

MEETINGS, CONFERENCES & WORKSHOPS

Tenth Williston Basin Horizontal Well & Petroleum Conference by Paul Diehl

The Tenth Williston Basin Horizontal Well & Petroleum Conference was held Sunday, May 5 through Tuesday, May 7 at the Radisson Inn in Bismarck, North Dakota. The customary Sunday evening Ice Breaker “kicked off” the meeting. On Monday morning, the Honorable Lorne Calvert, Premier of Saskatchewan, opened the technical presentation sessions. He welcomed the conference participants and recognized the international cooperation past workshops and conferences have generated in the oil and gas industries of Canada and the United States. Later, at the Monday luncheon, North Dakota Governor, John Hoeven, welcomed conference attendees to North Dakota and assured them that the oil industry is important to the state.

As it has been since inception, the conference was organized and hosted by the North Dakota Geological Survey and the Saskatchewan Industry and Resources (formerly Saskatchewan Energy and Mines). Twenty-six energy industry and associated companies helped sponsor the workshop with their generous contributions. We thank them for their continued support, which allows us to minimize participants’ expenses. Judging from most comments heard: “...a first class event;” “...the best conference yet;” “...attended many meetings in many places over the years, and this is certainly one of the best;” - the conference again was a success.

On Sunday, before the conference-opening Ice Breaker, Robert G. Knoll of Maurer Technologies, Inc. presented an eight-hour short course titled “Horizontal Technology for Geologists – Version 2002”. One of the leading experts on horizontal wells, Mr. Knoll travels extensively to all the oil and gas producing provinces around the world offering short courses and week-long “in-house” instruction on horizontal well technologies to petroleum engineers and geologists. Reports from the people who participated in this course were all very laudatory.

This year 318 conference registrants (Fig. 1), representing the spectrum of petroleum industry occupations, came from 13 states and three Canadian provinces (Fig. 2). Forty-four displays and posters representing energy industry service companies, government agencies, and consultants were set up in the courtyard and the Grand Pacific ballroom areas of the Radisson Inn. A total of twenty presentations were given during the two-day conference. Oral presentations

included the updates of horizontal well activity as well as significant non-horizontal drilling activities in the states and provinces within the Williston Basin. Technical papers included topics such as new techniques for making casing-conveyed perforations, pressure-activated sealant to repair casing leaks, storage of CO₂ in Mississippian carbonates, review of waterflood conformance in the Williston Basin, gel polymer treatments to reduce water production, advances in completion design and execution in mature reservoirs, coalbed-methane potential of the Williston Basin, geology of the Bakken Formation middle member in eastern Montana and western North Dakota, a spectroscopy device to give an in situ or down-hole measurement of methane content in coal beds, GPS precision and accuracy, techniques for creating multi-lateral wells, horizontal exploration and development in the Madison Formation in Billings and Stark counties, horizontal wells in redevelopment of fields along the Cedar Creek Anticline, and horizontal line-drive waterflood exploitation of East Lookout Butte and Cedar Hills South units. Ample time was also allotted for conference participants to engage in individual discussions.

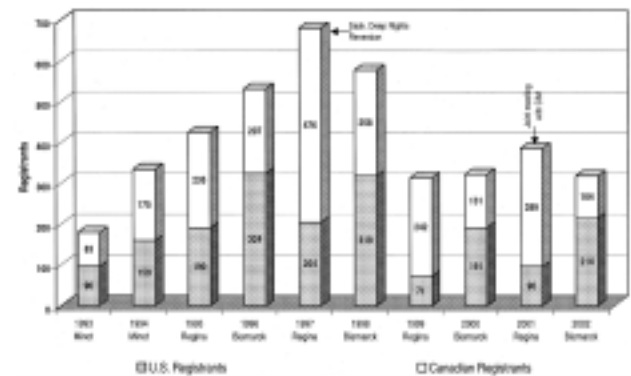


Figure 1. Annual registration in each of the ten Williston Basin Horizontal Well Workshops and Conferences.

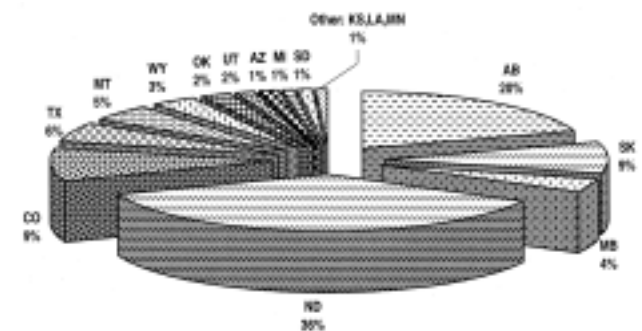


Figure 2. States and provinces represented as a percent of total conference registration.

On Tuesday morning, John Bluemle, Director of the North Dakota Geological Survey, and George Patterson, Executive Director of the Exploration and Geological Services Division, Saskatchewan Industry and Resources, renewed the Memorandum of Understanding between the two agencies. This memorandum continues the open cooperation and exchange of ideas between the two agencies. Wayne Stenehjem, North Dakota Attorney General, spoke to the conference participants following the signing of the Memorandum. Later, during the luncheon, Roger Johnson, North Dakota Commissioner of Agriculture, addressed the gathering. Both men's remarks were of encouragement and support. Ed Murphy presented a talk on coalbed-methane potential in North Dakota, and Julie LeFever discussed the middle member Bakken play in Montana and North Dakota.

All registrants received a 245-page conference volume containing the conference agenda and an outline, abstract, or paper of the oral presentations. This volume can be purchased from the Saskatchewan Industry and Resources for \$20 US (\$25 Canadian). Please make checks payable to "Horizontal Workshop" and mail to: Vivian Barkman, Horizontal Well Workshop, c/o Saskatchewan Industry and Resources, 2101 Scarth Street, Regina, SK, S4P 3V7 Canada. Vivian can be reached at (306) 787-7662, fax (306) 787-2333, or e-mail: vbarkman@ir.gov.sk.ca.

2002 Regional State Earth Science Information Center (ESIC) Meeting

This year's meeting was held on May 14 and 15 at the USGS EROS Data Center near Sioux Falls, South Dakota, and was co-hosted by the South Dakota Geological Survey (SDGS) and the EROS Data Center. State representatives from 20 states in the Mid-Continent Mapping Center (MCMC) area and the Rocky Mountain Mapping Center (RMMC) were invited to attend. The program included a tour and a workshop at the facility, as well as presentations by EROS Data Center staff and delegates from MCMC, RMMC, and SDGS. The agenda also provided for a series of short overviews by state ESIC representatives, describing the ESIC activities in their own state. Lorraine Manz compiled and presented the update on ESIC activities in North Dakota.

Association of American State Geologists Remote Sensing Workshop

This workshop, sponsored by NASA, was also held at the EROS Data Center on May 15 and 16 and was open to all 50 state agencies. Its purpose was to provide an introduction to remote sensing concepts and applications. The first day of the workshop covered the principles of remote sensing with

an in-depth look at geologic remote sensing. The second day was devoted to subsidence detection and other applications of Light Detection and Ranging (LIDAR) and interferometric radar, and a seminar on data access at the EROS Data Center, which included an afternoon of hands-on time at a computer.

Coalbed-Methane Meeting in Watford City

Ed Murphy was an invited speaker at a coalbed-methane meeting, which took place in Watford City on February 28. Approximately 80 people attended the meeting sponsored by the McKenzie County Energies and Taxation Association. Murphy discussed the coal stratigraphy in the area and some of the known occurrences of methane in western North Dakota. Other speakers from North Dakota included Lynn Helms, Director of the ND Oil and Gas Division; Gary Bracht, ND Department of Health; and Ron Ness from the ND Petroleum Council.

AASG Meeting in Washington, D.C.

In March, Ed Murphy represented John Bluemle at the annual Association of American State Geologists Liaison Meeting in Washington, D.C. During the three-day meeting, the attendees discussed natural resource issues with several federal agencies (including the Geological Survey, Forest Service, Bureau of Land Management, Department of Energy, National Science Foundation, Natural Resource Conservation Service, National Aeronautics and Space Administration, and others), congressional delegations and their staff, and natural resource organizations.

Digital Mapping Conference

On May 18 through 22, 2002, Lorraine Manz and Mark Gonzalez attended the Digital Mapping Conference in Salt Lake City. The conference provided a forum for geologic mappers to exchange ideas and methods for making geologic maps in the digital age. The conference included papers on new developments in software, hardware, such as data loggers and global positioning receivers, and techniques for converting field data to digital data.

Molding and Casting Workshop

On February 15, Johnathan Campbell, NDGS Paleontology Specialist, conducted a workshop on molding and casting. The morning was spent discussing the many types of molding techniques (i.e. latex, silicone, and alginate) and casting mediums (i.e., plaster, Pour-A-Mold). Time was also spent discussing the reasons for making a mold of an object (i.e. education, display, scientific study). During the afternoon, Campbell demonstrated different mold-making techniques and showed the numerous casting mediums

available. After the demonstrations were completed, the participants made a few molds of their own and made casts from those molds. Time was also spent demonstrating coloring techniques for casts. The participants came from Minot State University, Fargo Public Schools, and the State Historical Society of North Dakota.



Linda Olson, Minot State University Dept. of Art, and Chuck Stalnaker, State Historical Society of North Dakota prepare a mold of a *T. rex* tooth for casting.