



*Advanced Gasification Process Demonstrates Outstanding Results, Moves Closer to Commercial Introduction*

**March 20, 2008 – Gilbert, AZ** – Diversified Energy Corporation (DEC) today announced successful test results from its HydroMax<sup>®</sup> advanced gasification technology. Under a 2007 Small Business Innovation Research (SBIR) Phase I grant from the Department of Energy (DOE) - National Energy Technology Laboratory (NETL), DEC has been developing and testing a unique molten-metals gasification technology designed to produce synthesis gas for the U.S. industrial market. Once commercialized, HydroMax<sup>®</sup> will reduce the industrial sector's dependence on high and volatile natural gas prices and provide for stable energy costs. The gasification system is capable of converting a broad range of hydrocarbons (including coal, biomass, waste products, etc.) into synthetic gas that affordably and reliably satisfies industrial natural gas demands.

In the latest series of tests conducted at Pittsburgh Mineral and Environmental Technology, Inc. (PMET), the DEC team built and operated a HydroMax<sup>®</sup> gasification reactor that tested multiple coal types to characterize synthesis gas output composition and measure overall system performance and efficiency. All test results met or exceeded the team's expectations, with highlights being: a) continuous operations with repeatable data, b) capability to perform well using diverse classes of coal – high moisture content, low rank coal (Powder River Basin) and high sulfur content, high rank coal (Illinois #6), and c) non-optimized energy conversion efficiencies as high as 70%. Jerry Stephenson, DEC Chief Systems Engineering and Principal Investigator for the project remarked, "DEC is thrilled with the results generated during this project. Based on previous testing and detailed modeling tools, we had expected excellent performance, but there is no substitute for actual hardware tests to substantiate our expectations. It's also important to note that, even with these outstanding results, there are further opportunities to optimize system performance. These conclusions truly anchor the possibilities for HydroMax<sup>®</sup>."

DEC teamed with CertainTeed, one of North America's leading gypsum wallboard manufacturers, and a subsidiary of Compagnie de Saint-Gobain, for the project with the goal of reducing and stabilizing natural gas costs. Operating over 23 North American wallboard and finishing plants, all with substantive natural gas usage for process applications, CertainTeed provides an excellent model for the typical needs of an industrial user. DEC plans to compete for an SBIR Phase II award to build a larger-scale, more optimized system beginning in fall 2008. This system would be designed for industrial-class users of natural gas such as CertainTeed.

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Changing the Balance of Power

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About Diversified Energy Corporation:

Headquartered in Gilbert, Arizona (a suburb of Phoenix), Diversified Energy Corporation ([www.diversified-energy.com](http://www.diversified-energy.com)) is a privately held alternative and renewable energy company focused on maturing innovative technologies, developing commercial energy projects, and providing engineering services support to project developers. Principal areas of expertise include biofuels, gasification, and algal biomass production. The HydroMax<sup>®</sup> technology is under license from Alchemix Corporation.

About CertainTeed:

Through innovation and creative product design, CertainTeed ([www.certainteed.com](http://www.certainteed.com)) has helped shape the building products industry for more than 100 years. Founded in 1904 as General Roofing Company, the firm made its slogan "Quality Made Certain, Satisfaction Guaranteed," which quickly inspired the name CertainTeed. Today, CertainTeed is North America's leading brand of exterior and interior building products, including roofing, siding, windows, fence, decking, railing, trim, foundations, pipe, insulation, walls, ceilings and access covers.

Headquartered in Valley Forge, Pennsylvania, CertainTeed and its affiliates have approximately 9,000 employees and 70 manufacturing facilities throughout the United States and Canada. In 2006 the group had consolidated sales approaching \$4 billion.

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