NEW DATA ON COOLING HISTORY OF THE SOUTHERN BOWSER BASIN, DEFORMATION AND EARLY BASIN SEDIMENTATION IN THE NORTHERN BOWSER BASIN, AND PROGRESS ON DIGITAL FIELD DATA COMPILATION

C.A. Evenchick¹, P.B. O’Sullivan¹, J. Joseph¹, D. Ritchie¹, J.W.F. Waldron¹, J.F. Gagnon¹, and W. Loogman¹

¹Geological Survey of Canada, 625 Robson St., Vancouver B.C.; ²Apapite in Zinc Inc., Virden, ID, USA; ³Department of Earth and Atmospheric Sciences, University of Alberta, Edmonton AB

INTRODUCTION

The Bowser Basin, located in the northwestern part of British Columbia, is one of the most important hydrocarbon provinces in western Canada. The basin is characterized by a series of north-northeast-trending folds that were active during the Late Jurassic to Early Cretaceous. These structures were formed in response to the collision of the Farallon and North American plates. The basin was a significant source of hydrocarbons during the Cretaceous Period, and its development is closely tied to the structural history of the region.

1 EARLY BOWSER BASIN HISTORY AND STRUCTURAL ANALYSIS

Regional Record of Initiation of Sedimentation in the Bowser Basin

The Bowser Basin was initiated in the late Early Jurassic, with deposition of the Bowser Lake Group. The basin had eastern (Omineca Belt) and western (Skeena Fold Belt) depocenters, with the eastern depocenter showing more rapid sedimentation.

2 APATITE FISSION TRACK THERMOCHELORONY

Project Overview

The objective of the project was to determine the cooling history of the Bowser Basin. The project was completed in 2006.

3 DIGITAL ASPECTS OF THE FIELD-TO-PUBLICATION PROCESS

The project was completed in 2006. The Bowser Basin project highlights the importance of using digital data in the exploration process. The results of the project have contributed to the understanding of the structural and sedimentary history of the Bowser Basin, and have provided new insights into the exploration potential of the region.

ACKNOWLEDGEMENTS

The project was supported by the Canadian Petroleum Geoscience Association and the Canadian Society of Petroleum Geologists. The authors would like to thank all of the project participants.

Sécurité de l’approvisionnement énergétique
La mise en valeur des ressources du Nord
Secure Canadian Energy Supply
Sécurité de l’approvisionnement énergétique
du Canada