

## **Developing a Reasonable Foreseeable Development (RFD) Scenario for the BLM New Mexico Pecos district**

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The goal of this project has been to develop a justifiable forecast of development scenarios for the US Bureau of Land Management (BLM) Pecos District in southeastern New Mexico. In order to do this, we have compiled a tremendous amount of data for the region - geology, production history, production changes based on past technological improvements, and predictions for future developments that would impact production in the region. The project is to be completed within 18 months.

To create a meaningful framework for the accumulated data, we subdivided production from this part of New Mexico into plays that are based on common geological parameters, relying heavily on the work of Broadhead and others (2004). In their work, they examined only oil plays in the Permian basin, subdividing production into 17 plays, and they focused on reservoirs that had over 1 MMBO of production. Because the current project includes gas production, we have expanded the play concept to include plays that are primary gas producers, and have looked at fields with lesser production, as well as plays that are only now beginning to have importance in the state.

We have developed a common process for each play, where we have examined geology, trapping mechanisms, reservoir properties, and production histories for the most important reservoirs. On a basinwide scale, permitting data is examined to show drilling trends from the past 5 years and project these trends into the near future, and we are also talking with operators in the area to confirm the data demonstrated in these trends. A large amount of this information has been compiled into a GIS. For each play, we are attempting to predict what future development might be based on current trends and improvements in technology.

Broadhead, R. F.; Jianhua, Z.; Raatz, W D., 2004, Play analysis of major oil reservoirs in the New Mexico part of the Permian Basin: enhanced production through advanced technologies, New Mexico Bureau Geology Mineral Resources, Open-File report, v. 0479, pp. CD-ROM.