



CANADA/BRITISH COLUMBIA COAL DATA PROJECT

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INTRODUCTION

In March, 1978 the Geological Branch of the British Columbia Ministry of Energy, Mines and Petroleum Resources and the Institute of Sedimentary and Petroleum Geology (ISPG) of the Geological Survey of Canada (GSC) initiated a project to compile non-geological, location, and analytical data into a computer-processible format. Summus Resource Evaluations Ltd. was contracted for three years to construct computer files, containing data up to 1977, which resulted in COALFILE (refer to article by C. Kenyon, this volume). Upon completion of this contract the Geological Branch assumed responsibility for updating these files.

PRESENT AGREEMENT

A new three-year agreement began in March, 1983 to collect geological data in addition to non-geological data for computer based reserve and resource evaluations. Each agency funds its own share of the project and exchanges the data collected.

OBJECTIVES

Both provincial and federal governments require sound estimates of the coal resources of British Columbia, therefore reliable and uniform criteria for each coal basin will be established. To aid in the resource estimates, geological models of coal deposits in mountainous terranes are being developed. In addition, industry is provided with access to continually updated geological data to facilitate exploration and development.

DATA COLLECTION

Data is collected by both agencies from the annual assessment reports submitted by companies in accordance with the Coal Act Regulations.

The Geological Branch's contribution is to update COALFILE and build computer files of the digitized outcrop data. A consultant, Jill Thompson (Geocal Consulting), under contract since December, 1980, has been calculating reserves and resources manually for the publication 'Coal in British Columbia,' as well as for this project.

The data is digitized on a 91 by 122 centimetre graphic tablet digitizer, a Digi-pad 5 Model by GTCO Corporation, using a 16-button cursor with a crosswire reticle and 0.002-centimetre resolution. The digitizer is connected to an IBM PC XT micro-computer, Epson printer, and Zeta digital plotter in the Geological Data Centre (refer to article by C. Kenyon, this volume).

The GSC is responsible for completing a computer model of the Sukunka coal property. In addition they will interpret approximately 40 000 metres of lithological and geophysical borehole logs annually for future modelling. Cal Data Ltd. has been contracted by the GSC since February, 1984 to analyse the Quintette property boreholes.

The GSC has installed a data entry terminal in the Geological Branch (Victoria) connected by a dedicated telephone line to the Hewlett-Packard 3000 mini-computer facility at the ISPG in Calgary.

ANALYSIS AND RESOURCE ESTIMATION

The computer based files are used to analyse, manipulate, and display the large volumes of geoscience, coal quality, and resource data generated by industry. Branch geological staff utilize the Geological Analysis Package by Cal Data Ltd., Graphics Analysis Package #1 by GTCO Corporation, and the Coal Outcrop Digitizing in-house program in the surficial data collection and reserve and resource studies.

The major benefit of the project to the Geological Branch will be the capability to rapidly update reserve and resource estimates resulting from new geological data or different economic or technological criteria. The Geological Branch provides reserve and resource estimates to the British Columbia government for resource development and land use planning decisions.

The GSC will incorporate the British Columbia resource estimates into the calculation of national coal resources.