



**CORRELATION STUDIES PEACE RIVER COALFIELD
(93P)**

By P. McL. D. Duff

Eight weeks were spent in the Province in 1978, mainly at the Charlie Lake core library. A visit was made to Edmonton from August 9th to 12th to discuss with Dr. Charles Stelck, of the University of Alberta, fossil identifications undertaken by him on material from drill cores, to have further collections identified and to discuss areas, both geographical and geological, within the coalfield, that would repay further detailed examination.

Two visits were made to the Sukunka area (August 20-21, 24-25), one particularly to examine a prolific fossiliferous horizon in the Gates member found during the mapping. The other visit was to locate, with R. Karst, the cores from the holes drilled by the former Coal Division of the Department of Lands and Forests in the Hasler, Willow, and Noman Creek areas during the early 1950's. The core boxes were found but both *they and the cores were weathered and useless, which is unfortunate as they could have proved an invaluable link in solving some of the stratigraphic problems in a particularly obscure area of the geology.*

*The opportunity was also taken, while in the area, to visit the B P Explorations' Sukunka coal camp and discuss stratigraphic problems with their geologists, and also to walk a stretch of the Grizzly pipeline trench (crossing the Manalta property) with R. Karst. The exposed section yielded valuable information on the structural complexities, emphasizing the very real difficulties of mapping and drilling in that area. A potentially useful fossiliferous horizon was seen, although it is not absolutely certain it is *in situ*, and we hope Dr. Stelck will throw some light on the discovery.*

The main objective of this year's work was to attempt to complete the first overall examination of a representative sample of cores from the whole length of the coalfield. To this end some 5 000 metres of core from 22 bore holes were examined. A concentrated effort was made on the detailed paleontological studies of cores at Carbon Creek, in conjunction with examination of cores from East Mount Gething and Cinnabar Peak to help solve correlation problems. Cores from Pan Ocean's Pine Pass property were examined as well. Time prevented extensive examination of cores from the Saxon and Quintette areas in an attempt to define the extent of the marine horizon in the middle of the Gates. Further fossil identifications will be necessary before firm conclusions can be drawn, but the broad stratigraphic picture that emerged in 1977 seems to be confirmed.

Two weeks were spent in Victoria obtaining information from the files and attempting to draw up graphic logs of, and correlate, bore holes. Preparation of a bulletin on the stratigraphic studies in the Peace River Coalfield will be possible after one more season's work.