

## **Foothills to Fairmont: A Rocky Mountains transect to the Trench**

Field trip leaders:

P. Pedersen, P. MacKay, K. Boggs, D. Eaton & the University of Calgary REDEVELOP Team

*Co-sponsored by: GAC Geophysics Division and CGU Solid Earth Section*

**Pre-meeting field trip – 2 days: Friday, May 8 to Saturday, May 9, 2020**

A scenic field trip featuring links between geology, structural architecture, fault-fluid interaction, hydrology, geophysics, and geothermal resources. This field tour will focus on the geology and structural architecture of the mountain ranges and the Western Canada Sedimentary Basin, unconventional reservoirs, fault-fluid interaction, hydrogeology, geophysics and geothermal resources. Day 1 will have a Geology focus, and Day 2 will focus on Geophysics and the Hot Springs. We will travel in style on a 56-passenger bus (with bathroom) provided by National Motorcoach. Hiking boots or sturdy footwear are required (no running shoes). Dress in layers. Please bring your own refillable water and hot beverage bottles. Overnight accommodations at the Fairmont Hot Springs Resort are included in the fee.

Day 1 – Friday, May 8

- 1) Shell Gas Plant, overview geology of WCSB, history of hydrocarbon production
- 2) Kananaskis Barrier Lake Institute field station stop (tentative) – hydrology
- 3) Mount Yamnuska, structural geology of the Rocky Mountains
- 4) Grotto Canyon (by Exshaw). Fractures and tightly folded carbonates
- 5) Mt Norquay road (Banff), structural overview and Montney reservoir

Day 2 – Saturday, May 9

- 6) Fairmont Hot Springs, largest carbonate mound deposits
- 7) Rocky Mountain Trench overview
- 8) Red Canyon, Radium Hot Springs
- 9) Basin to ramp transition (Kootenay National Park) and Marble Canyon

**Enrollment cap for field trip:** 50 attendees

**Cost of field trip:** \$CAD 500 (\$CAD 400 for students)

(meeting registration is **not** required)

**What's included:**

- All meals on Day 1 and breakfast, packed lunch on Day 2
- transportation by 56-passenger motorcoach
- accommodation (assuming two people per room) at Fairmont Hot Springs Resort
- 1-hour preview talk and field tour booklet will be provided on Thursday, May 7 (3:00 - 4:00 pm) at 2nd floor Hilton Garden Inn Downtown Calgary as part of the REDEVELOP Conference wind-up.

**Departure time and location:** 07:30 Friday May 8, 2020; location Hilton Garden Inn Downtown Calgary (near Convention Centre).

**Return time and location:** 17:00 Saturday May 9, 2020; location same as departure location.