We Have to Drill This Well Somewhere – A Survey of Surface Issues Across the Nation

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BOARD CERTIFICATION:

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- 2010-2013 - Oil and Gas Council of the Oil, Gas and Energy Resources Law Section of the State Bar of Texas
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- 2011-2013 - President of Independent Title Agents of Texas (ITAT)
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- In 2011, Ms. Flowers was honored by the East Texas Association of Petroleum Landmen with their President's Award and in 2012, with the Pioneer Award. In 2011, she was also recognized with the esteemed Title Person of the Year Award by the Texas Land Title Association for her significant and longtime contributions to the title industry and the association.
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PUBLICATIONS and HONORS:

- 2013 TEXAS LAND TITLE INSTITUTE - "Minerals--Practice Tips for Leases and Surface Use Agreements", December 2013, San Antonio, Texas, Celia C. Flowers
- 2013 ADVANCED REAL ESTATE DRAFTING COURSE, Houston Texas, March 2013, "Avoiding the Unintended Consequence When Drafting Mineral Reservations", Celia C. Flowers and Melanie S. Reyes
- 2012 TEXAS LAND TITLE INSTITUTE - "CFPB - The New Disclosure Form and Its Requirements", December 2012, San Antonio, Texas, Celia C. Flowers
- 2012 SECTION REPORT OF THE 30TH ANNUAL ADVANCED OIL, GAS, AND ENERGY RESOURCES LAW COURSE, October 2012 "The Before and After - An Update of the Eminent Domain Changes", Celia C. Flowers
- 2011 SECTION REPORT OF THE OIL, GAS & ENERGY RESOURCES LAW SECTION OF THE STATE BAR OF TEXAS, June 2011, "The Proof is in the Public Record...or is it? Navigating Evidentiary Issues Related to Texas Railroad Commission Documents", Celia C. Flowers and Melanie Reyes.
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- 2009 TEXAS LAND AND TITLE INSTITUTE, November 2009, "Surface Use by Mineral Owners: The Title Insurance Solution," Celia Flowers, Melanie Reyes-Bruce, and Eric Schmalbach.
- 2009 EAST TEXAS ASSOCIATION OF PETROLEUM LANDMEN SEMINAR, February 2009, "Pitfalls in Title Examination: The Intricate Relationship Between Real Property Rights and Ownership," Celia C. Flowers and Melanie S. Reyes Bruce.
- 2007 REVIEW OF OIL AND GAS LAW XXII, Energy Law Section Dallas Bar Association, August 17, 2007, "Exercising the Power of Eminent Domain," Celia C. Flowers and Melanie S. Reyes.
- 2007 TEXAS LAND AND TITLE INSTITUTE, November 2007, "Minerals: Examination and Coverage Issues," Celia C. Flowers, Melanie S. Reyes, and Meredith N. Todd.
- 2006 OIL, GAS & MINERAL LAW INSTITUTE, "Protecting and Defending Your Mineral Title", Celia C. Flowers.
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- 2011 SECTION REPORT OF THE OIL, GAS & ENERGY RESOURCES LAW SECTION OF THE STATE BAR OF TEXAS, June 2011, "The Proof is in the Public Record…or is it? Navigating Evidentiary Issues Related to Texas Railroad Commission Documents", Celia C. Flowers and Melanie Reyes.
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- 2009 TEXAS LAND AND TITLE INSTITUTE, November 2009, "Surface Use by Mineral Owners: The Title Insurance Solution," Celia Flowers, Melanie Reyes-Bruce, and Eric Schmalbach.
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- 2006 OIL, GAS & MINERAL LAW INSTITUTE, "Protecting and Defending Your Mineral Title", Celia C. Flowers and Melanie Reyes.

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During the last decade, North America has witnessed a surge in oil and gas exploration and development. Since the late 1990s, major technological advances in horizontal drilling and the refinement of hydraulic fracturing techniques have allowed oil and gas companies to produce natural resources (such as shale gas, tight gas, tight oil, coal seam gas, and hard rock wells) from subterranean formations that were previously thought difficult, if not impossible, to produce. This increase in oil and gas development has simultaneously resulted in an escalation of conflict between mineral estate owners/lessees and surface estate owners. Common laws governing the relationships between surface and mineral estate owners, which have been applied throughout North America for more than a century, have become somewhat antiquated in the face of these new technologies, and thus, courts and legislatures have been grappling with a means to effectively balance the rights of the mineral estate and surface estate owners.

Historically, oil and gas jurisprudence in the majority of jurisdictions has developed around two sister theories. These theories are the "dominant estate theory" and the "reasonable use theory". The dominant estate and reasonable use theories have long controlled the relationships between surface and mineral estate owners in the various jurisdictions where oil and gas production has prospered since the early 1900s.

I. The Dominant Estate Theory.

A. In Texas

The dominant estate theory has long been the law in Texas. *Harris v. Currie*, 176 S.W.2d 302, 305 (Tex. 1944). The dominant estate theory holds that the mineral estate is the dominant estate, and the surface estate is the subservient estate. *See Tarrant County Water Control and Imp. Dist. No. One v. Haupt, Inc.*, 854 S.W.2d 909, 911 (Tex. 1993). Specifically, the dominant estate theory is a well-established doctrine wherein the mineral estate carries with it the right to enter the surface estate in order to extract the underlying minerals. *Cowan v. Hardeman*, 26 Tex. 217, 222 (Tex. 1862). This common law right was created "because a grant or reservation of minerals would be wholly worthless if the grantee or reserver could not enter upon the land in order to explore for and extract the minerals granted or reserved." *Harris*, 176 S.W.2d at 305. Like the mineral estate owner, the lessee under an oil, gas, and mineral lease steps into the mineral estate owner's (lessor's) shoes, and thus, the dominant mineral estate inures to the benefit of the lessee. *Humble Oil & Ref. Co. v. Williams*, 420 S.W.2d 133, 134 (Tex.1967).

B. Throughout the United States

Outside of Texas, other states that follow some form of the dominant estate theory are: Arkansas, California, Colorado, Kentucky, Louisiana, Michigan, Mississippi, Montana, New Mexico, North Dakota, Oklahoma, Pennsylvania, West Virginia, and Wyoming. *See Desoto Gathering Co., LLC v. Smallwood*, 362 S.W.3d 298, 301-02 (Ark. 2010); *Bourdieu v. Seaboard Oil Corp.*, 100 P.2d 528, 532 (Cal. App. [4th Dist.]. 1940); *Notch Mountain Corp. v. Elliott*, 898 P. 2d 550, 556 (Colo. 1995); *Akers v. Baldwin*, 736 S.W.2d 294, 297 (Ky. 1987); *Horton v. Browne*, 94 So. 3d 1034 (La. App. 2nd Cir. 2012); *Douglas v. Denbury Onshore*, 78 So. 3d 912, 918 (Miss. Ct. App. 2011); *Miller Brothers v. Dep't of Natural Resources*, 513 N.W.2d 217 (Mich. App. 1994); *Burlington Res. Oil & Gas, LP v. Lang & Sons Inc.*, 259 P.3d 766, 770 (Mont. 2011); *Hunt Oil Co. v. Kerbaugh*, 283 N.W.2d 131, 135 (N.D. 1979); *McNeill v. Burlington Resources Oil & Gas Co.*, 182 P.3d 121 (N.M. 2008); *Turley v. Flag-Redfern Oil Co.*, 782 P.2d 130, 135 (Okla. 1989); *Belden & Blake Corp. v. Dep't of Conservation & Natural Res.*, 969 A.2d 528 (Pa. 2009); *Lowe v. Guyan Eagle Coals*, 273 S.E.2d 91 (W. Va. 1980); *Mingo Oil Producer v. Kamp Cattle Co.*, 776 P.2d 736, 741 (Wyo. 1989).

Besides the above-referenced states, other states have either adopted alternative theories or have little to no case law addressing the issue. For instance, in Kansas, while the mineral estate is not technically considered the "dominant estate", courts have held that the mineral estate owner/lessee has the implied right to make reasonable use of surface in order to develop the land for oil and gas. *Brooks v. Mull*, 78 P.2d 879 (Kan. 1938). In Ohio, the courts follow a doctrine of "strict necessity". In particular: "[a]n oil lease which grants to the lessee the exclusive right to mine for and produce petroleum and natural gas . . . confines the occupancy and use of the surface to so much as is *strictly necessary* for mining and producing purposes." *Fowler v. Delaplain*, 87 N.E. 260 (Ohio 1909) (emphasis added); *Snyder v. Dept. Natural Resources*, 985 N.E.2d 168 (Ohio Ct. App. 7th Dist. 2012), *appeal allowed*, 982 N.E.2d 727 (Ohio 2013). "Necessity" is the judicial test in Ohio, not "reasonableness". *See id.* (housing employees of lessee on surface to monitor operations held not strictly necessary for development of mineral estate).

C. Canada

In Canada, 90% of mineral rights are government owned. *See* Aladeitan, Lanre, "*Symposium: Powering the Future: A 21st Century Guide for Energy Practicioners: Ownership and Control of Oil, Gas, and Mineral Resources In Nigeria: Between Legality and Legitimacy*;" 38 T. Marshall L. Rev. 159 (Spring 2013). The government, however, may lease its minerals rights to private individuals/entities for exploration, development and production. *See id*. The various Canadian Provinces have enacted surface use legislation to address the rights of the surface estate owners and the mineral owners/lessees. *See, for example*, Alberta's Surface Rights Act R.S.A. 2000, c. S-24; *see also Canadian Reserve Oil & Gas Ltd. v. Lamb*, [1973] 5 W.W.R. 306 (Saskatchewan Dist. Ct. 1973), judgment varied, 49 D.L.R.3d 759, [1975] 1 W.W.R. 414 (Saskatchewan Ct. of Appeal 1974), appeal allowed, [1977] S.C.R. 517, 70 D.L.R.3d 201, [1976] 4 W.W.R. 79 (Supreme Court of Canada 1976); *see also* Currie, Lucas, Sychuk, "*Compensation for Oil and Gas Surface Rights in Alberta, British Columbia, and Saskatchewan*," 36 Sask. L. Rev. 350, 387 (1971-72). A comprehensive analysis of the various surface use legislative schemes for Canadian Provinces, however, is beyond the scope of this paper.

D. Obstruction Doctrine

In many states, including Texas, courts have adopted a corollary to the dominant estate theory known as the "obstruction doctrine". The obstruction doctrine holds that injunctive relief, and in some cases monetary relief, is available to mineral estate owners/lessees when a surface owner interferes with the dominant estate owners' right to access and use the surface estate for mineral development. In *Ball v. Dillard*, the Texas Supreme Court upheld the right of injunctive relief for mineral owners where a surface tenant was interfering with the mineral operations. 602 S.W.2d 521 (Tex. 1973). In Arkansas, commentators note that it is common for lessees to obtain injunctive relief from district courts to enter property to conduct operations due to the surface owner's interference with same. *See* Timothy A. Daily, *Oil & Gas Law: Nationwide Comparison of Laws on Leasing, Exploration, and Production*, "Arkansas Chapter," p. 17, (AAPL. 2011). Moreover, the Arkansas Supreme Court has held that obstruction by a surface owner excuses the lessee's obligation to drill under a lease until the obstruction can be reasonably removed. *Haddock . McClendon*, 266 S.W.2d 74 (Ark. 1954).

In California, while injunctive relief is available to prevent a surface owner's interference, the mineral owner/lessee must first provide written notice to the surface owner of the intent to enter the property before seeking such injunctive relief. *Callahan v. Martin*, 3 Cal. 2d 110, (Cal. 1935); Cal. Penal Code Sec. 848. California Penal Code Section 420.1 specifically states that anyone who willingly hinders another's attempt to access their property rights is guilty of an infraction

punishable by a fine. Similarly, Louisiana's Mineral Code Article 12 provides procedural rights and remedies for mineral owners that include the right for a temporary restraining order to access property.

In Michigan, the owner of the surface estate has an implied duty to allow the mineral estate owner to exercise his/her mineral rights, which provides the mineral estate owner with appropriate relief for a surface owner's breach of said duty. *Miller Brothers*, 513 NW2d 217. Mississippi law further provides injunctive relief for a surface owner's interference with a lessee's operations. *Reynolds v. Amerada Hess Corp.*, 778 So.2d 759 (Miss. 2000).

In North Dakota, under appropriate circumstances, an action for injunctive relief allows a court to enjoin a surface owner or others from unlawfully interfering with the lessee's right to use as much of the surface as is reasonably necessary for exploring, mining, removing, and marketing minerals. *Sagebrush Resources, LLC v. Peterson*, 2014 ND 3, 841 N.W.2d 705 (N.D. 2014). A New York court has held that "whatever the nature of a plaintiff's interest, it has a vested right to go upon the land and explore. This right can be enforced." *Belmont Quadrangle Drilling Corp. v. Galek*, 244 N.Y.S. 231, 235 (N.Y. 1930)

Oklahoma has a comprehensive surface damage act to protect the rights of surface owners. However, said act provides that once a surface damage contract has been entered by and between the mineral estate owner/lessee and the surface estate owner, the mineral estate owner/lessee has the right to enter the property. 52 Okl. St. Sec. 318.5 (a). If a contract cannot be reached, the lessee may petition the appropriate court for the appointment of appraisers to determine surface damages. Once said petition is filed, the lessee has right to enter property. Upon acquisition of the right to enter (either via contract or court petition), injunctive relief is available for interference by surface owner of said right. *Lierly v. Tidewater Petroleum Corp.*, 139 P.3d 897 (Okla. 2006); *Enron Oil & Gas Co. v. Worth*, 947 P.2d 610 (Okla. Civ. App. Dist. 4 1997).

II. The Reasonable Use Theory

A. In Texas

As noted above, in most states, the dominant estate theory developed along with a sister theory – the reasonably use theory. In Texas, as the mineral estate is the dominant estate, a mineral lease executed by the mineral estate owner impliedly conveys the right to use all of the surface estate that is reasonably necessary to carry out the lessee's operations under the lease. *See Sun Oil Co. v. Whitaker,* 483 S.W.2d 808 (Tex. 1972). Pursuant to the reasonable use theory, there is no common law or statutory duty to compensate surface estate owners for use, including damages, of the surface estate in Texas. *See Humble Oil & Ref. Co.*, 420 S.W.2d at 134. Similarly, Texas law imposes no duty on the mineral estate owner/lessee to restore the surface estate to the state existing prior to operations. *Warren Petroleum Corp. v. Monzingo*, 304 S.W.2d 362 (Tex. 1957).

Some oil and gas companies negotiate surface damages or enter into a surface use agreement with the surface estate owner in order to keep a good, working relationship even if the surface estate owner owns no minerals. This approach protects the oil and gas company in the sense that it is able to avoid delay and costly litigation to prove its right to use the surface. *See Taylor v. Coal-Mac, Inc.*, 864 S.W.2d 302, 304 (Ky. Ct. App. 1992, discretionary review denied); *see also* 1-2 Williams & Meyers, Oil and Gas Law § 218; *see also* Clarence A. Brimmer, *The Rancher's Subservient Surface Estate*, 5 Land & Water L. Rev. 49, 49 (1970). Moreover, oftentimes, mineral owner lessors will provide for contractual provisions that protect the surface estate to one extent or

another in the oil and gas lease. *Id.* This is especially true when the mineral estate owner is also a surface estate owner.

When the mineral estate owner is not the surface estate owner, however, and the lease contains provision to protect the surface, an unanswered legal question arises as to whether the surface owner has standing to bring a claim as a third party beneficiary under the lease. A showing of standing requires that a surface owner prove not just that he/she is an incidental beneficiary but that he/she is an "intended" beneficiary. *See MCI Telecommunications Corp. v. Texas Utilities Elec. Co.*, 995 S.W.2d 647, 651 (Tex. 1999). There is currently no Texas case law directly addressing this issue, but it seems unlikely a lessee would attempt to litigate this issue. Nevertheless, a surface use agreement in place avoids the issue completely.

B. Throughout the United States and Canada

Courts from the following states have applied some form of the reasonable use theory: Alabama, Arkansas, California, Colorado, Kansas, Kentucky, Louisiana, Mississippi, Montana, New Mexico, Oklahoma, New York, West Virginia, and Wyoming. *See Gulf Oil Corp. v Deese*, 153 So.2d 614 (Ala. 1963); *Louisiana Gas Co. v Wood,* 403 S.W.2d 54 (Ark. 1966); *Callahan,* 3 Cal.2d 110; *Burkett v. Amoco Production Co.*, 85 P.3d 576 (Colo. Ct. App. 2003), *cert. denied*, 2004 WL 500833 (Colo. 2004); *Thurner v. Kaufman*, 699 P.2d 435 (Kan. 1984); *Edwards v. Jeems Bayou Production Co.*, 507 So.2d 11 (La. App. 2d Cir. 1987); *Cities Service Oil Co. v Corley,* 197 So.2d 244 (Miss. 1967); *Burlington Resources Oil & Gas Co., LP*, 259 P.3d 766; *XTO Energy, Inc. v. Armenta*, 144 N.M. 212 (N.M. App. 2008); *Schlueter v Shawnee Operating Co.*, 535 N.Y.S.2d 867 (NY. 1988); *Sagebrush Resources, LLC*, 841 N.W.2d 705; *Wilcox Oil Co. v. Lawson*, 341 P.2d 591 (Okla. 1959); *Belden & Blake*, 969 A.2d at 532-33; *Sanford v Arjay Oil Co.*, 686 P.2d 566 (Wyo. 1984).

As will be discussed in more detail below, it is important to note that many of these states -- such as Kentucky, Montana, New Mexico, North Dakota, Oklahoma, and Wyoming -- have enacted legislation that severally limits the reasonable use theory. Canada, similarly, has applied some form of the reasonable use theory in the past, but, like many of the U.S. states, Canadian Provinces have enacted legislation limiting the theory. See *Alberta Energy v. Goodwell Petroleum*, 2002 ABCA 251; Surface Rights Acquisition and Compensation Act R.S.S. 1978, c. S-65 (interpreted by Saskatchewan Court of Appeals at *Canadian Occidental Petroleum LTD v. Antoniuk*, SKCA 12 (2001); Alberta Surface Rights Act (interpreted by Alberta court of appeals at *Legal Oil & Gas LTD. v. Alberta* 303 A.R. 8 (C.A. 2001)).

III. Implied/Specific Rights Associated with "Reasonable Use"

As noted, in most states where oil and gas rights are granted or reserved without the express right to use the surface, the right of the mineral estate owner to use as much of the surface as was reasonably necessary followed the grant or reservation. This right has been referred to as an implied right incident to the oil and gas rights expressly granted. The implied right to use the surface can encompass various specific rights, including, but not limited to, the right to use water, the right to construct pipelines, the right to use and/or construct roads, the right to salt water disposal, the right to construct production and/or storage facilities, the right to build sludge pits, the right to choose the well location, and the right to conduct seismic activities. Whether these specific rights are implied along with the right of reasonable use of the surface varies on a state by state basis. Moreover, the laws related to these implied rights are constantly evolving. This is especially true with the advanced horizontal drilling and hydraulic fracturing methods, which will be more closely examined below.

Not all states have court decisions and/or legislation addressing individual implied rights. A general survey of the laws across the nation demonstrates that states following the dominant mineral estate/reasonable use doctrines allow for any and all uses of the surface reasonably necessary to conduct operations, which should encompass most, if not all, of the above-referenced individual implied rights. These implied rights are limited by express lease/deed/surface use provisions, or by other doctrines discussed herein such as the accommodation doctrines, surface use acts, and causes of action for excessive/unreasonable uses. *See Reimer v. Gulf Oil Corp.*, 664 S.W.2d 456 (Ark. 1984); *Callahan*, 3 Cal.2d 110; *Wall v. Shell Oil Co.*, 209 Cal. App.2d 504 (Cal. 1962); *Akers*, 736 S.W.2d 294; *Allen v. Gouverneur Talc Company Inc.*, 668 N.Y.S.2d 755 (A.D. 1998); *See Wilcox Oil Co.*, 341 P.2d 591. Below is a survey of states that have addressed particular implied rights.

A. Use of Surface and Ground Water

There are different types of water, and ownership of the differing types of water varies on a state by state basis. For instance, diffused rainwater that falls on the ground either: 1) percolates into the ground and becomes groundwater; or 2) flows into a surface water resource such as a river or lake. *Denis v. Kickapoo Land Co.*, 771 S.W.2d 235 (Tex. App.---Austin 1989, writ denied); *Edwards Aquifer Auth. v. Day*, 274 S.W.3d 742 (Tex. App.---San Antonio 2008) *jdgmt. aff'd*, 369 S.W.3d 814 (Tex. 2010).

> Texas makes a distinction between state water and groundwater. '[W]ater of ordinary flow, underflow, and tides of every flowing river, natural stream, and lake, and of every bay or arm of the Gulf of Mexico, and the storm water, floodwater, and rainwater of every river, natural stream, canyon, ravine, depression, and watershed in the state is the property of the state," and is known as state or surface water. See TEX. WATER CODE ANN. § 11.021(a) (Vernon 2008). Groundwater, which is "water percolating below the surface of the earth," is not governed by the laws and rules applicable to state water. Id. §§ 35.002(5), 35.003 (Vernon 2008).

Edwards Aquifer Auth., 274 S.W.3d at 752. Groundwater and surface water ownership, and the laws associated therewith, are quite complex, and thus, other than a brief overview of Texas groundwater law, this paper will not address all the various judicial and legislative schemes established by each state with respect to water rights.

Suffice it to say, oil and gas production, across the country, requires an enormous amount of water to complete, as well as to operate, wells. Because water is essential for the production and operation phases of oil and gas production, water demand has always been high in the industry. And, as will be noted in more detail below, the hydraulic fracturing process has further increased the demand for water in oil and gas fields.

1. In Texas

In Texas, the surface owner owns all groundwater unless owned by state or expressly severed from the surface estate. *Sun Oil*, 483 S.W.2d at 811. As recently as 2012, the Texas Supreme Court officially adopted the "ownership in place" theory for groundwater. *EAA v. Day*, 369 S.W.3d 814, 832 (Tex. 2012). Nevertheless, the mineral estate owner/lessee has the right to take water in an amount which is reasonably necessary for the development and production of minerals.

Stradley v. Magnolia Petroleum Co., 155 S.W.2d 649 (Tex. Civ. App.—Amarillo 1941, error ref'd); *Fleming Foundation v. Texaco, Inc.*, 337 S.W.2d 846, 850 (Tex. Civ. App.—Amarillo 1960, writ ref'd. n.r.e.). This right applies to both fresh and salt water on the property. *Sun Oil Co.,* 483 S.W.2d 808. Furthermore, it includes the right to take water for secondary recovery process such as water-flood projects. *Id.* at 811.

Recently, however, the Texas Legislature has restricted a lessee's ability to use water for secondary recovery purposes. Section 27.0511(c), (d) of the TEXAS WATER CODE provides that the Texas Railroad Commission must first consider whether there is some other "solid, liquid, or gaseous substance" economically feasible and technically available to the lessee for secondary recovery purposes. If such alternatives exist, the lessee is required to use such other substances instead of fresh water. And, although Texas courts have been reluctant to limit the mineral owner/lessee's right to use water, a mineral owner/lessee's right to use water does not extend to uses off the premises. *Robinson v. Robbins Petroleum Corp.*, 501 S.W.2d 865, 867 (Tex. 1973).

2. Throughout the United States

As stated, a complete survey of each state's water laws is beyond the scope of this paper. A few notable examples, however, should be touched upon. For instance, in New Mexico, the state owns all water within its borders subject to vested rights to appropriate water for beneficial use, which may be owned by individuals. N.M. Const. art. XVI, Sec. 2. Still, a mineral owner/lessee has the right to drill a water well for purposes of acquiring sufficient water to conduct its drilling operations. This right is limited, however. In order to utilize water in significant amounts, a mineral owner/lessee must comply with specific State Engineer's rules and regulations. Moreover, the right to water for secondary recovery operations is not inherent in mineral estate ownership in New Mexico. *See* Nibert, Gregory J., *Oil & Gas Law: Nationwide Comparison of Laws on Leasing, Exploration, and Production*, "New Mexico Chapter," p. 166, (AAPL. 2011).

In Oklahoma, the lease impliedly conveys the right to use all of the oil, gas, water, soil, etc., that is reasonably necessary to carry out the lessee's operations under the lease, including secondary recovery operations such as water flooding. *Wilcox Oil Co.*, 341 P.2d 591. Both Pennsylvania and West Virginia have statutes addressing water use. Specifically, in Pennsylvania, statutes require payment for damages to water supply whether via pollution or diminution. 58 P.S. Sec. 601.208. And, in West Virginia, although following the reasonable use theory, the West Virginia Department of Environmental Protection has issued guidance and regulations on certain water issues related to fracing/horizontal drilling due to large fracing operations in the Marcellus Shale often involving large volumes of water. *See* WV DEP, Water Resources: Title 47 – Series 2 – Requirements Governing Water Quality Standards, 7.2.c.1; 85 WV DEP, Frac Water Reporting Form; 86 WV DEP, Water Resources: Title 47 – Series 2 – Requirements Governing Water Quality Standards (effective August 9, 2009), 7.2.d.20.1.

B. Right to Dispose of Salt Water

It is not unusual to produce salt water with oil and gas. In Texas, this may be disposed of by the non-negligent use of slush pits and by re-injection of the salt water into the pore spaces underground. *Brown v. Lundell*, 344 S.W.2d 863, 866-67 (Tex. 1961); *TDC Engineering, Inc. v. Dunlap*, 686 S.W.2d 346, 349 (Tex. Civ. App.—Eastland 1985, writ ref'd n.r.e.) (absent showing that salt water injection well was not reasonably necessary, lessee has right to re-inject salt water produced from leased premises in a nonproductive well on leased premises). The right to dispose saltwater is subject to stringent Railroad Commission regulation, however. 16 TEX. ADMIN. CODE

Likewise, in Kansas, saltwater disposal is an implied right under an oil and gas lease. *Colburn v. Parker & Parsley Dev. Co.*, 842 P.2d 321 (Kan. 1992). Like Texas, however, the Kansas Legislature has provided for control over the disposal of salt water as follows:

> The owner or operator of any oil or gas well which may be producing and which produces salt water or waters containing minerals in an appreciable degree shall have the right to return such waters to any horizon from which salt waters may have been produced, or to any other horizon which contains or had previously produced salt water or waters containing minerals in an appreciable degree, if the owner or operator of such well makes a written application to the state corporation commission for authority to do so, and written approval has been granted to the owner or operator after investigation by the state corporation commission.

K.S.A. 1991 Supp. 55-901(a).

North Dakota courts have also recognized the implied right to dispose of salt water; however, said right is limited to disposal in surface pits. *Feland v Placid Oil Co.*, 171 N.W.2d 829 (N.D. 1969). And, the West Virginia legislature has promulgated regulations that apply to the disposal of fracing fluids and salt water. Specifically, if more than a 5,000 barrel liquid disposal is anticipated, the West Virginia Department of Environmental Protection requires the disposal pit be designed by an engineer. W.Va. CSR Sec. 35-4-21; W. Va. CSR Sec. 35-4-7.

C. The Right to Construct Production/Storage Facilities and Pipelines

1. In Texas

The mineral estate owner is entitled to use the surface to lay pipelines and build storage tanks, power stations, and other structures necessary "to produce, save, care for and dispose" of oil and gas production. *Joyner v. R. H. Dearing & Sons*, 134 S.W.2d 757, 759 (Tex. Civ. App.—El Paso 1939, error dism'd judg. cor.); *see also Ottis v. Haas*, 569 S.W.2d 508, 513 (Tex. Civ. App.—Corpus Christi 1978, writ ref'd n.r.e.); *Atlantic Ref. Co. v. Bright & Schiff*, 321 S.W.2d 167, 168-69 (Tex. Civ. App.—San Antonio 1959, writ ref'd n.r.e.); *Mobil Pipe Line 6 Company v. Smith*, 860 S.W.2d 157, 159-60 (Tex. App.—El Paso 1993, dism'd w.o.j.). While the rights to construct structures and pipelines are implied, said rights do not extend to the transportation, treatment or storage of substances produced *off the lease. See Delhi Gas Pipeline Corp. v. Dixon*, 737 S.W.2d 96, 99 (Tex. App.—Eastland 1987, writ denied) (lessee could grant purchaser easement to construct pipeline across leasehold, but pipeline could not transport gas produced off of lease). Moreover, one Texas court has held that it was unreasonable to lay thousands of feet of pipeline on open ground, not buried. *Texaco, Inc. v Joffrion,* 363 S.W.2d 827 (Tex. Civ. App.---1962, writ ref'd n.r.e.).

2. Throughout the United States

Like Texas, Colorado, Kentucky, Louisiana, Oklahoma, and West Virginia have recognized the right to construct pipelines as an implied right within the reasonable use standard. *Amoco Production Co. v. Thunderhead Investments, Inc.*, 235 F. Supp. 2d 1163 (D. Colo. 2002); *Lindsey v Wilson*, 332 S.W.2d 641 (Ky. 1960); *Rohner v Austral Oil Exploration Co.*, 104 So.2d 253 (La. App. 1958); *Schlegel v Kinzie*, 12 P.2d 223 (Okla. 1932); *Adkins v United Fuel Gas Co.*, 61 S.E.2d 633 (W. Va. 1950). Oklahoma courts, however, have explicitly held that the failure to bury pipelines below plow depth is unreasonable. *Schlegel*, 12 P.2d 223.

Ohio and Wyoming have held that the right to construct above ground structures constitutes a reasonable use of the surface. *Fowler*, 87 N.E. 260; *Holbrook v Continental Oil Co.*, 278 P.2d 798 (Wyo. 1955). In this connection, however, Ohio courts have expressly limited said right by holding that the construction of above ground structures for housing employees is unreasonable. *Fowler*, 87 N.E. 260.

D. Use/Construction of Surface Roads

In Texas, a mineral owner/lessee has the right to construct roads and absent excessive, unnecessary or unreasonable use, owes no damages for exercising this right. *Humble Oil & Refining Co. v. Williams*, 420 S.W.2d at 135; *Gulf Oil Corp. v. Walton*, 317 S.W.2d 260, 262 (Tex. Civ. App.---El Paso 1958, no writ). Similarly, a mineral owner has the right to use a landowner's existing roads. *See Eastex Wildlife Conservation Asso. v Jasper*, 450 S.W.2d 904 (Tex. Civ. App.—1970, writ ref'd n.r.e).

In Kansas, Louisiana, Mississippi and West Virginia, the implied right of reasonable use includes the use of existing roads. *Mai v. Youtsey*, 646 P.2d 475 (Kan. 1982); *Rohner,* 104 So. 2d 253; *Central Oil Co. v Shows*, 149 So. 2d 306 (Miss. 1963); *Adkins*, 61 S.E.2d 633.

While other states generally follow the reasonableness standard with respect to road construction and use, fact specific instances have resulted in holdings of unreasonable use. For example, the Arkansas Supreme Court has held that evidence of the construction of 40-foot wide roadway over four surface acres is unreasonable. *Arkansas Louisiana Gas Co.,* 403 S.W.2d 54. The Kentucky Supreme Court has held that hauling equipment with large vehicles and heavy traffic off-road across open fields is unreasonable. *Illinois Basin Oil Asso. v Lynn*, 425 S.W.2d 555 (Ky. 1968).

The Montana Supreme Court has held that if a particular facility is necessary to mineral operations, it may be placed anywhere on the surface so long as such placement is reasonable under prevailing conditions. *Hurley v Northern P. R. Co.*, 455 P.2d 321 (Mont. 1969). Generally, this is true even though such placement in particular instances might work a hardship on the surface owner. *See id.* However, in one particular case, an oil and gas company constructed a road across a dam spillway. *See id.* The company then failed to maintain the road, which resulted in significant damage to the surface estate. *See id.* As such, the court held that the placement of the roadway and lack of maintenance thereof was unreasonable. *See id.*

In Oklahoma, a mineral owner/lessee does not necessarily have a common-law right to enter a tract of land at each and every available point of entry. *Lierly*, 139 P.3d 897. As noted in more detail below, Oklahoma's Surface Damage Act specifically addresses this issue.

E. Well location and the surface

In Texas, there are no statutory or common law limitations placed on well site locations. Texas courts have traditionally provided the mineral owner/lessee with broad rights to select the drilling site of their choice. *Stephenson v. Glass*, 276 S.W. 1110, 1112 (Tex. Civ. App.---San Antonio 1925), writ ref'd, *per curium at* 279 S.W. 260 (Tex. 1926). Nevertheless, in *Reading & Bates Offshore Drilling Co. v. Jergenson*, the mineral lessee placed a well on the edge of the surface owner's ensilage pit. 453 S.W.2d 853, 855-56 (Tex. Civ. App.—Eastland 1970, writ ref'dn.r.e.). That location prevented the surface owner from using his property for a cattle feeding business. *See id.* Under the circumstances, the court upheld a jury's finding that the mineral lessee had made an unreasonable use of the surface owner's property and upheld the jury's award of damages. *See id.*

The Arkansas Legislature has placed a notification limitation on a mineral owner's/lessee's right to well placement. Specifically, a mineral owner/lessee has to notify the surface owner prior to conducting any surface operations. A.C.A. Sec. 14-72-203. Similarly, the rules of the Colorado Oil and Gas Conservation Commission contain numerous requirements regarding surface access, well site location, reclamation and notice. C.R.S. 34-60-106. This is further true of most states that have some form of a Surface Damage Act, as demonstrated below in more detail.

F. Seismic activities

1. In Texas

In Texas, seismic activities are encompassed as part of the word "explore". Accordingly, the mineral owner/lessee, not surface owner, owns the right to conduct or authorize seismic tests. *Gulf Oil Corporation v. Whitaker*, 252 F.2d 157 (5th Cir. Tex. 1958). As between the mineral owner and his/her lessee, if the granting clause of the lease conveys the exclusive right to explore, then the mineral lessor no longer retains any geophysical rights. *Wilson v. Texas Company*, 237 S.W.2d 649 (Tex. Civ. App.---Fort Worth 1951, writ ref'd n.r.e.). Less a specific clause, however, the lessee and mineral owner will share the right to conduct seismic activities. *See id.* The surface estate owner has no rights of seismic. Nevertheless, in all instances, a surface owner approached by a seismic company should immediately request a copy of the lease under which the company claims a right to enter the property. In some cases, the company may be on the wrong property, or there may not actually be a lease.

2. Throughout the United States

Courts in the following states have held that the right to conduct seismic activities belongs to the mineral estate: Arkansas, Colorado, Montana, North Dakota, and Oklahoma. *El Paso Production Company v. Blanchard*, 269 S.W.3d 362 (Ark. 2007); *Grynberg v. Northglenn*, 739 P.2d 230 (Colo. 1987); *Norum v. Ohio Oil Co.,* 272 P. 534 (Mont. 1928); *Hunt Oil Co.*, 283 N.W.2d 131; *Enron Oil & Gas Co.*, 947 P.2d 610. In Ohio, there are no specific statutes or case law, but one court has implicitly considered the conducting of seismic as part of the exploration of oil and gas. *Hill v. Lee Enterprises*, 1991 Ohio App. LEXIS 4870 (Ohio Ct. App. 5th 1991).

The Arkansas and Montana Legislatures have limited the right to conduct seismic operations by requiring actual notice be provided to the surface estate owner of proposed seismic activity locations and dates. A.C.A Sec. 15-72-203; Mont. Code. Ann. Sec. 82. Moreover, the Montana statutory scheme requires the surface estate be restored to its prior condition following seismic operations. Mont. Code. Ann. Sec. 82. It is important to note that while most states with Surface Damage Acts address seismic activities, Oklahoma's Surface Damage Act does not apply to seismic activities, and injunctive relief is available against interfering surface owners when conducting seismic. *Anschutz Corp. v. Sanders*, 734 P.2d 1290 (Okla. 1987).

G. A Word on Hydraulic Fracturing (fracing), Horizontal Drilling, and Implied Rights

The recent utilization of horizontal drilling/fracing technologies in the oil and gas industry has raised many questions about the mineral estate owner's implied rights of reasonable surface use. For instance, the implied rights to use water, to dispose of salt water, and to build sludge pits, while common with the use of traditional drilling techniques, have become the subject of much scrutiny in the face of large horizontal drilling/fracing operations. The fracing process has also drastically changed private negotiations between potential lessees and mineral estate owners who are also surface estate owners. In areas where fracing is being utilized, it is not uncommon to see large, detailed lease addendums, addressing all surface operations potentially affected by the fracing

process. In this connection, it is important to have a general overview of the fracing process in order to understand how the process has begun to alter certain long-standing rights.

The primary method of natural gas extraction from shale gas reservoirs involves hydraulic fracturing stimulation ("fracing"). *Coastal Oil & Gas Corp. v. Garza Energy Trust*, 268 S.W.3d 1, 6-7 (Tex. 2008). Fracing has been used commercially since 1949, but advanced technologies have increased its use over the last couple of decades. *See id.* Fracing creates spaces in the rock formations below the ground to enlarge the pores within the rock itself. *See id.* Fracing is performed by "pumping fluid down a well at high pressure so that it is forced out into the formation." *Id.* at 7. The high pressure from the fluid creates cracks in the rock below the surface that form along the natural azimuth of natural fault lines in specific patterns. *See id.* A slurry, containing small granules called "proppants" made up of sand, ceramic beads, or bauxite, follows the fluid. *See id.*

These propponants lodge themselves in the cracks, propping them open against the enormous subsurface pressure that would force them shut as soon as the fluid was gone. *Coastal Oil & Gas Corp.*, 268 S.W.3d at 6-7. "The fluid is then drained, leaving the cracks open for gas or oil to flow to the wellbore." *Id.* at 7. Fracing increases the well's exposure to the intended subsurface formation, which allows for greater production. *See id.* The cracks created by the fracturing process allow resources, typically natural gas, to move freely from the rock pores to the wellbore. *See id.*

Each fracing operation is designed specifically for a particular well. *See id.* Engineers select specific injection pressure, volume of the material to be used, and the "type of proppant to achieve a desired result based on data regarding porosity, permeability, and modulus (elasticity) of the rock." *Id.* Engineers can estimate the length and size of the fractures created by the process in three different ways: the hydraulic length, the propped length, and the effective length. *See id.* However, even with this data, it is impossible to know the direction and actual distances the hydraulic fracturing process will create. *Coastal Oil & Gas Corp.*, 268 S.W.3d at 6-7. In fact, no technique or technology can control the direction or size of the fractures created; the fractures will follow "Mother Nature's fault lines in the formation." *Id.*

During the fracing process, immense volumes of water, combined with propponants, are forced down a well bore and into subsurface rock formations. *See id.* Fracing fluid typically consists of up to 99% water with propponants making up the rest. Heather Cooley and Kristina Donnelly, *Hydraulic Fracturing and Water Resources: Separating the Frack from the Fiction*, 25th Pacific Institute (June 2012). Thus, the enabler of the shale play revolution is water. *See* Amy Hardberger, *Water Issues in Shale Production, Environmental Impacts of Oil and Gas Production*, Texas Bar CLE, Houston, Texas, Jan. 13, 2012 (citation omitted). It is estimated that oil and gas producers use the following amounts of water to drill and fracture a well per the following Texas shale plays: "Eagle Ford Shale, 5.1 million gallons per well; Barnett Shale, 4.8 million gallons per well; Haynesville Shale, 5.6 million gallons per well." *Id.*

The fracing process also results in what is referred to as "produced water." Heather Cooley and Kristina Donnelly, *Hydraulic Fracturing and Water Resources: Separating the Frack from the Fiction*, 25th Pacific Institute (June 2012). Produced water is essentially salt water that is produced along with the natural resources coming through the well-head at the surface. *See id.* Produced water can contain natural formation water, naturally occurring subsurface substances, and residual fracing fluids. *See id.* The torage and disposal of produced water from large fracing operations have created much debate and conflict with surface estate owners in recent years.

The fracing technology has so rapidly developed, state laws have had a difficult time keeping pace. Where, as noted in detail above, the traditional doctrines of the dominant estate and reasonable use could be applied to traditional petroleum development, fracing/horizontal drilling procedures have raised many new questions as to the continuing viability of these doctrines. This is especially true with respect to the use of water, the disposal of fracing fluids/produced water, groundwater/surface water contamination, the expansion of surface site operations, heavy truck/equipment traffic, and the potential for subsidization. Heather Cooley and Kristina Donnelly, *Hydraulic Fracturing and Water Resources: Separating the Frack from the Fiction*, 25th Pacific Institute (June 2012). While debates continue, it will be interesting to see how state courts and legislators address these issues and whether the long-standing doctrines of the dominant estate and reasonable use will continue to be viable. As demonstrated in the next section, some states are already beginning to address these issues through increased legislation and the further development of judicial limitations on petroleum production.

IV. Limitations on the Dominant Estate Theory and the Reasonable Use Theory

Despite the mineral estate being the dominant estate and certain surface uses being necessary to develop the minerals, the specific manner in which a particular surface use is carried out may raise "reasonable" necessity questions. For example, a lease may expressly grant the right to install pumps, or such right may be implied where a well would not flow otherwise. But, an attack upon a particular pump's installation is not necessarily foreclosed. It is, for example, still open for a surface owner to ask whether the size or shape of the pumping unit is excessive, given a well's producing capacity and the availability of other sizes, shapes, and types of pump. Similarly, questions of whether the method of installation is reasonable under the circumstances may arise. Moreover, said pump's location, shape, size or installation methods may interfere with existing uses of the surface estate.

In order to address such issues, jurisdictions have carved out various causes of action under which surface owners can attack "reasonable use". Moreover, some jurisdictions have created limiting doctrines, such as the accommodation doctrine and the alternative means doctrine to balance the equities between the mineral and surface estate. Finally, other jurisdictions have enacted legislation that directly addresses surface uses and surface damages.

A. Common Law Causes of Action

1. In Texas

Texas case law provides surface owners with causes of action that provide relief for tortious acts of mineral owners/lessees. "A person who seeks to recover from the lessee for damages to the surface has the burden of alleging and proving either specific acts of negligence or that more of the land was used by the lessee than was reasonably necessary." *Lexington Ins. Co. v. Daybreak Exp., Inc.*, 393 S.W.3d 242, 245 (Tex. 2013)(*quoting Humble Oil & Ref. Co.*, 420 S.W.2d at 134).

The requisites to prove negligence of a mineral lessee are the same as for any other tortfeasor. *See* Keeton & Jones, *Tort Liability and the Oil and Gas Industry*, 35 Tex. L.Rev. 1, 12 (1956). In order to establish a claim for unreasonable use, the surface owner must prove that more of the land was used by the lessee than reasonably necessary. *Humble Oil & Ref. Co.*, 420 S.W.2d at

134. "When the surface owner claims the operator has exceeded its rights to use the surface, damages have traditionally been measured by the value of the excessive acreage used." *Cole v. Anadarko Petroleum Corp.*, 331 S.W.3d 30, 38 (Tex. App.---Eastland 2010, pet. denied) (*citing Stradley,* 155 S.W.2d 649 ("operator used and occupied six acres more than was reasonably necessary for its full enjoyment of the minerals under its tract and, therefore, was responsible to the surface owner for the value of that acreage").

2. Thoughout the United States

Most states that have adopted the reasonably use theory also provide causes of action for unreasonable or excessive use. Some examples include Arkansas, which provides a cause of action similar to that in Texas for the unreasonable use of surface and/or unreasonable harm. *Diamond Shamrock Corp. v. Phillips*, 511 S.W.2d 160 (Ark. 1974). California jurisprudence provides negligence, willful misconduct, breach of a lease provision, or excessive use of surface causes of action for damages to surface. *Callahan*, 3 Cal.2d 110. Similarly, Kansas and Kentucky allow the recovery of damages for unreasonable use of surface. *Fast v. Kahan*, 481 P. 2d 958 (Kan. 1971); *Wiser Oil Co. v Conley*, 346 S.W.2d 718 (Ky. 1960)

B. Accommodation Doctrine and/or Alternative Means Doctrine

1. In Texas

In Texas, the mineral estate owner's right to use the surface is further limited by the rule of "due regard." Specifically, the mineral estate owner must conduct his activities with due regard for the surface estate. Out of the concept of "due regard," Texas courts have developed what is presently referred to as "the accommodation doctrine" and/or "the alternative means doctrine". The accommodation doctrine was first articulated by the Texas Supreme Court in the case of *Getty Oil Co. v. Jones*:

> [w]here there is an existing use by the surface owner which would otherwise be precluded or impaired, and where under the established practices in the industry there are alternatives available to the lessee whereby the minerals can be recovered, the rules of reasonable usage of the surface may require adoption of an alternative by the lessee.

470 S.W.2d 618, 622 (Tex. 1971).

The accommodation doctrine recognizes a greater duty on the mineral lessee than previously imposed. The doctrine does not, however, stand for the proposition that the surface estate is now the dominant estate, nor that the mineral lessee must, at all costs, avoid interference with the surface owner's use. *See id.* at 628; *see also Sun Oil Co.*, 483 S.W.2d 808. In fact, if there is no reasonable alternative to the one complained of by the surface owner, and the activity is consistent with industry standards, the mineral estate owner/lessee is entitled to proceed. *Tarrant County Water Control and Improvement Dist. Number One*, 854 S.W.2d at 911-12. Moreover, the burden of satisfying an accommodation doctrine claim is on the surface estate owner. *See Merriman v. XTO Energy, Inc.*, 407 S.W.3d 244 (Tex. 2013).

For a time following *Getty Oil Co.*, case law further defining the accommodation doctrine was scarce. The few courts that addressed the doctrine interpreted it narrowly. For instance, in *Landreth v. Melendez*, the Amarillo Court of Appeals held that the accommodation doctrine can be contracted away, and thus, waived. 948 S.W.2d 76, 81 (Tex. App.— Amarillo 1997, no writ). Another significant limitation on the accommodation doctrine arose in *Ottis v. Haas* where the court

held that a showing of mere inconvenience does not satisfy the elements of the doctrine. 569 S.W.2d at 514.

In the last decade, the courts have revisited the doctrine on numerous occasions. In *Texas Genco, LP v. Valence Operating Co.*, a surface owner bought 450 acres to use as a landfill and determined that the entire acreage was necessary for its waste disposal operations over the next twenty+ years. 187 S.W.3d 118, 120-21 (Tex.App.–Waco 2006, pet denied). The Waco Court of Appeals held, under the accommodation doctrine, that even though there was no existing use on that portion of the landfill at the time of drilling, the entire acreage should be considered an existing landfill because a producing well resulting from the drill-site ten years in the future would adversely affect the landfill's ongoing operations at that time. *See id* at 123-25. In the 2008 sister case, *Valence Operating Co. v. Tex. Genco, LP* (Tex. Genco II), the Waco Court of Appeals determined that there were several locations on the surface owner's estate outside of the landfill that could provide the operator with reasonable access to its minerals via directional drilling. 255 S.W.3d 210, 218-19 (Tex.App.–Waco 2008, no pet). Such alternative means, the court held, allowed the operator to accommodate the surface owner's landfill operations. *Id.*

Most recently, the Texas Supreme Court in *Merriman vs. XTO Energy, Inc.*, reaffirmed the surface owner's heavy burden of proof under the accommodation doctrine. 407 S.W.3d 244 (Tex. 2013). Specifically, the high court held that, in order to be entitled to relief under the accommodation doctrine, the surface owner must establish that: 1) the lessee's use completely prevents or substantially impairs the surface estate owner's existing use; and 2) no reasonable alternative means are available to the surface owner by which the existing use can be continued. *See id.* at 250-52. And, although the court did not have to decide the issue, had these high burdens been met, the surface owner would then have had to prove that a reasonable alternative existed for the lessee's operations. *See Tarrant County Water Control and Improvement Dist. Number One*, 854 S.W.2d at 911-12.

2. Throughout the United States

States that have expressly adopted some form of the accommodation doctrine include: Colorado, Utah, and West Virginia. *See* Colo. Rev. Stat. Sec. 34-60-127; *Flying Diamond Corp. v. Rust*, 551 P.2d 509, 511 (Utah 1976); *Buffalo Mining Co. v. Martin*, 267 S.E.2d 721 (W. Va. 1980). Some courts in states such as Arkansas, Kentucky, and Louisiana seem to have implicitly adopted the accommodation doctrine. For instance, the Arkansas Supreme Court has held that reasonableness requires minimizing the surface owner's damages. *See Diamond Shamrock Corp.*, 511 S.W.2d 160. (*see also McFarland v. Taylor*, 65 S.W.3d 468 (Ark. 2002). Kentucky courts have adopted a "due regard" standard in that the courts reason the rights of an oil and gas lessee and a surface owner are correlative and must be exercised with due regard. *Lindsey*, 332 S.W.2d 641. Similarly, although Louisiana has no stated accommodation doctrine, prior use of the property by the surface owner is a factor courts review in determining reasonable use and due regard. *Butler v. Baber*, 529 So. 2d 374 (La. 1988).

Likewise, Pennsylvania and Tennessee courts have applied accommodation-like tests. In *Gillespie v. Am. Zinc & Chem. Co.*, the Pennsylvania Supreme Court held: "as between two proposed locations for the drilling and operation of a well, when one would injure, harass and annoy the owner of the land, without benefit or advantage to the [producer], while the other would result in no such injury, the [producer] is bound ... to choose the latter location, if in so doing he is not substantially injured, or put to disadvantage thereby." 93 A. 272, 274 (Pa. 1915); *see also Chartiers Block Coal Co. v. Mellon*, 25 A. 597, 598 (Pa. 1893). And, a Tennessee appellate court has stated: "The mineral owner does not have the right, under a general mineral reservation such as this one, to

extract substances in a manner that would cause serious, long-term interference with the uses of the surface that the original parties to the deed intended, or with the uses that a reasonable landowner in the surface owner's position would be expected to make of the property." *State v. Lahiere-Hill, L.L.C.*, 278 S.W.3d 745 (Ten. App. 2008).

States with no current accommodation doctrine (either express or implied) include: California, Ohio, and Oklahoma. States like Michigan and Mississippi appear to have rejected the doctrine. A Michigan appeals court, in an unpublished opinion, held that where an oil, gas, and mineral lease expressly grants a right, the lessee has no duty to accommodate existing surface use. *Rorke v. Savoy Energy LP*, 2004 WL 1103775 (Mich. App. 2004). Mississippi courts have rejected the accommodation doctrine in favor of a "prudent operator" standard. *See EOG Resources, Inc. v. Turner*, 908 So.2d 848 (Miss. 2005); *Abraham v. Sklar Exploration Co., L.L.C.*, 408 F.Supp.2d 244 (S.D. Miss. 2005). "[A] mineral lessee will be liable to the surface owner for damages if the lessee wantonly or negligently destroys the land or uses more land than is reasonably necessary for its mineral exploration and production operations. This has been termed the 'prudent operator standard.'" *EOG Resources, Inc.*, 908 So.2d at 853 (citations omitted).

C. Payment for Surface Damages

Texas has no Surface Damage Act. Surface damage acts are legislation enacted to require oil and gas operators to pay surface damages resulting from their operations. *See* Howard R. Williams & Charles J. Meyers, Manual of Oil and Gas Terms 949 (14th ed. 2009). Texas also has no common law requiring compensation to surface owners for use, including damages, of surface. *See Humble Oil & Ref. Co.*, 420 S.W.2d at 134. There is no duty to restore the surface to its existing state prior to operations. *Warren Petroleum Corp.*, 304 S.W.2d 362. As previously, noted, however, many industry players pay surface damages and/or enter into surface-use agreements with the surface owner simply to retain good working relationships with the surface owners and avoid conflict and costly litigation.

Other states that do not have surface damage acts include: Alabama, Arkansas, California, Colorado, Kansas, Louisiana, Michigan, Mississippi, New York, Ohio, Pennsylvania, and Utah. As many of the oil and gas developers conducting business in Texas are also conducting business in other states, it is fair to assume they use similar business methods everywhere. Thus, it is likely the good neighbor policy of entering into surface use agreements, despite the lack of statutory duty, is common throughout the nation.

D. Surface Damage Acts

Numerous states have enacted Surface Damage Acts. Montana's act, for instance, requires mineral owners/lessees to give notice of drilling operations to surface owners, which disclose a plan of intended operations that will occur on the surface. The mineral owners/lessees are then required to provide damages to surface owners for loss of agriculture production and income, lost land value, and lost value of improvements. The surface estate owner must give notice within two years of any damages that have occurred. Upon such proper notice, the operator has 60 days to make an offer of settlement. *See* "Surface Damage Act"; Mon. Code. Sec. 82-10-501 et. seq.

New Mexico's Surface Damage Act is more comprehensive. Surface owners are entitled to mandatory notice of all proposed entries and operations. Mineral owners/lessees must propose

both a surface use agreement and a compensation agreement. The surface owner must agree to all terms, but the Act requires, at a minimum, that the following issues be addressed:

- Terms of ingress and egress
- Placement, specifications, construction, and maintenance of well pads, gathering lines, pits, equipment and roads;
- Use and impoundment of surface water
- Removal and restoration of vegetation plant life
- Surface water drainage changes
- Actions to limit runoff and erosion issues resulting from operations;
- Interim and final reclamation;
- Actions to minimize surface damges
- Operator indemnification; and
- Offer of compensation for damages.

See "Surface Owner's Production Act"; N.M. Stat. Sec. 70-12-1 et. seq.

Similarly, North Dakota's act requires mineral owners/lessees to pay a sum of money equal to the damages sustained by the surface owner for loss of agriculture production and income, lost land value, lost use and access, and lost value of improvements. North Dakota also requires written notice of all operations be provided to the surface owner. *See* "Surface Damage Act"; N.D. Cent. Code § 38-11.1-04.

Oklahoma also requires notice to surface owners of intent to commence operations. Mineral owners/lessees are required to negotiate with the landowners in good faith to reach a compensation settlement. Until such settlement is reached, the mineral owner/lessee may not enter the surface. In the event an agreement cannot be reached, Oklahoma provides a judicial process; whereby, a petition may be filed in district court, and appraisers are appointed to decide damages. Once the petition is filed, the mineral owner/lessee may enter the surface and commence operations. *See* "Surface Damage Act"; Okla. Stat. Tit. 52, § 318.1 et. seq.

Wyoming's act, known as the Split Estates Act, essentially codified a form of the accommodation doctrine. In addition, the act requires a detailed notice be provided to the surface owners of proposed dates of entry and operation locations. The mineral owner/lessee is required to compensate the surface owner for the amount of damages sustained for the loss of production and income, loss of land value, and loss of value of improvements caused by mineral operations. Entry is conditioned on good faith negotiations. And, the Wyoming Oil and Gas Conservation Commission is not authorized to grant drilling permits without proof of compliance with the act. *See* "Split Estates Act"; W.S. Sec. 30-5-401 et. seq.

Other states with similar Surface Damage Acts include: Indiana, Illinois, South Dakota, Tennessee, and West Virginia. Canadian Provinces all have surface use legislation as well. Some states, while not having comprehensive acts, provide some additional protections for surface owners. For example, in Arkansas, the mineral owner/lessee must notify the surface owner prior to conducting surface operations. A.C.A. Sec. 14-72-203. And, upon drilling a dry hole or upon termination of production, Arkansas lessees have a duty to restore the surface to its original condition as nearly as is practicable. *Bonds v. Sanchez-O'Brien Oil and Gas Co.*, 715 S.W.2d 444 (Ark. 1986)

The rules of the Colorado Oil and Gas Conservation Commission contain numerous requirements regarding surface access, reclamation, and notice. C.R.S. 34-60-106. In Kansas,

lessees are required, at the termination of the lease, to remove "any rig, derrick or other operating structure and return the land to its original grade." K.S.A. 55-177. Violation of this act is a criminal misdemeanor. *See id*. Utah's Administrative Code requires operators seeking to drill a new well to use reasonable efforts to enter into a surface use agreement establishing well site restoration with the surface owner prior to drilling a new well. This agreement typically results in surface damages being addressed. Utah Admin. Code R649-3-34 (6).

V. CONCUSION

From a practical perspective, the mineral estate must function as the dominant estate. The production of petroleum in North America serves a much larger interest than those of simply the mineral estate owners and lessees. It is certainly within the best interests of the North American society to rely on production at home as opposed to relying on resources exploited overseas. That being the case, there is unfortunately no means of extracting the products without some surface upheaval. The laws of the various jurisdictions work to strike a balance between the surface estate and mineral estate. How that balance is achieved in the wake of technological advancements remains to be seen, but owners and industry participants should expect the debate to continue and the laws to evolve and change with the times.