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**NORTHERN APPALACHIAN COALBED METHANE
ASSESSMENT PROJECT**

FINAL REPORT

(August 2003 – August 2004)

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SUMMARY

The Northern Appalachian Basin, which is comprised mainly of large areas of West Virginia, Pennsylvania, and Ohio, is estimated to contain 61 TCF of the 700+ Coalbed Methane (CBM) resource base in the Lower 48 States of the U.S. However, CBM production has been virtually non-existent in this basin, to date. It is generally agreed that this region should be capable of producing considerably more CBM than it is currently. Projections indicate that the contribution of CBM to the overall mix of natural gas sources in U.S. is expected to increase over the next two decades. However, this increase cannot be achieved without a substantial increase in CBM production in the Northern Appalachian Basin. The problems and uncertainties causing the lag in development of CBM in the Northern Appalachian Basin need to be overcome for CBM to reach its true potential in the U.S. energy equation. While CBM ownership issues remains a problem, particularly in Ohio and Pennsylvania, the technical uncertainties associated with CBM production are the main obstacles to development. Development and dissemination of key technological achievements in CBM reservoir and production engineering were the primary drivers in making CBM a commercial success in western region basins of United States. However, relevant information and technologies have lagged behind in the Northern Appalachian Basin. Thus, the objective of this project has been to assess different factors contributing to the lack of development of CBM in Northern Appalachian Basin.

This report has been organized to address the original objectives of the project in the following order.

- **Section One:** Detailing the CBM resource potential and characteristics in the Northern Appalachian Basin through the development of a database.
- **Section Two:** Developing a knowledge base of the engineering barriers, identifying technological needs that must be overcome and assessing the environmental impacts which may accompany CBM development of Northern Appalachian Basin CBM. This objective is addressed through development of an independent database and development and implementation of a survey.
- **Section Three:** Establishing a Northern Appalachian CBM consortium of state, federal, private industry, academia, and other stakeholders, through an inaugural conference, to share in outreach and research, development, and demonstration activities.