WILLISTON BASIN PETROLEUM CONFERENCE AND PROSPECT EXPO By Ed Murphy

The 14th annual Williston Basin Petroleum Conference and Prospect Expo was held May 7-9, 2006 in Minot, North Dakota. This year's conference had 530 registrants, the third highest total in the last fourteen years and more than twice the attendance of the meeting in Minot two years ago. "Part of that increase can be attributed to the high level of activity in the Williston Basin and part can be attributed to the promotional efforts of Ron Ness and the North Dakota Petroleum Council, "said conference co-chair Lynn Helms, Director of the North Dakota Department of Mineral Resources. The ND Petroleum Council and the ND Department of Mineral Resources were co-sponsors of this year's event along with Saskatchewan Industry and Resources. The conference also saw a record number of people, 150, attending one of four workshops that were offered on Sunday. These workshops included: Complex Well Technology for Earth Scientists/Engineers taught by Bob Knoll, Maurer Technology Inc.; Optimizing Frac Treatments in the Bakken -Determining Realistic Fracture Conductivity and the Impact on Well Performance instructed by Mike Vincent, Insight Consulting, and John Kullman, CARBO Ceramics; Salt and Hydrocarbon Contaminated Soil Remediation presented by Len Gawel, Bio-Rem Consulting; and a Bakken Core Workshop taught by Julie LeFever, North Dakota Geological Survey.

In all, thirty talks were presented at the conference. Activity updates were presented by the oil and gas agencies for North Dakota, South Dakota, Montana, Saskatchewan, and Manitoba. North Dakota Governor John Hoeven spoke of the importance of the oil and gas industry to the economy of North Dakota during his luncheon address. Those sentiments were also expressed by North Dakota Tax Commissioner Cory Fong and Saskatchewan Industry and Resources Minister Eric Cline. The other keynote luncheon address was presented by Jim Brown, Vice-President of Operations for Whiting Oil and Gas Corporation.

The highlight of the conference may well have been two talks on the Middle Bakken Formation presented by Bill Walker, Headington Oil Company, and Julie LeFever, North Dakota Geological Survey, that were followed by a panel discussion on completion considerations in the Middle Bakken. The panel consisted of Monte Besler, Hohn Engineering; Mike Eberhard, Haliburton Company; Walt Kordziel, Schlumberger; and Trent Green, Pinnacle Technologies, Inc. The presentations and panel discussions highlighted the progress that has been made in identifying and compensating for the differences between the Middle Bakken Formation in eastern Montana and western North Dakota.

Recently, there has been a resurgence of interest in shallow gas in the Williston Basin and adjacent areas. There were six shallow gas talks presented during the conference. Bruce Williams, Fidelity Exploration and Production Company, and Karen Budwill, Alberta Research Council, spoke on coalbed methane. Four other talks, by Dennis Zander, Fidelity Exploration and Production Company; Dave Fischer, Fischer Oil and Gas, and Fred Anderson, North Dakota Geological Survey; George Shurr, GeoShurr Resources; and Melinda Yurkowski, Saskatchewan Industry and Resources, focused on natural gas within Cretaceous shales or glacial deposits. The North Dakota Department of Mineral Resources unveiled several new posters in our booth on Cretaceous and unconventional gas sources in North Dakota. A structural contour and a three-dimensional map on top of the Greenhorn Formation (Cretaceous) in North Dakota generated a significant amount of interest. The ND Department of Mineral Resources will be producing three or four additional structural contour maps on Cretaceous units in the coming months.

The conference program was tailored to provide useful information to an audience with a wide variety of backgrounds and interests. Conference attendees included company officers, geologists, engineers, consultants, technicians, service representatives, and landmen. Ben Rostron, University of Alberta, and Lynden Penner, J.D. Mollard & Associates, spoke on fluid flow in the Williston Basin. Rostron focused on the isotopic values and cation concentrations of subsurface waters and Penner presented information on surface lineaments, fractures, and deep-seated faults. Garth Hill, Amerada Hess Corporation, discussed challenges in horizontal completions in the Beaver Lodge Field in North Dakota. Mark Sippel, Luff Exploration Company, presented 3D seismic interpretations of the Red River Formation in Bowman County, North Dakota. John Harju, Energy and Environmental Research Center, and Marty Hewitt, EnCana Corporation, discussed CO, storage - Hewitt in the Weyburn Field and Harju through the Plains CO, Reduction Partnership. Alex Sagebien, Amerada Hess Corporation, gave a presentation on oil field safety. Steven Grape, U.S. Department of Energy, talked about the contribution of the Bakken Formation and the Williston Basin to an update of the U.S. oil and gas proved reserves. Dave Fischer, technical advisor to the North Dakota Oil and Gas Research Council, discussed the \$1.3 million matching-grant fund that is available this biennium to fund projects that promote the growth of the oil and gas industry in North Dakota through research or education. Bruce Hicks, North Dakota Oil and Gas Division, demonstrated how to navigate through their subscription website. For \$15 per month, companies and individuals have access on the subscription

site to well files, electric logs, core and thin section photographs, searchable case files and orders, and audio of past oil and gas hearings.

Several new things were tried at this years meeting. Although there had always been booths setup at the conference, this year it was billed as a Prospect Expo and all sixty available booths sold out. The North Dakota State Land Department Lease Sale was held in the conference venue on the afternoon of May 9. In addition to the traditional Sunday night ice-breaker, a social was held Monday night in conjunction with the Prospect Expo and land sale participants were invited to attend along with conference attendees.

The fifteenth annual Williston Basin Petroleum Conference and Prospect Expo will be held in Regina, Saskatchewan from April 29 to May 1, 2007.

> Number of registrants over the 14 year history of the Williston Basin Petroleum Conference and Prospect Expo.

Third from the left: Julie LeFever, Bruce Juenker, and Fred Anderson were kept busy answering numerous enquiries on the shallow gas and Bakken posters that were exhibited in the ND Department of Mineral Resources booth at the prospect expo.

Lynn Helms, Director of the Department of Mineral Resources, introduces the panel on completion considerations in the Middle Bakken. Panel members are from left to right: Trent Green, Pinnacle Technologies, Inc; Walt Kordziel, Schlumberger; Mike Eberhard, Haliburton Company; and Monte Besler, Hohn Engineering.



