Meetings, Conferences and Workshops

Twelfth Williston Basin Horizontal Well & Petroleum Conference
Held in Minot, North Dakota
By Paul Diehl

The twelfth annual Williston Basin Horizontal Well & Petroleum Conference returned to its 1993 birthplace in 2004. On Sunday, May 2nd through Tuesday, May 4th the conference was held at the Holiday Inn Riverside, Minot, North Dakota, the same facility in which the first Williston Basin Horizontal Well Workshop was held eleven years ago. Judging from the many favorable comments heard, this year’s conference may have been the best yet.

This year, two pre-meeting short courses were held on Sunday. Robert Knoll, Maurer Engineering, Inc., presented the day-long, popular and highly informative “Complex Well Technology for Earth Scientists/Engineers; A Multidiscipline Review of Application Screening, Design, Implementation and Intervention of Horizontal and Complex Wells.” Sunday afternoon Kathleen Spilman, PE, Keitu Engineering, provided valuable information on how oil producers can develop an oil SPCC Plan which will meet the EPA requirements.

Visiting with friends, old and new, viewing technical displays and posters, and enjoying good food and refreshment at the Sunday evening Ice Breaker, started the conference off on the right track. Monday morning the Honorable Eric Cline, Minister of Saskatchewan Industry and Resources, 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 Saskatchewan and North Dakota. At the Monday luncheon, Mr. Jack Dalrymple, Lt. Governor of North Dakota, welcomed the conference attendees and assured them that the oil industry is vitally important to the State of North Dakota.

As it has been since inception, the conference was organized and hosted jointly by the North Dakota Geological Survey and the Saskatchewan Industry and Resources. Eighteen 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.

This year’s 267 conference registrants (Fig. 1) represented the spectrum of petroleum-industry occupations. Registrants came from 13 states and four provinces (Fig. 2). Thirty-eight displays and posters representing energy-industry service companies, government agencies, and consultants were set up for participants’ inspection and discussion. Oral presentations included the updates of significant drilling and completion activities in the states and provinces within the Williston Basin. In addition to the annual summaries of oil-industry activities in each of the states and provinces in the Williston Basin, technical papers included the following topics:

- Evaluation of reservoir characteristics to assess CO₂ miscible flooding in ND
- Using synergistic H₂S prevention and increased oil recovery systems
- Uses of pump-off controllers (POCs) and rod pump controllers (RPCs).
- Transient voltage surge suppressors on well pumps and electrical facilities
- 4-D seismic monitoring of a CO₂ flood in Weyburn Field, Saskatchewan
- Extending the limits of seismic resolution
- Hydraulic fracture stimulation of horizontal laterals
- Improving mature field economics using multilateral well construction
- Applications for surface geochemical exploration in mature basins
- Results and future potential of horizontal drilling in the West Flat Lake Nisku Unit
- Horizontal well technology to revitalize abandoned fields
- Cased-hole dynamics tester
- Determining water entry zones in horizontal laterals
- Technical changes in the application of underbalanced drilling
- Integrated approach for evaluating tight hydrocarbon shales
- A look at EOR units in North Dakota

A total of twenty-three presentations were given during the two-day conference. Much longer than typical breaks between sessions have become standard procedure for these conferences. This allows ample time for conference participants to engage in individual discussions.

Mr. Roger Johnson, North Dakota Commissioner of Agriculture addressed the conference attendees during Tuesday’s luncheon. His remarks concerning the conference’s history and relevance to the oil industry of North Dakota and Saskatchewan were both informative and entertaining. Mr. Johnson also reflected on the spirit of cooperation and communication between Canadians and Americans with which this conference has been organized and attended.

Roger also presented awards of appreciation recognizing the efforts of three people who have had key roles in producing this series of conferences. Paul Diehl, of the North Dakota Geological Survey, received an elk with the inscription “In
appreciation - Williston Basin Horizontal Well & Petroleum Conference.” Paul has been instrumental in compiling the programs for nine of the twelve conferences, contacting potential speakers, developing the agenda, compiling and producing the preprint volumes for each US meeting and, in general overseeing most of the activities relating to the conferences. In addition, Roger recognized Malcolm Wilson, University of Regina, (formerly with Saskatchewan Industry and Resources), and John Bluemle, North Dakota Geological Survey, for their foresight in initiating this series of conferences and for their ongoing roles for the past 12 years in continuing them. Both Malcolm and John were presented with a white bison inscribed with the same words as Paul’s elk.

A 360-page conference volume, including the conference agenda, an outline, abstract, or short paper of the oral presentations, was provided to all registrants. 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: Horizontal Workshop, c/o Vivian Barkman, 2nd Floor, 2103 – 11th Avenue, Regina, SK, S4P 3V7 Canada. Vivian can be reached at (306) 787-7662, fax (306) 787-2198, or e-mail: vbarkman@ir.gov.sk.ca. Past conference volumes may also be purchased from Vivian.

Current plans are to hold the Thirteenth Williston Basin Horizontal Well & Petroleum Conference in Regina, Saskatchewan at the Delta Regina Hotel. The 2005 conference will be held on April 24 – 26. Mark your calendar and join us in Regina in 2005.

American Association of Petroleum Geologists Annual Convention

Randy Burke attended the 2004 American Association of Petroleum Geologists’ Annual Convention, which was held in Dallas, TX on April 18-21.

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Digital Mapping Workshop

On May 16 through 19, 2004, Fred Anderson attended the Eighth Annual Digital Mapping Techniques (DMT 04) Workshop, which was held on the campus of Portland State University in Portland, Oregon. The main focus of the workshop was on the design and implementation of databases in Geodatabase and SDE (Spatial Database Engine), and on progress towards the building of the National Geologic Map Database. Ninety-four attendees were present at the meeting, which included a diverse array of geologists, GIS specialists, cartographers, and information technology professionals from many of the state geological surveys, the USGS, the Geological Survey of Canada (GSC) and Natural Resources Canada (NRC).

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Friends of the Pleistocene Field Conference

The 50th annual Midwest Friends of the Pleistocene Field Conference met on June 4 through 6, 2004 on the campus of St. John’s University/College of St. Benedect in central Minnesota. John Bluemle and Lorraine Manz were among the 96 earth scientists who attended the meeting, which was sponsored by the Minnesota Geological Survey. Field trips and discussions concentrated on the “Landforms, Stratigraphy, and Lithologic Characteristics of Glacial Deposits in Central Minnesota” and included visits to several sites that highlighted the geomorphology, stratigraphic relationships, and unit characteristics of this unusually active region of pre-Late and Late Wisconsinan glaciation. At dinner on Saturday evening special recognition was given to Herb Wright and Al Schneider, who led the fifth Midwest Friend of the Pleistocene meeting in the same area in 1954.

The 2005 meeting will convene in Streeter, Illinois. In 2006 a meeting is tentatively planned for central North Dakota. A proposal to base a field conference around Lewis and Clark’s geologic observations along the Missouri River, with emphasis on those related to Pleistocene geology, was received with enthusiasm by members at the Minnesota meeting.