



## Toward an Integrated Tectonic Model for the Canada Basin: Implications for North Alaska

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Many tectonic models have been presented over the past decades for the evolution of the Canada Basin. We present new data and integrate existing geological and geophysical data to support our working model. In this presentation, we show how the incorporation of these data from the region leads to an integrated model for the geological history of the Beaufort and Chukchi Seas, as well as the Alaska North Slope.

The model invokes a rotational model for Canada Basin seafloor spreading and suggests that the Canada Basin was largely open before the formation of the prominent Lower Cretaceous Unconformity (LCU) in North Alaska as well as emplacement of the High Arctic Large Igneous Province (HALIP). The proposed model also introduces solutions for enigmatic elements such as the Chukchi Borderlands, the Paleozoic Siberian Fauna in North Alaska, and the nature of the LCU.

In this presentation, we briefly discuss our

### AGS Luncheon

**Date & Time:** Nov. 17<sup>th</sup>, 11:30 am – 1:00 pm

**Program:** Tectonic Model for Canada Basin

**Speaker(s):** Tom Homza

**Place:** BP Energy Center

**Reservations:** Please make your reservation before noon Tuesday, Nov. 15<sup>th</sup>, 2011.

**Cost:** Seminar only, no meal: Free

Reserve a box lunch: \$15

Reserve a hot lunch: \$20

Lunch with no reservation:  
On an "as-available" basis only

**E-mail reservations:** [vp@alaskageology.org](mailto:vp@alaskageology.org)  
Or phone (907) 644-4429

**For more information:** visit the AGS website:

[www.alaskageology.org](http://www.alaskageology.org)

techniques and the problem of the Chukchi Borderlands. We then present regional models for key evolutionary periods of the Chukchi Sea and North Slope.

### **About the Speaker:**

Tom Homza is currently Shell Exploration and Production Company's Principal Regional Geologist for Alaska. He graduated with a BS in geology from the University of Vermont in 1989. He moved to Alaska that same year, where he attended the University of Alaska Fairbanks. His work focused on the structural geology of the Brooks Range and he received his MS in 1992 and PhD in 1995 from UAF. Tom went to work for BP in Anchorage in 1995, then Encana Oil and Gas in 2002, working as an explorer for most of that time. Tom moved to Shell in 2005, when he opened the Shell office in Anchorage. Tom is a past President and Vice President of AGS; he currently sits on the AGS Board of Directors.

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### **From the President's Desk ....**

I would like to wish all the members a prosperous and happy Thanksgiving and remind everyone that next month's (December) luncheon is scheduled for the second Thursday of the month (December 8) and is a joint meeting of the Alaska Geological Society and the Geophysical Society of Alaska.

Keith Torrance has officially taken over chairmanship of the Advertising committee from Tim Ryherd after fifteen years of service to the society. Keith is an adjunct instructor in the Department of Geosciences at the University of Alaska Anchorage with specialization in environmental geology. Any future business concerning advertising the AGS newsletter should be directed to Keith at [kwtorrance@uaa.alaska.edu](mailto:kwtorrance@uaa.alaska.edu).

I have appointed Chad Hults to assume chairmanship of the Field Trip committee from Tom Plawman. Chad is working with Dave Schoderbek and Robert Blodgett to determine the best way to reintroduce AGS field trips. They are currently seeking volunteers willing to lead one-day field trips. If you have an idea for a field trip and would be willing to lead it next spring, please contact Chad Hults at [chults@usgs.gov](mailto:chults@usgs.gov).

As I mentioned last month Dick Garrard has begun preparations for the 2012 AGS Technology Conference to be held in Fairbanks next spring. He is contemplating an oral session organized around

#### **The Alaska Geological Society**

#### **LUNCHEON SCHEDULE 2011 - 2012**

**Updates on the web at:**  
**<http://www.alaskageology.org>**

|                |   |
|----------------|---|
| September 2011 | Thursday, Sept. 15 <sup>th</sup> , Paul Decker, DNR Source-Reservoired Oil Resources, North Slope Alaska  |
| October 2011   | Thursday, Oct. 20 <sup>th</sup> , Kristine Crossen and David Yesner, UAA, Youngest Mammoths in America: 5700 Year Old Mammoth Remains from Qagnax Cave, Pribilof Islands, Alaska                          |
| November 2011  | Thursday, Nov. 17 <sup>th</sup> , Tom Homza, Shell Exploration & Production, Toward an Integrated Model for the Canada Basin: Implications for North Alaska   |
| December 2011  | Thursday, Dec. 8 <sup>th</sup> – Tad Smith (SEG 2011 Honorary Lecturer), Apache Corporation, Practical Seismic Petrophysics: The Effective Use of Log Data for Seismic Analysis (Joint meeting AGS / GSA) |
| January 2012   | Tentative   |
| February 2012  | Tentative   |
| March 2012     | Tentative (AAPG Distinguished Lecturer)   |
| April 2012     | Tentative   |
| May 2012       | Tentative   |


**If you would like to volunteer a talk or would like to suggest a speaker, please contact Dick Garrard at 644-4429.**



the theme of “The Alaska Geological Resource Potential – Energy for the Future” and a poster session open to any and all topics. The date and venue for the conference are still in flux, but anyone interested in being involved with the conference, especially folks in Fairbanks, should contact Dick ([rgarrard@talismanusa.com](mailto:rgarrard@talismanusa.com)).

This month’s luncheon presentation by Tom Homza of Shell Exploration and Production Company will be on “Circum-Arctic Tectonic Evolution: Toward an Integrated Model for the Amerasian (Canada) Basin & Surrounding Regions” is sure to draw a large audience. Come early to get a good seat.

- Ken



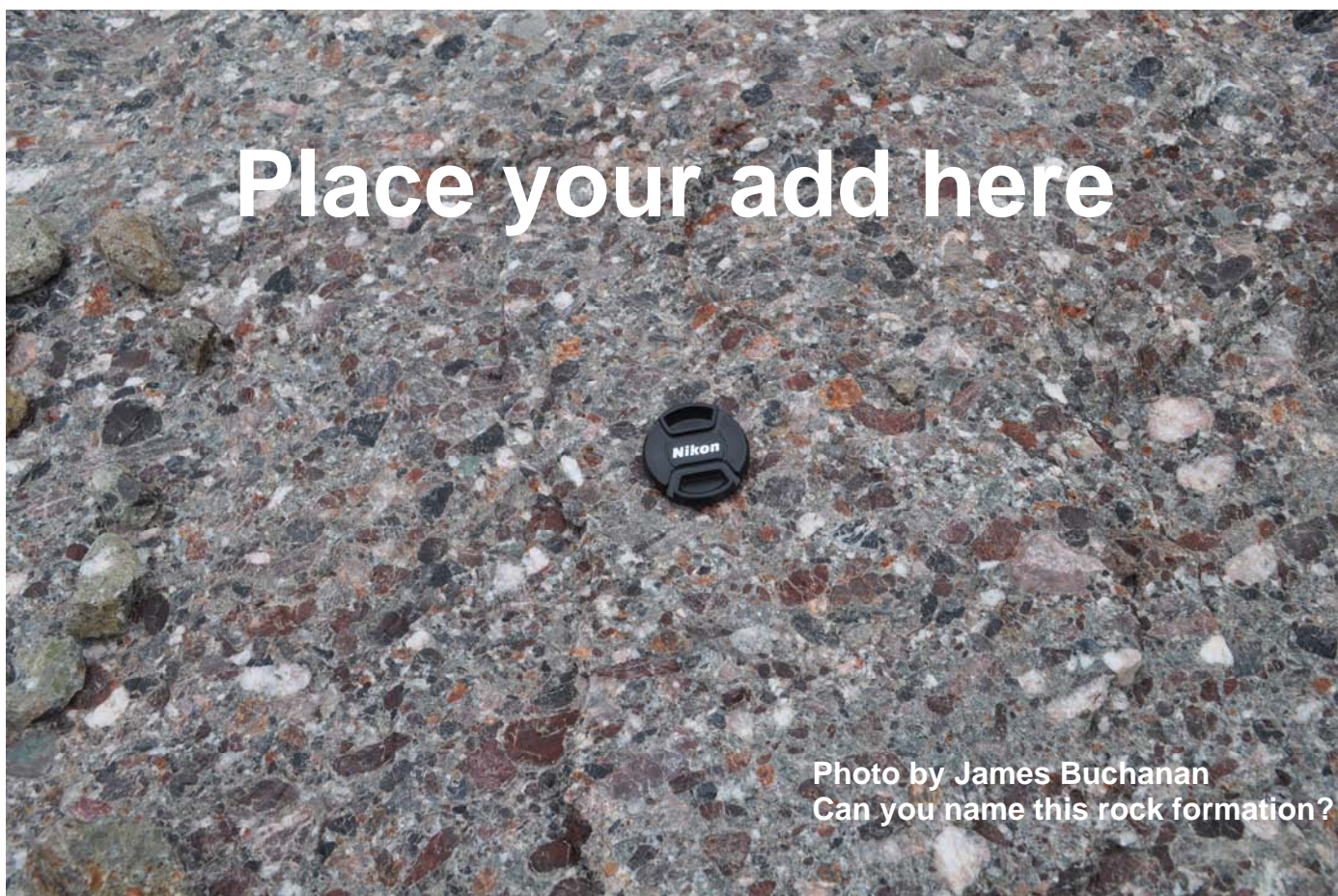
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## Meeting Information

The **American Geological Institute** provides a comprehensive list of national and international geoscience meetings at: <http://calendar.agiweb.org>

### Local Meetings:

#### American Water Resources Association—Alaska Section

<http://www.awra.org/state/alaska/index.html>

#### Alaska Geological Society

<http://www.alaskageology.org>

Lunch meetings are held monthly September through May in Anchorage. For more information, contact Jim Clough, 451-5030.

#### Alaska Miners Association

<http://www.alaskaminers.org/>

The Anchorage branch of the AMA holds weekly meetings at 7 AM every Friday at the Denny's on Northern Lights and Denali. They hold regular luncheon meetings in association with SME. For more information, contact the AMA office at 563-9229.

#### American Institute of Professional Geologists

<http://www.aipg.org>

AIPG holds regular quarterly evening Section meetings in Anchorage and Fairbanks. For more information contact Mark Lockwood, President, at Shannon & Wilson, Inc., in Fairbanks, 907-458-3142.

#### Chugach Gem & Mineral Society

<http://www.chugachgms.org>

CG&MS holds all meetings at the First United Methodist Church on 9<sup>th</sup> Avenue. Contact their hotline at 566-3403 for information on regular monthly business meetings, monthly potlucks, and guidebook sales, including the new Alaska Rockhound Guidebook.

#### Geophysical Society of Alaska

<http://gsa.seg.org/>

Luncheon meetings are held monthly September through May at the ConocoPhillips Tower. For more information, contact Phil Rorison, 265-6321

#### Society of Petroleum Engineers

<http://alaska.spe.org/>

#### UAS Environmental Science Program

<http://www.uas.alaska.edu/envs>

#### National Association of Geology Teachers (NAGT)

<http://www.nagt>

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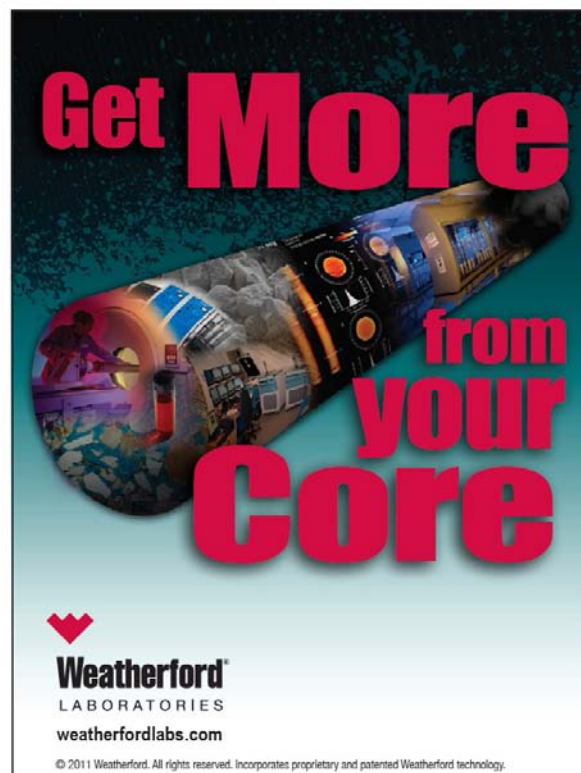
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The Alaska Geological Society is an organization which seeks to promote interest in and understanding of Geology and the related Earth Sciences, and to provide a common organization for those individuals interested in geology and the related Earth Sciences.

This newsletter is the monthly (September-May) publication of the Alaska Geological Society, Inc. Number of newsletters/month: ~300

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### MEMBERSHIP INFORMATION

AGS annual memberships expire November 1. The annual membership fee is \$20/year. You may download a membership application from the AGS website and return it at a luncheon meeting, or mail it to the address above.

Contact membership coordinator Greg Wilson with changes or updates (e-mail: [gregory.c.wilson@conocophillips.com](mailto:gregory.c.wilson@conocophillips.com); phone: 907-263-4690)

All AGS publications are now available for on-line purchase on our website. Check to see the complete catalogue.

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### Membership Notes

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