

CANADA/BRITISH COLUMBIA COAL DATA PROJECT

By B. J. Thompson

INTRODUCTION

The Geological Branch of the British Columbia Ministry of Energy, Mines and Petroleum Resources renewed an agreement for three years with the Institute of Sedimentary and Petroleum Geology (ISPG) of the Geological Survey of Canada (GSC) in March 1983. The project was initiated in 1978 to aid both provincial and federal governments in coal resource estimations and provide industry with continually updated geological data for exploration and development. With this latest agreement geological as well as non-geological coal data are being collected into a computer-processable format.

DATA COLLECTION

At present the project is in the third year of data collection under the new agreement. The Geological Branch hired a consultant, Jill Thompson (Geocal Consulting), to construct computer files of digitized coal outcrop data. Close to 18 000 outcrop locations from the Quintette, Bullmoose, and Sukunka properties in the Northeast Coalfield have been digitized. The verification process is underway for each of these locations. Within the Geological Branch computer deposit models will use the outcrop data in conjunction with subsurface data to estimate coal reserves and resources. Models for the Northern and Southern Dominion Coal Blocks (Parcels 73 and 82) have been constructed using the Geological Analysis Package designed by Cal Data Ltd (Grieve and Kilby, 1985; Grieve and Kilby, this volume).

The annual update of COALFILE is also part of the agreement (refer to article by C. Kenyon, this volume). Information was coded from the 1984 geological assessment reports as well as the backlog of 1982 and 1983 reports.

A computer model for the Sukunka property is being developed by the GSC as the basis for other geological models of deformed coal deposits in mountainous terrains. The evaluation methodology is described by Hughes (1984). The interpretation of 50 000 metres

of lithological and geophysical borehole logs for the Quintette property has been completed by Cal Data Ltd. and entered on the computer at the ISPG in Calgary (Thompson and Matheson, 1985). Cal Data Ltd. was contracted by the GSC to interpret borehole data from the Bullmoose property in the Northeast Coalfield. The South Fork area has been completed and work is progressing in the West Fork area. Carbon Creek is being considered as the next property for borehole interpretation.

DATA EXCHANGE

Over the past year the GSC has supplied the Geological Branch with a nine-track tape of most of the Quintette data and hard-copy maps for the verification process.

The Geological Branch has supplied the GSC with non-geological, location, and analytical data from COALFILE on nine-track tapes. Six floppy diskettes containing the digitized outcrop information were given to the GSC and updates will be sent when the map verification is complete.

REFERENCES

- Grieve, D. A. and Kilby, W. E. (1985): Structural Modelling of Parts of the Northern Dominion Coal Block (Parcel 73), Southeastern British Columbia (82G/10), *B.C. Ministry of Energy, Mines & Pet. Res.*, Geological Fieldwork 1984, Paper 1985-1, pp. 53-65.
- Hughes, J. D. (1984): Geology and Depositional Setting of Late Cretaceous, Upper Bearpaw and Lower Horseshoe Canyon Formations in the Dodds-Round Hill Coalfield of Central Alberta — A Computer-based Study of Closely spaced Exploration Data, *Geol. Surv., Canada, Bull.* 361, 81 pp.
- Thompson, B. J. and Matheson, A. M. (1985): Canada/British Columbia Coal Data Project, *B.C. Ministry of Energy, Mines & Pet. Res.*, Geological Fieldwork 1984, Paper 1985-1, pp. 403, 404.

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