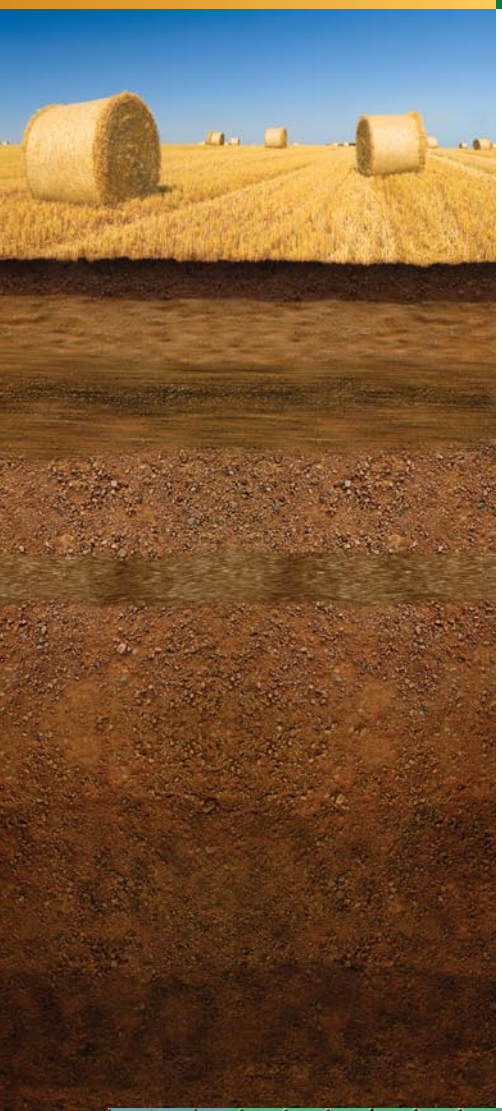
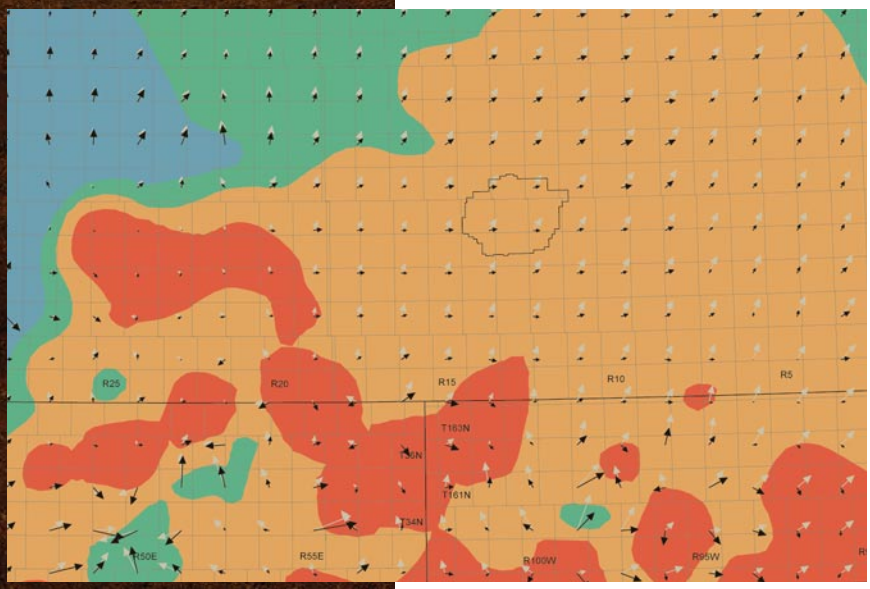


Saskatchewan Phanerozoic Fluids and Petroleum Systems

Overview

Finding, extracting and exploiting hydrocarbons is difficult. To gain a better understanding of where and when hydrocarbons were generated, and where they migrated in the subsurface of Saskatchewan, the Petroleum Technology Research Centre in Regina has entered into a research partnership with the University of Regina, the University of Alberta, and the Petroleum Geology Branch of the Saskatchewan Ministry of Energy and Resources to address these fundamental questions.



A hydrogeologic map showing vectors of the influence of potentiometric surface and brine density on subsurface fluid flow.

The Project

The Saskatchewan Phanerozoic Fluids and Petroleum Systems project is examining how basins, hydrocarbons and other fluids in the Saskatchewan subsurface have evolved over geologic time.

Aspects of the study include mapping the hydrogeology of Saskatchewan's subsurface, filling gaps in the southwest and northwest parts of the province, and ultimately providing seamless hydrogeologic maps of the Phanerozoic succession in Saskatchewan. The distribution of heat within the sedimentary package will be evaluated to provide geothermic data for petroleum systems modeling. New organic geochemical data will be generated and added to a database that will be made publically available and that describes the distribution and nature of organic matter. These data will be incorporated into state-of-the-art 3D

Saskatchewan Phanerozoic Fluids and Petroleum Systems

ptrc
Petroleum Technology Research Centre

models describing the maturation, generation and migration of petroleum into, and within, Saskatchewan.

The Team

Dr. Stephen Bend of the University of Regina and Dr. Ben Rostron of the University of Alberta are principal investigators in this project. They will be training and leading a team of graduate students, adding capacity to the petroleum geosciences programs at both of these universities. Expertise and guidance is also being provided by petroleum geologists from the Petroleum Geology Branch of the Saskatchewan Ministry of Energy and Resources. This project continues the Petroleum Technology Research Centre's role in building petroleum research capabilities critical to the future of an energy-secure Canada.

The project encourages industry support and inquiries.

Gavin Jensen of the Saskatchewan Ministry of Energy and Resources checks core samples at the Subsurface Geological Laboratory in Regina.

Contacts:

For information on this research project, contact:

Dr. Steve Whittaker
Senior Project Manager
Petroleum Technology Research Centre
6 Research Drive
Regina, SK S4S 7J7
Ph: 306.787.9910

Dr. Ben Rostron
Professor
Department of Earth and Atmospheric Sciences
1-26 Earth Sciences Building
University of Alberta
Edmonton, AB T6G 2E3
Ph: 780.492.2178

Dr. Stephen Bend
Professor
Department of Geology
University of Regina
Regina, SK S4S 0A2
Ph: 306.585.4021

Ms. Melinda Yurkowski
Acting Director
Petroleum Geology Branch
Exploration & Geological Services
Ministry of Energy and Resources
Ph: 306.787.0650