Is There a Future for the Domestic Oil and Gas Industry? Some Lessons from the Appalachian and Permian Basins

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ABSTRACT

The last decade has been one of upheaval in the oil and gas industry, and especially for the domestic oil and gas industry. This period has been noted for downsizing of professional staffs, wholesale mergers and acquisitions which have resulted in large, often specialized energy companies, the loss of many historic companies to insolvency or bankruptcy, and more prominent exploration failures than successes in both domestic and international arena. These changes have treated new perceptions about the industry and its employees.

The most significant change in perception from the pre-1980's period is the belief that domestic production is no longer a significant resource, that the remaining reserves of oil and gas in the contiguous 48 states (on-shore) are either too expensive to develop or too insignificant to worry about. Significantly, the investment community, most of our federal legislators, and the national media hold this perception. As a result, it is the foundation upon which reporting on the domestic oil and gas industry is based. It is also the foundation for creating political policies, and for guiding large dollar investment decisions.

The management of many oil and gas companies hold a second perception, namely that the new technologies (especially 3-D and 4-D seismic applications, advanced seismic stratigraphy, and other computer based exploration and development methods) have not been successful in defining significantly large reservoirs in the many onshore basins. This suggests to them that new reservoirs are not present, and that the only hope for identifying significant new reservoirs lies either in offshore areas or in international exploration. This perception drives not only their internal capitalization decisions, but also their personnel decision making.

The author believes that both perceptions are incorrect. That the reality of the situation is that many significant new reservoirs exist in the contiguous 48 states, and that the reservoirs may hold as much oil and natural gas as has been previously found in the basins. The U.S.G.S acknowledges that the conventional oil reserves within the boundaries of the United States exceed 112 billion barrels of oil, that natural gas reserves exceed 1,000 trillion cubic feet, and that co-produced natural gas liquids will exceed 29 billion barrels. In this paper, some examples from the Appalachian and Permian Basins that support this viewpoint are provided. It is pointed out what the future for domestic exploration may be if a change in the current perception of federal policy makers, the investment community, and most importantly, the management of oil and gas companies occurs.