

Exploration Discipline Matrix: A Key to Reestablishing a Vibrant Exploration Industry in the Mid-Continent and Other “Mature” Provinces.

Lyle F. Baie and John J. Gallagher, Jr.; Creative Energy Investments

A recent Oil and Gas Journal article reported that the number-one issue holding back the Domestic U.S. Industry is lack of high-quality prospects in the Lower 48. This tells us that the state of our domestic industry and its future as an employment source is tenuous at best.

Our plan is to promulgate a set of twelve exploration disciplines to provide a tool for generating exploration project ideas. The Exploration discipline Matrix reflects the level of experience of the explorationist, codifies the actual exploration idea-generating process and its various approaches into a new and powerful tool for reinvigorating our industry. This matrix is a guide for both experienced and novice explorationists to access and organize the combined knowledge and experience of those who have gone before, together with our modern knowledge and technology, in order to develop a more continuous flow of exploration ideas and eventually leading to quality prospects.

“TRANSLATION” is one of twelve approaches, which can be used for developing exploration targets in the “mature” basins of North America. The TRANSLATION case history applies an idea related to vertical hydrocarbon migration in Nevada, found in Chamberlain, 2003, to the southeastern extension of the Ardmore basin where an under-explored volume of rock plunges beneath the Ouachita Overthrust Belt. The vertical migration idea is used to explain the enigmatic Isom Springs oil field in Marshall County, Oklahoma and could help define an exploration fairway for oil and gas within the allochthonous thrust sheets as well as within the underlying autochthon.