Preface

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We usually find gas in new places with old ideas. Sometimes, also, we find gas in an old place with a new idea, but we seldom find much gas in an old place with an old idea. Several times in the past we have thought that we were running out of gas, whereas actually we were only running out of ideas.

—Parke A. Dickey, University of Tulsa petroleum geology professor, September 1958

Born of new ideas in old places, the shale gas revolution spans across the United States and has generated unparalleled opportunity for investment and economic growth. The abundance of shale resources coupled with technological advances in horizontal drilling and hydraulic fracturing translates to high levels of oil and gas production and a greater possibility of stabilized pricing for both oil and gas. The seemingly impossible has not only become possible, but also profitable. Access to an abundant supply of unconventional gas at prices forecasted to remain at relatively low prices means that the United States can meet its domestic energy needs, and export the surplus around the world. And the economic boom is not just from the sale of oil and gas. Expanding oil and gas production requires significant and sustained capital investment to secure the necessary equipment, technology, and personnel to extract the oil and gas, and build the infrastructure necessary to accommodate anticipated production levels including pipelines, roads, refineries, and natural gas-fired power generation facilities. An anticipated hundreds of billions of dollars in capital investment funds will flow into the economy as a result of the shale gas revolution.
Seemingly overnight, sleepy towns in rural areas have awakened to a boom of oil and gas activity. Trucks hum down rural highways ill-equipped to handle the increased traffic. Land professionals’ hot pursuit of acreage may uncover crudely documented title, missing mineral owners, or other title issues. The race to find enormous quantities of water necessary for hydraulic fracturing operations has generated increased regulation of water use and new disputes over water rights. The impact of hydraulic fracturing on air emissions, soil or water contamination, or other natural phenomena like earthquakes has been taken up by the media and concerned citizens both inside and outside the courtroom. Local municipalities, state legislatures, and administrative bodies struggle to quickly implement new ordinances, regulation, and laws. With this fast-paced unconventional development comes a new wave of litigation issues.

To understand the source of these issues, the first chapter provides an overview of the geology, exploration, drilling, and production of shale plays, and introduces the shale plays and their individual properties regionally: the Marcellus, the Utica, the Haynesville, the Eagle Ford, the Black Warrior, the Fayetteville, the Woodford, the Cana Woodford, the Permian, the Barnett, the Williston, the Bakken, and the Three Forks, among others.

The second chapter identifies common litigation issues in shale plays, including leasing and title litigation arising from incorrect lessors and legal descriptions, lessor misunderstandings related to mineral holdings, missing mineral owners, the use of conventional lease terms in the context of unconventional oil and gas development, condemnation of property for oil and gas purposes, subsurface trespass actions, accommodation doctrine issues, environmental impacts to water and air, earthquakes, contamination caused by spills, and impacts on road use, and regulatory issues arising from clashes between federal, state, and local regulatory authorities.

In part, the media coverage of hydraulic fracturing and its alleged environmental impacts has generated a comparable surge in related litigation. Lawsuits popping up across the country highlight the claims being asserted by real-world plaintiffs for recovery of personal injury and property damages related to hydraulic fracturing. Other lawsuits between governmental entities illuminate the battle between state regulation and local municipal zoning bans. New York’s moratorium on drilling has resulted in lawsuits
in which oil and gas lessees allege that force majeure exempts them from the payment of delay rentals provided for in the parties’ oil and gas lease until the end of the moratorium. Lawsuits in Wyoming and Pennsylvania challenge disclosure regulations related to the disclosure of chemicals used in hydraulic fracturing.

The third chapter highlights common contractual disputes related to royalties, pooling, and unitization, and implied covenants to market and for further development. These common contractual disputes in the context of conventional development have generated long-standing legal precedent in Texas, Oklahoma, and Louisiana, among other jurisdictions. However, horizontal drilling creates new legal wrinkles that have yet to be ironed out. Other jurisdictions altogether lack 100-plus years of standing legal precedent. They look to those jurisdictions that have such legal precedent for guidance, but are not bound to that precedent. The result is an inherent uncertainty in the resolution of these common contractual disputes. Lawsuits percolating in North Dakota, Pennsylvania, Texas, and other jurisdictions will continue to shape the contours of the legal precedent applicable to these common contractual disputes.

Finally, the development of shale plays requires the use of significant quantities of water. Competition for water and a significant uptick in regulation related to the use of water will generate litigation related to the use of water in oil and gas operations. The final chapter in this book provides a broad regional overview of the statutory and regulatory schemes that govern water use in oil and gas producing states, and highlights potential areas for disputes.

An influx of new ideas applied to established technologies paved the way for today’s rapid unconventional shale development. Likewise, judges, litigators, and other legal practitioners should infuse established legal precedent with new ideas to adequately address the contentious disputes arising across the nation as a result of the shale gas revolution.