Cline Shale: New Investments Bring Familiar Legal Issues

Technological innovation and improved drilling methods have led to renewed interest in the Permian Basin region in West Texas, as producers explore oil-rich formations located in deep strata that were previously thought to be uneconomical to produce. Activity across the Permian Basin has intensified dramatically recently, and the rig count in the region has increased over tenfold since the late 1990’s. In the past few months, one particular formation, the Cline Shale, has been the center of increased investment.

"Cline Shale" is the localized name for a Pennsylvanian aged geologic formation found along the eastern shelf of the Permian Basin, including parts of Scurry, Borden, Mitchell, Fisher, Nolan, Sterling, and Glasscock Counties. Approximately 140 miles long and 70 miles wide, the Cline Shale is located beneath the Wolfcamp formation at approximately 6,000 to 9,000 feet below the surface, and is estimated to comprise up to 85% oil and natural gas liquids. Test well results in the Cline Shale suggest that up to 30 billion barrels of oil could be recoverable from the entire shale. The light crude retrieved from the Cline during this early phase of exploration has been compared to oil from the Eagle Ford Shale in South Texas, the most active shale play in the country. Also contributing to the excitement over the Cline is that the Cline contains roughly ten times the vertical penetrable length of popular shale plays like the Eagle Ford or North Dakota's Bakken Shale.

Due to the Cline's location immediately beneath existing plays in the Wolfcamp and Spraberry formations, exploration and production companies have been able to bring new life to old leases and wells and use new technologies to expand and increase production from wells previously thought to be poor or marginal. With multiple productive oil formations stacked on top of each other in the deeper zones of the eastern shelf, certain leases and wells in the region could see a dramatic increase in value, and wells that can produce from several formations through multiple stacked laterals over time could become extremely profitable. Several companies have acquired sizable land positions in the Cline region and have invested hundreds of millions of dollars toward long term development from the Cline and other deep strata.

While large blocks of leasehold acreage containing the Cline have already been acquired by companies making sizable long term investments in the region, development of the shale is still in its early stages due to the high level of resources and capital necessary to drill into deeper zones and utilize hydraulic fracturing to extract oil from the formations. However, the potential for production from stacked payzones and the low operating costs due to easy access to Permian Basin's existing oil and gas production infrastructure make the Cline an intriguing shale play for future development. A planned 20-inch pipeline from Colorado City in the heart of the Cline Shale to the Houston gulf coast area slated for completion in mid-2014 could also result in additional interest in Cline exploration.

Investment in and development of the Cline Shale will create many types of legal issues similar to other large shale plays. For example, many of the leases used to explore the Cline are beyond their primary terms and held by production from other...
zones or strata. For such leases, it is important to consider whether existing production has been sufficient to maintain the leases. While some leases may contain specific guidelines for determining whether production has been in "paying quantities" purposes of holding such leases, lessees will often need to carefully analyze lease terms and the history of prior production on the leased lands to properly determine whether there has been sufficient production to maintain a lease in accordance with Texas case law. Companies should also be aware that even if a lessor has never previously questioned whether a lease was producing in paying quantities, there is risk that a lessor can claim that the lease terminated due to lack of production in hopes of receiving a new lease and getting a new bonus and larger royalties.

For leases held by production from shallower depths located above the Cline, such as the Wolfcamp formation, issues may also arise regarding depth restrictions, depth severances, or Pugh clauses. "Pugh clause" is a general term for a number of clauses in some leases that can cause the leases to expire insofar as they cover undeveloped lands or depths. Pugh clauses may be written to create either vertical or horizontal severances, so any companies exploring the Cline should examine such clauses carefully to be certain whether they can result in only vertical severances or both horizontal and vertical severances. A severance resulting from a Pugh clause may greatly restrict a company’s ability to efficiently drill into (or in the case of horizontal severances, across) deep formations like the Cline Shale by releasing certain depths or acreage from a lease. Similarly, a lease may contain related requirements such as "Continuous Development," "Continuous Drilling," or "Retained Acreage" provisions. Such provisions can cause a lease to expire as to undeveloped lands (and sometimes depths) at some point in time. In such cases, a lessee should examine the drilling history to determine whether the continuous development or similar period has expired, or how much time is remaining before another well must be commenced to preserve the lease, in order to maximize its development of Cline acreage.

Additional legal issues that may arise during exploration of the Cline Shale include, but are not limited to, pooling restrictions, title and environmental issues, state and federal regulatory compliance, and issues related to operations. For a discussion of some of these issues, see the following articles:

- Acceptance of Royalties May Establish Quasi-Estoppel
- Anatomy of a Purchase and Sale Agreement for Producing Properties
- Exploring Common Legal Issues in U.S. Shale Plays
- North Dakota, Montana, Wyoming, Colorado and Texas Oil and Gas Regulations
- Shale Gas - Environmental Law and Regulation: Quarterly Update, March 2012
- Shale Gas - Environmental Law and Regulation: Quarterly Update, November 2012
- Title Defect Issues in Purchase and Sale Agreements
- U.S. Shale Plays

For more information about legal issues related to shale plays or Baker & McKenzie’s experience with U.S. upstream oil and gas transactions, please contact one of the authors listed above or the Baker & McKenzie attorney you normally consult with.