## Testimony of David E. Pierce before the Joint Committee on Energy and Environmental Policy 9 September 2011

I appear here today, at the request of Representative Carl Holmes, to provide background information on legal issues associated with ownership of "pore space" in Kansas. I am not representing anyone in this matter. I am here today in my academic capacity to discuss ownership issues I routinely explore with my students in the classes I teach at Washburn University School of Law, which include Property, Oil and Gas Law, Advanced Oil and Gas Law, and Energy Regulation.

## Pore space ownership principles:

- Ownership of the surface of land includes ownership of all that lies beneath the surface boundaries extended downward, to include minerals, rock structures, and voids.
- Ownership of the "surface estate" can be separated from one or more "mineral estates."
- Absent express language in the document separating a mineral estate from the surface estate, the owner of the mineral estate has the implied right to make reasonable use of the surface to develop the mineral estate.
- The owner of the "surface estate" generally retains ownership of minerals not expressly encompassed by the conveyed "mineral estate."
  - For example, assume O owns all the rights in a section of land, Section 30. In Kansas, and in most states, a conveyance by O to A of "all minerals" results in A owning "some" minerals and O retaining "some" minerals but one thing is certain, A will not receive "all minerals" in Section 30. O, as the "surface" owner, will generally be held to have retained ownership of minerals that would require significant destruction of the surface to extract the mineral.
- Ownership of minerals (for example, "oil and gas") also gives the owner the right to access the rock structure where the oil and gas are found so they can be developed even though the "oil and gas" mineral owner may not "own" the minerals comprising the rock structure.
- Although not expressly addressed by the courts to date, where the surface estate has been severed from a mineral estate, the surface estate owner will most likely "own" subsurface areas that are not part of the mineral comprising the mineral estate. Surface estate ownership of subsurface areas may be subject to implied rights in the mineral estate owner to access, or drill through, the subsurface area to develop the mineral estate.
- Pore space structures, like oil and gas reservoirs, are not compartmentalized areas beneath a single tract of land but rather an interconnected body of rock. This creates a community of interests because each owner in the pore space area can impact other owners. This can give rise to private correlative rights, and public rights, to protect and use the resource.

## Pore space ownership issues:

- Is the law regarding pore space ownership settled to such an extent that declaring ownership in the surface owner, mineral owner, or the State of Kansas raises "taking" issues?
- What are the risks associated with declaring ownership in either the surface owner or the mineral owner at this time?
- Is it possible that the lower subsurface reaches of land may be declared part of the "public domain" like the upper reaches of airspace above land?
- If subsurface areas are held in private ownership, what is the nature of that ownership considering that the areas cannot be "fenced off" from surrounding interconnected lands?
- What is the effect of a permit authorizing a landowner to inject material into pore space beneath their land that will migrate into surrounding lands owned by others?
- Should the state consider a field-wide (pore space structure-wide) unitization program to assist in assembling the acreage necessary to avoid subsurface trespass issues?
- Is it possible for the State of Kansas to order private owners to make defined pore space available for carbon dioxide storage and disposal?
- What are the risks associated with not addressing the pore space ownership issue?