

Report from the AAPG/EMD Gas Hydrate Committee Art Johnson, Robert Lankston, Chairs

1. Gas Hydrate Special Publication

Work on the Gas Hydrate Special Publication (covering all aspects of gas hydrates based on papers from the 2004 Hedberg Research Conference) was delayed for most of the past 12 months as coordinating editor Tim Collett was heavily involved with two hydrate drilling programs (Cascadia Margin and Offshore India). Work has now resumed, with Tim Collett, Camelia Knapp, Ray Boswell and Art Johnson as editors. Forty-three papers have been received and two reviewers have been identified for each paper. Reviewers are being requested to complete the technical reviews by November 24. EMD will be included in the process, although there will be no cash contribution from EMD. Much like the Coal Atlas, EMD will receive some portion of the proceeds because of its historical contributions to gas hydrates.

2. 2006 Annual Convention

EMD had a well attended gas hydrate oral session with 9 papers at the Houston Convention. The Gas Hydrate Committee convened a meeting on the evening of April 11 with 23 participants. Representatives from the MMS described the status of the assessment program for gas hydrate volumes in the Gulf of Mexico that is scheduled for public by the end of December, 2006. Other topics discussed included future plans for the Gulf of Mexico Joint Industry Program (JIP) and an update on the status of gas hydrate evaluation programs in the US and India.

Dennis Earl, Wes Ingram, Mike Wiley, and John Welch agreed to serve on the Gas Hydrate Committee, with a primary task and improving the Gas Hydrate page on the AAPG website.

3. Field Programs

Results that have significant implications for gas hydrate investigations are emerging from recent drilling programs on the Cascadia Margin and Offshore India. Field operations are also planned for three other areas.

a. Cascadia Margin

The Integrated Ocean Drilling Program conducted Expedition 311 on the Cascadia Margin (Offshore British Columbia) from August 28 to October 25, 2005. Among the many significant results of the cruise was a strong verification of the link between lithology and hydrate concentration, with hydrate being concentrated in sands even at considerable distances above the base of the gas hydrate stability zone. This result has important implications for any consideration of commercial development of potential gas hydrate resources.

b. India

From May through August, 2006, India conducted drilling, coring, and logging operations in the nation's offshore waters to evaluate gas hydrate resource potential. Thirty-nine wells were drilled and the project leaders have stated that the program was very successful. The results are intended to be made public within 18 months. Subsequent to the drilling program, India announced its plans for a gas hydrate production test in 2008.

c. Gulf of Mexico JIP Drilling

The ChevronTexaco-led Gulf of Mexico Joint Industry Program (JIP) continued to assess the results of the 2005 drilling program and has begun site assessment for additional drilling in the Gulf as early as 2007. While the focus of the 2005 phase was primarily on safety and seafloor stability, the new phase of drilling will address gas hydrate resource potential. As a sign of increasing interest in hydrate resource potential, representatives from Mexico attended a site selection meeting. Other nations have also expressed interest in participating.

d. Canadian Arctic

Drilling operations were conducted at the Mallik site in the Canadian Arctic in 1999 and 2002, culminating in relatively brief production test in 2002. Plans have been announced for a more rigorous test during the winter of 2006-2007, and a longer duration (75-80 day) production test during the winter of 2007-2008.

e. Alaska North Slope

A gas hydrate well had been planned by BP Alaska for Milne Point on the North Slope for early 2006. The well was not drilled, however, due to a problem with rig availability prior to the end of the drilling season. It is unclear whether the well will be drilled in the upcoming season. On a more positive note, some additional log data were acquired in the hydrate stability zone from wells of opportunity.

4. Federal Gas Hydrate Research

Interest in the potential of Gas Hydrates as a commercial resource remains strong in Washington, and higher funding levels have been recommended for the future. It is hoped that appropriations will match the authorizations. The Federal Methane Hydrate Advisory Committee formed a subcommittee to investigate options for accelerating the Federal program, and the subcommittee has held workshops to develop recommendations.