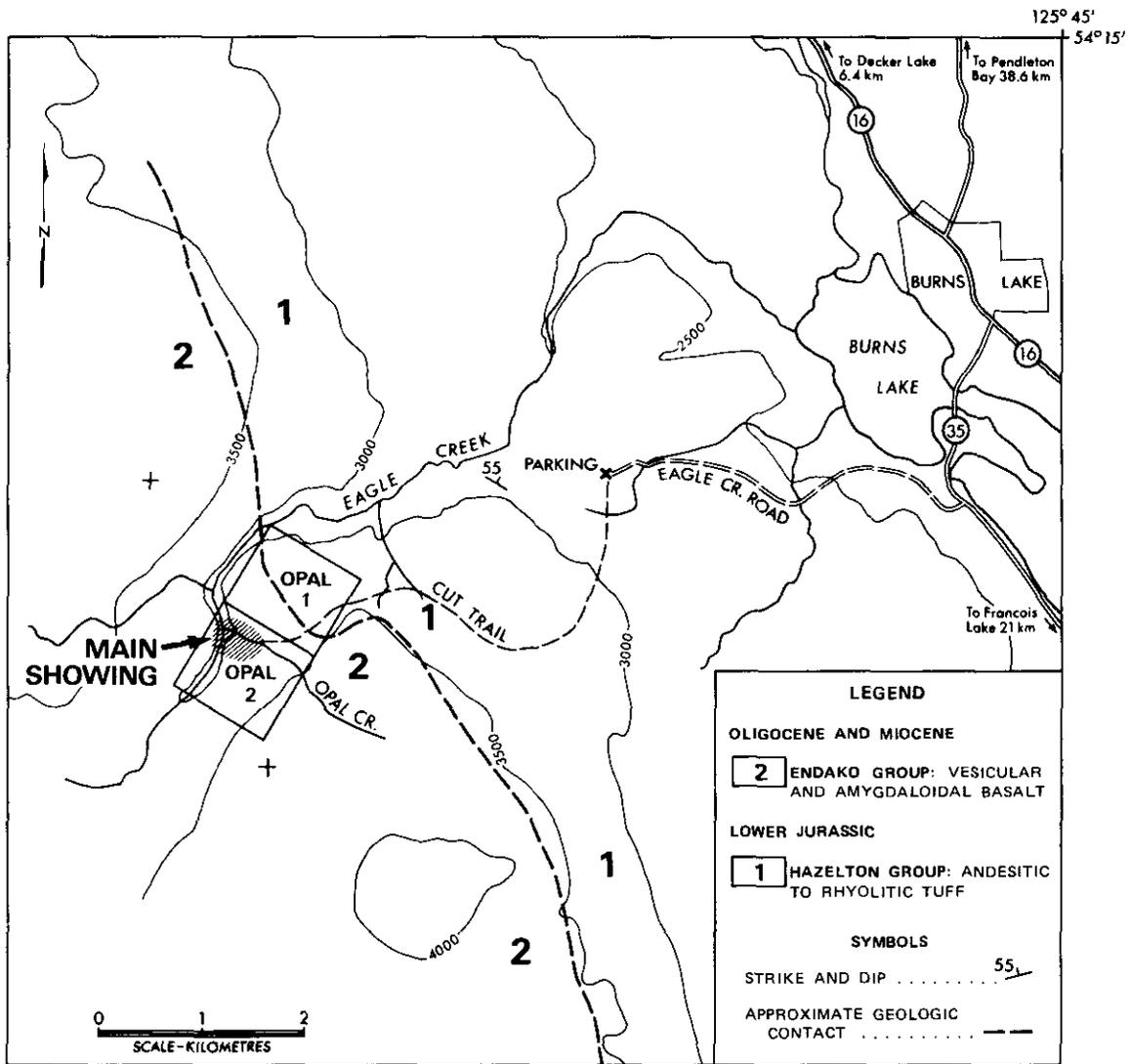


Figure 57. Location and access map of Eagle Creek Opal occurrence.