

**The Interpretation of
Surface Easements in Severance Deeds
as a Limit on Hydraulic Fracturing Practices**

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Hydraulic fracturing has driven a boom in natural gas production in the Marcellus Shale. While providing a growing source of domestic energy, this boom also raises significant environmental concerns. Many of the impacts of hydraulic fracturing predominantly affect the inhabitants of the property where the drilling occurs. Yet when those inhabitants own only the surface estate, they have relatively little influence over whether and how the drilling occurs and will not profit from the gas extraction. This article provides a jurisdictional case study set in West Virginia to assist in understanding the nuances relevant to an interpretation of the scope of express and implied surface easements pertinent to mineral extraction. West Virginia takes a unique approach to the accommodation doctrine. It permits a surface owner to argue that certain overly burdensome practices may not have been contemplated by the parties to the original severance deed and easement, thus weakening the likelihood of their propriety and giving surface owners leverage. Depending on the type of easement at issue, the analysis can include a review of the burden to the surface, the nature of surface uses, the necessity of a practice, the compatibility of a practice, and/or contractual intention.

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Table of Contents

INTRODUCTION 73

I. HYDRAULIC FRACTURING AND THE MARCELLUS SHALE 76

II. SPLIT ESTATES 79

III. INTERPRETING SURFACE EASEMENTS IN WEST VIRGINIA 85

 A. Practices that Exceed the Scope of an Easement 86

 1. Unambiguous Express Easements 88

 2. Ambiguous Express Easements and Implied
Easements 90

 a) The Evolution of the Interpretation of Ambiguous
Easements in West Virginia 91

 b) The Accommodation Doctrine 96

 c) The Accommodation Doctrine in West Virginia 98

CONCLUSION 104

INTRODUCTION¹

The news these days is full of stories about the light and dark sides of the natural gas boom for landowners in the Marcellus Shale states of New York, Pennsylvania, West Virginia, and Ohio. On the brighter side are landowners who have profited from leasing their land to gas developers, including stories of dairy farmers turned “shalionaires.”² On

¹ In December 2011, after the completion of this article, West Virginia enacted a significant revision of its oil and gas laws to, among other things, address some of the issues raised by horizontal drilling and hydraulic fracturing. See Press Release, Office of the Governor Earl Ray Tomblin, Governor Signs Horizontal Well Act (Dec. 22, 2011), available at <http://www.governor.wv.gov/newsroom/pressreleases/2011/Pages/GovernorSignsHorizontalWellAct.aspx>. This amendment, known as the Horizontal Well Act, has been codified at W. VA. CODE §§ 22-6A-1-24 (2011). Compensation provisions for damage to surface estates caused by extraction from horizontal wells were also enacted at W. VA. CODE §§ 22-6B-1-8 (2011). Those provisions are similar to the original oil and gas compensation provisions, except they now specifically apply to horizontal wells. See W. VA. CODE §§ 22-7-1-8 (2011). This article does not directly address the implications of these pieces of legislation, which include, for example, improved notice to surface owners, see *id.* § 22-6A-10 (2011), and new distance restrictions for the location of wells and well pads. See *id.* § 22-6A-12 (2011). The changes, while providing some increases in protection for surface owners, do not fundamentally alter the analysis presented below because the analysis is not statutory but rather contractual in nature, i.e. whether certain extraction practices can be enjoined because they are outside the scope of an express or implied easement contained in the deed severing the mineral and surface estates. Notably, § 22-6B-1(c) states that “[t]his article shall be interpreted to benefit surface owners, regardless of whether the oil and gas mineral estate was separated from the surface estate and regardless of who executed the document which gave the oil and gas developer the right to conduct drilling operations on the land.” Most importantly for our purposes, § 22-6B-4(a) states that, “[n]othing in . . . this article diminishes in any way the common law remedies, including damages, of a surface owner or any other person against the oil and gas developer for the unreasonable, negligent or otherwise wrongful exercise of the contractual right, whether express or implied, to use the surface of the land for the benefit of the developer's mineral interest.”

² Rachel Weaver, *Marcellus Gas Wells Generate an Amazing Bounty for Landowners*, PITTSBURGH TRIBUNE-REVIEW (Feb. 27, 2011), (currently

the darker side are the environmental and health consequences that can arise when hydraulic fracturing arrives in a community. Residents complain about toxic fumes, noise, foul – and even flammable – well water, and other detrimental impacts.³

All of these landowners have something in common, however – they had a choice about whether to allow hydraulic fracturing on their property. As owners of both the surface and mineral estates on their property, they could decide whether and how drilling would occur on their land, and what it might be worth to them. Before any gas drilling company could begin fracking operations on their land, it had to negotiate a lease.

By contrast, owners of only surface estates that have been severed from the mineral estate get all of the bad effects of hydraulic fracturing without any of the benefits. In this “split estate” scenario, which can occur anywhere, but is especially prevalent in West Virginia, the surface rights to the property were severed from the subsurface rights – often decades or even a century ago – and the surface owner generally has little or no say in whether hydraulic fracturing occurs on the property.

This article examines whether surface owners have a basis for an injunctive remedy in the common law governing the interpretation of deeds or other conveyances. The act of exceeding the scope of an easement amounts to trespass.

available as a Google cache:

http://webcache.googleusercontent.com/search?q=cache:a6_ZL4UiW8oJ:www.pittsburghlive.com/x/pittsburghtrib/news/email/s_724934.html%3F_s_icmp%3Denews+Rachel+Weaver,+Marcellus+Gas+Wells+Generate+an+Amazing+Bounty+for+Landowners&cd=1&hl=en&ct=clnk&gl=us&client=safari; see Bill Toland, *A Boom Without a Bust?*, PITTSBURGH POST-GAZETTE (Feb. 27, 2011), <http://shale.sites.postgazette.com/index.php/news/business/23884-a-boom-without-a-bust-> (“Gas royalties and surface-lease payments will make millionaires out of some.”).

³ See Rory Sweeney, *Gas Wells a Mixed Blessing on Property*, TIMES-LEADER (Wilkes-Barre, Pa.) (Oct. 28, 2010), <http://pagasdrilling.com/pennsylvania-natural-gas-drilling/gas-wells-a-mixed-blessing-on-property/>.

Injunctive relief is thus an appropriate remedy.⁴ Injunctive relief may alternatively be appropriate if the surface owner can show that the mineral owner's actions have risen to the level of a private nuisance.

Under West Virginia law, actions taken by an easement holder may form the basis of a private nuisance when they exceed the scope of the easement.⁵ A private nuisance exists where one actor creates a "substantial and unreasonable" hindrance to another's enjoyment of his or her property.⁶ "An interference is unreasonable when the gravity of the harm outweighs the social value of the activity alleged to cause the harm."⁷ As will be discussed below, this analysis overlaps with the interpretation of easements. Thus, exceeding the scope of an easement will in some cases *ipso facto* trigger a nuisance.

More particularly, because the magnitude of the impacts to the surface estate caused by hydraulic fracturing are so much greater than those caused by conventional oil or gas drilling, this article examines whether surface owners can argue that hydraulic fracturing was not contemplated by the parties to the severance deed, and that therefore the right to frack, or at least the right to perform particular fracking practices, was not conveyed. We conclude that, at least in West Virginia, surface owners may be able to enjoin some particularly burdensome modern features of hydraulic fracturing that are not strictly necessary for extraction.

In Part I, we review the nature of hydraulic fracturing, its potential impacts on the property of surface owners, and the recent expansion of hydraulic fracturing, especially in the Marcellus Shale. In Part II, we discuss the dilemma surface

⁴ See *Shock v. Holt Lumber Co.*, 148 S.E. 73, 74-75 (W. Va. 1929) (finding that "[a]n unlawful or excessive use of an easement may be enjoined" because "[t]he attempted excessive use by the defendants of the easement in question constitutes a continuous trespass to real property, which may, ordinarily, be enjoined") (citations and internal quotation marks omitted).

⁵ See *Quintain Dev., LLC v. Columbia Natural Resources, Inc.*, 556 S.E.2d 95, 103-04 (W. Va. 2001).

⁶ *Hendricks v. Stalnaker*, 380 S.E.2d 198, 202 (W. Va. 1989).

⁷ *Id.*

owners face when the surface and mineral estates have been split. In Part III, we explain how West Virginia courts interpret the scope of a mineral owner's easement over the surface and, based on those interpretive methods, sketch out a legal strategy surface owners might use to limit the impacts of hydraulic fracturing on their property.

I. HYDRAULIC FRACTURING AND THE MARCELLUS SHALE

As humanity exhausts the world's reserves of fossil fuels, there is an increasing reliance on extraction from unconventional sources.⁸ Compared to conventional sources, these unconventional sources are generally harder and more expensive to access and potentially much more dangerous and harmful to the environment. For oil, unconventional sources implicate off-shore drilling at previously out-of-reach depths and extraction from tar sands, like those in Alberta. For natural gas, an increasingly important unconventional source is deeply-buried shale formations, from which the gas can be extracted only by means of a process called hydraulic fracturing - or "fracking," for short - a practice that takes its name from the literal fracturing of subsurface geological formations with fluids at high pressures to release trapped oil and gas reserves.

A conventional gas well is drilled vertically and encased along the way with steel and cement. Once a reservoir is reached, the wellhead can be completed to manage the flow. The pressurized nature of the reservoir, combined with the low density of natural gas, allows the gas to flow freely to the surface. There are several kinds of gas deposits, and some may

⁸ See FRED BOSSELMAN ET AL., ENERGY ECONOMICS AND THE ENVIRONMENT 458 (3d ed. 2010) (defining "unconventional sources" of natural gas as "sources that are not 'conventional,' meaning that gas production from the reservoir does not readily flow into a well bore"); EPA, DRAFT PLAN TO STUDY THE POTENTIAL IMPACTS OF HYDRAULIC FRACTURING ON DRINKING WATER RESOURCES 8 (2011) (projecting that shale gas "will constitute 45 percent of the U.S. gas supply in 2035 if current trends and policies persist"), *available at* http://www.epa.gov/hfstudy/HF_Study_Plan_110211_FINAL_508.pdf [hereinafter EPA DRAFT PLAN].

require separation and purification interventions when, for example, oil mixes with the natural gas as it is extracted. Enhanced recovery techniques common to conventional wells include injecting the reservoir with water before it runs dry so that any trapped gas is forced towards the well bore.

Natural gas contained in shale formations (called “shale gas”) cannot be extracted profitably through conventional wells. Shale’s permeability is too low, so the gas trapped in these formations will not simply rise to the surface once tapped. To exploit this source of gas, drillers need to use horizontal wells and inject large quantities of water mixed with chemicals at high pressure.⁹ The high pressure water and chemicals cause cracks in the shale that serve as channels for the gas to move to the well bore.¹⁰ When the water flows out, sand or another propping agent or “proppant” remains behind to prop open the cracks through which gas flows.¹¹

“The Marcellus Shale is a sedimentary formation that underlies most of Pennsylvania and West Virginia and extends into parts of Virginia, Maryland, New York and Ohio.”¹² This formation, found at depths of 5,000 to 8,000 feet, has long been known to contain huge quantities of natural gas, but until recently, the extraction of this gas was prohibitively expensive.¹³ In the past decade, however, the combination of reduced drilling costs and rising natural gas prices has led to a boom in production from the Marcellus Shale. It is currently “one of the largest natural gas ‘plays’ in the world.”¹⁴ The new wave of drilling in the Marcellus Shale is bringing fossil fuel

⁹ EPA DRAFT PLAN, *supra* note 8, at 12.

¹⁰ *Id.*

¹¹ *Id.*

¹² EPA, *Key Documents About Mid-Atlantic Oil and Gas Development*, REGION 3: THE MID-ATLANTIC STATES, http://www.epa.gov/region03/marcellus_shale (last updated Mar. 9, 2012) [hereinafter EPA].

¹³ PA. DEP’T OF ENVTL. PROT., FREQUENTLY ASKED QUESTIONS: “WHAT IS MARCELLUS SHALE AND WHY THE SUDDEN INTEREST IN IT?,” DRILLING FOR NATURAL GAS IN THE MARCELLUS SHALE FORMATION, *available at* <http://files.dep.state.pa.us/OilGas/BOGM/BOGMPortalFiles/MarcellusShale/MarcellusFAQ.pdf> (last visited May 26, 2012).

¹⁴ EPA, *supra* note 12.

extraction to areas that have traditionally seen little, if any, natural gas drilling.¹⁵

Fracking has the potential to cause impacts for surface owners that are qualitatively and quantitatively different from those of conventional oil and gas development. One focus of concern has been the chemicals that are included in the mixture that is injected into the wells to create the fractures. While companies have fought efforts to require disclosure of these chemicals,¹⁶ reports show that chemical content may run the gamut – everything from the innocuous (ice cream thickener) to the toxic (benzene).¹⁷ There is some evidence that these chemicals have already contaminated residential water supplies, which has led to media attention and legal action.¹⁸ Complaints have ranged from odiferous tap water to chemical poisoning with painful and vivid symptoms.¹⁹

¹⁵ PA. DEP'T OF ENVTL. PROT., *supra* note 13.

¹⁶ This pressure notwithstanding, several shale gas states – notably Wyoming and Texas – have promulgated fracking fluid disclosure requirements. See Mike Soraghan, *Wyoming Fracking Rules Point the Way for Public Disclosure*, WYOFILE (Dec. 28, 2010), <http://wyofile.com/2010/12/wyoming-fracking/>; *Texas: Drillers Must Disclose 'Fracking' Chemicals*, N.Y. TIMES (June 21, 2010), <http://www.nytimes.com/2011/06/21/us/21brfs-Texas.html>. California's legislature is currently considering passing a similar law. See *California Mulls 'Fracking' Disclosure*, UPI.COM (June 23, 2011), http://www.upi.com/Science_News/2011/06/23/California-mulls-fracking-disclosure/UPI-60131308869709.

¹⁷ See Mike Soraghan, *In Fracking Debate, "Disclosure" Is in the Eye of the Beholder*, GREENWIRE, June 21, 2010, available at <http://www.eenews.net/public/Greenwire/2010/06/21/1>; see also EPA, PAVILLION GROUNDWATER INVESTIGATION, PAVILLION, WYOMING: PHASE I SAMPLING RESULTS (August 11, 2009), available at http://www.epa.gov/region8/superfund/wy/pavillion/Pavillion_GWInvestigationPublicPresentation.pdf; Abrahm Lustgarten, *Is New York's Marcellus Shale Too Hot to Handle?*, PROPUBLICA (Nov. 9, 2009), <http://www.propublica.org/article/is-the-marcellus-shale-too-hot-to-handle-1109>.

¹⁸ See Abrahm Lustgarten, *EPA: Chemicals Found in Wyoming Drinking Water Might Be from Fracking*, PROPUBLICA (Aug. 25, 2010), <http://www.propublica.org/article/epa-chemicals-found-in-wyo.-drinking->

Hydraulic fracturing sites may also utilize multi-acre impoundment pits to store frackwater, which is the flowback and produced water that comes up from the well after it has been fracked. In the past several years, West Virginia residents who own the surface above fracked mineral estates have seen the emplacement of these massive pits and associated equipment, as well as dramatically increased heavy machinery traffic. Fracking processes have also been associated with disruptions of the water table, groundwater (including drinking water) contamination, scarring of the surface land, and destruction of vegetation.

Another manner in which fracking differs from conventional oil and gas development is in the locations in which it occurs. While much conventional development occurs in sparsely populated parts of the country, major fracking areas, such as the Marcellus Shale, can be densely populated. Surface impacts are therefore more likely to occur in closer proximity to homes and people.

Because fracking's impact on the surface estate is greater than that caused by traditional oil and gas development operations, is it possible that some of the activities undertaken by West Virginia mineral owners employing fracking techniques fall outside the scope of what the parties to an original lease or severance deed could have contemplated? If so, what are the implications?

II. SPLIT ESTATES

In general, a property owner owns a parcel of land in fee simple, meaning that her title extends *usque ad coelum et ad inferos*, usually translated as meaning that the rights of the surface owner extend upward to the heavens (*ad coelum*) and

water-might-be-from-fracking-825; Mark Clayton, *Controversial Path to Possible Glut of Natural Gas*, CHRISTIAN SCI. MONITOR, Sept. 17, 2008, at 25.

¹⁹ See Hannah Wiseman, *Untested Waters: The Rise of Hydraulic Fracturing in Oil and Gas Production and the Need to Revisit Regulation*, 20 FORDHAM ENVTL. L. REV. 115, 129-33 (2009).

downward to the center of the earth (*ad inferos*).²⁰ Among the rights held by an owner in fee simple are the rights to extract valuable minerals, including oil and gas, from beneath the surface. Accordingly, when the person who owns the surface rights also owns the mineral rights under the land, a drilling company must lease the mineral rights from the owner before extracting the natural gas. In this situation, the surface owner can protect herself from the impacts of fracking, either by refusing to lease the subsurface rights at all or by negotiating terms in the lease that either prevent harm or require the drilling company to remediate and/or compensate for any damage, environmental or otherwise. In addition, the landowner will be paid a royalty on all of the gas extracted from the well or wells on her property, meaning that any physical damage to the property is offset by the income received from the well.²¹

However, it is a “well-established principle[] of property law . . . that the land may be horizontally severed into surface and subsurface estates so that legal title vests in different owners.”²² Under this “split estate” scenario, ownership of the surface estate is distinct from ownership of the minerals found beneath the surface, which can include coal, oil, and natural gas, among other valuable commodities.

The surface and mineral estates of many plots were severed decades or more in the past, when a previous owner of

²⁰ John G. Sprankling, *Owning the Center of the Earth*, 55 UCLA L. REV. 979, 980-81 (2008). There are, of course, exceptions to this general rule, most notably pertaining to air space. *See, e.g.*, *United States v. Causby*, 328 U.S. 256 (1946).

²¹ *See* David McMahon, *The Marcellus Shale: The Need to Change Real Estate Transaction Documents*, W. VA. LAWYER 26, 27 (April-June 2010) (noting that the first-month royalty from a Marcellus Shale well can be as much as \$5,000).

²² Christopher M. Alspach, *Surface Use by the Mineral Owner: How Much Accommodation is Required Under Current Oil and Gas Law?*, 55 OKLA. L. REV. 89, 91 (2002); *see also* *Del Monte Mining & Milling Co. v. Last Chance Mining & Milling Co.*, 171 U.S. 55, 60 (1898) (“Unquestionably at common law the owner of the soil might convey his interest in mineral beneath the surface without relinquishing his title to the surface.”).

the whole plot granted the subsurface minerals to another party.²³ As a result of subsequent transactions, many current West Virginia residents own a surface estate, while a separate party owns the coal, oil, and/or gas beneath the surface and enjoys a limited easement over the surface.

In this situation, the mineral or subsurface estate traditionally has been considered the dominant estate, while the surface owner has the servient estate.²⁴ As this terminology indicates, when the rights and interests of the two estates come into conflict, the mineral estate's interests generally prevail.²⁵ In particular, at common law:

Unless there is an express lease provision to the contrary, an oil and gas lessee has the right to use as much of the surface estate as is reasonably necessary for its operations. This right includes the legal privilege to use the surface in a way that interferes with the surface owner's use of the land and that significantly damages the surface, without the legal obligation to make any compensation whatsoever.²⁶

The reasoning underlying this doctrine is that ownership of the minerals has no value unless one can remove them from the earth; removal of the minerals necessarily

²³ See Clinton W. Smith, Note, *Disturbing Surface Rights: What Does "Reasonably Necessary" Mean in West Virginia?*, 85 W. VA. L. REV. 817, 824 (1983) (stating that "most mineral estates were severed from the surface estate" "[a]t the first part of the [20th] century").

²⁴ See Alspach, *supra* note 22, at 91; Rick D. Davis, Jr. & Chris Aycock, *Oil Patch Environmental and Surface Damage Litigation*, in 60 INSTITUTE ON OIL AND GAS LAW 118 (2009).

²⁵ See BOSSELMAN, ET AL., *supra* note 8, at 461; Alspach, *supra* note 22, at 91.

²⁶ Ernest E. Smith, *The Growing Demand for Oil and Gas and the Potential Impact Upon Rural Land*, 4 TEX. J. OIL GAS & ENERGY L. 1, 5-6 (2008); accord BARLOW BURKE & ROBERT BECK, *THE LAW AND REGULATION OF MINING: MINERALS TO ENERGY* 94 (2010).

involves using the surface.²⁷ “[A] grant or reservation of the minerals would be wholly worthless if the grantee or reserver of the minerals could not enter upon the land in order to explore for and extract the minerals granted or reserved.”²⁸

Under the traditional view, owners of surface estates have very few legal rights regarding oil and gas development on their property. As the Bureau of Land Management put it in a report to Congress in 2006, surface owners “bear the brunt of the development, have their lives and land changed forever, and receive little if any compensation.”²⁹ This “seeming unfairness” has led to judicial and statutory changes to the common-law baseline in many states, including West Virginia.³⁰ In this article, we focus on surface owners’ potential use of contractual arguments to protect themselves from some of the impacts of hydraulic fracturing. Before discussing those arguments, however, we briefly explain the statutory rights that surface owners have under West Virginia’s well control and damage compensation acts.³¹

Several states have adopted surface owner compensation statutes.³² The purposes of the statutes include minimizing harm to the surface owners, preventing harm in the form of the depletion of land available for agricultural or other purposes, and allowing the development of mineral

²⁷ See, e.g., *Porter v. Mack Mfg. Co.*, 64 S.E. 853, 854 (W. Va. 1909); Cyril A. Fox, Jr., *Private Mining Law in the 1980's: The Last Ten Years and Beyond*, 92 W. VA. L. REV. 795, 827 (1990) (“Mineral ownership has no value unless one can remove the mineral from the earth, process it, sell it, or consume it. For this reason, the mineral estate has a right, easement, or servitude for use of the surface estate in order to remove the minerals.”).

²⁸ *Tarrant Cnty. Water Control & Improvement Dist. No. One v. Haupt, Inc.*, 854 S.W.2d 909, 911 (Tex. 1993).

²⁹ UNITED STATES DEP’T OF THE INTERIOR, BUREAU OF LAND MANAGEMENT, ENERGY POLICY ACT OF 2005 – SECTION 1835 SPLIT ESTATE, FEDERAL OIL AND GAS LEASING AND DEVELOPMENT PRACTICES, A REPORT TO CONGRESS 9 (2006).

³⁰ Fox, *supra* note 27, at 832.

³¹ See W. VA. CODE §§ 22-6A-1-24, 22-6B-1-8, 22-7-1-8 (2011).

³² See Davis & Aycok, *supra* note 24, at 152 (identifying twelve states – North Dakota, Oklahoma, Montana, South Dakota, West Virginia, Tennessee, Illinois, Indiana, Kentucky, Wyoming, New Mexico, and Colorado – with surface damage statutes).

resources to proceed without lengthy disputes between surface owners and developers.³³ These statutes generally require the gas developer to notify the surface owner before starting drilling operations and to compensate the surface owner for certain types of damage to the surface. Unlike at common law, under these statutes the reasonableness of the developer's use of the surface is not a defense – the standard is “one of strict liability where the mineral developer's only defense is that the damage did not occur or was not as great as claimed.”³⁴ The specific types of harms that are compensable under these statutes vary, but generally include “loss of agricultural production and income, lost land value, and lost value to improvements caused by the drilling operations.”³⁵

West Virginia adopted its original Oil and Gas Production Damage Compensation Act in 1983.³⁶ The Act specifically equalized the surface and mineral estates, contrary to common law.³⁷ In 2011, West Virginia adopted a slightly modified version of the Act – the Oil and Gas Horizontal Well Production Damage Act – specifically applicable to horizontal wells, thereby prospectively eliminating application of the original act to any horizontal well.³⁸ While both the original act and the new act (relevant here because most fracked wells involve horizontal drilling) provide surface owners additional

³³ Alpsach, *supra* note 22, at 110.

³⁴ John F. Welborn, *New Rights of Surface Owners: Changes in the Dominant/Servient Relationship Between the Mineral and Surface Estates*, in 40 PROCEEDINGS OF THE ROCKY MOUNTAIN MINERAL LAW INSTITUTE § 22.03[2][a], § 22.03[2][b] (1994) (noting that the West Virginia statute provides for strict liability); Alpsach, *supra* note 22, at 115 (“[T]he mineral owner must pay for damage to the surface regardless of whether or not the mineral owner's use of the surface is reasonable.”).

³⁵ Alpsach, *supra* note 22, at 116.

³⁶ 1983 W.Va. Acts, ch. 154.

³⁷ See W. VA. CODE § 22-7-1(a)(1) (2011) (“The Legislature finds [that] . . . [e]xploration for and development of oil and gas reserves in this state must coexist with the use, agricultural or otherwise, of the surface of certain land and that *each constitutes a right equal to the other.*”) (emphasis added).

³⁸ *Id.* § 22-6B-1(c)-(d). West Virginia also adopted at the same time the Horizontal Well Act, which more thoroughly controls horizontal drilling practices. See *id.* § 22-6A-1-8.

protections not available at common law, they are still of limited benefit. First, they provide compensation only for enumerated harms.³⁹ They do not, therefore, allow compensation for “annoyance and inconvenience.”⁴⁰ Second, the surface owner will not receive compensation until after the completion of drilling operations (or, if the surface owner negotiates a settlement prior to the conclusion of operations, she risks that the damages will eventually prove greater than the compensation she received). Third, and most importantly, the availability of compensation after the fact does nothing to prevent the occurrence or location of harmful practices in the first place.

There are few statutory limitations on the activities of gas developers that surface owners can enforce, though some do exist. For example, under the new Horizontal Well Act, a horizontal gas well may not be drilled within 250 feet of an existing water well and the center of a well pad must be at least 625 feet from an occupied dwelling unless the surface owner consents in writing or the Secretary grants a variance.⁴¹ The West Virginia Surface Owners’ Rights Organization therefore recommends that surface owners drill water wells on any part of their property that they want to protect (e.g., a future home site).⁴² The setback provisions, however, limit only the location of surface operations and not the nature of the activities in which the gas developer can engage. The next part of this article outlines legal strategies that could provide surface

³⁹ Both acts allow compensation for lost income from being unable to put land occupied by drilling operations to a pre-existing use, damaged crops, damage to a water supply, the cost of repair of personal property, and the diminution in value of the surface after the completion of surface operations. *Id.* §§ 22-6B-3, 22-7-7.

⁴⁰ *Depeterdy v. Cabot Oil & Gas Co.*, No. CA-97-966-2, 1999 WL 33229744 at *4 (S.D. W. Va. Sept. 13, 1999), *aff’d*, 230 F.3d 1352 (4th Cir. 2000).

⁴¹ W. VA. CODE § 22-6A-12.

⁴² West Virginia Surface Owners’ Rights Org., *Top 10 Tips for Surface Owners Before/When the Oil and Gas Driller Shows Up*, <http://www.wvsoro.org/resources/advice/advice16.html> (last visited May 26, 2012).

owners with a more robust means of protecting themselves from the detrimental surface impacts of fracking.

III. INTERPRETING SURFACE EASEMENTS IN WEST VIRGINIA

To enjoin a developer from engaging in activities that excessively burden the surface estate, a surface owner can show that the developer's actions exceed the scope of the mineral owner's easement over the surface. Because of the rise of fracking operations, many West Virginia surface owners find their property burdened in ways they could not have imagined even a few years ago. For these owners, the burdens may not have been contemplated by the parties to the governing legal instrument at the time the estates were severed or at any later time the surface owner entered into an agreement with the mineral estate owner regarding the mineral owner's use of the surface. Practices not contemplated may exceed the scope of an easement.⁴³

A mineral estate owner may have either an express or implied right to burden the surface estate to extract minerals.⁴⁴ If the deed severing the surface and mineral estates contains a specific provision enumerating the mineral owner's rights over the surface, then the mineral owner is said to have an *express* easement. The scope of this express easement over the surface is determined by the language of the deed and, if that language is ambiguous, the likely intent of the parties at the time.⁴⁵ A surface owner challenging a practice as in excess of an express easement can argue, first, that an easement granting specific rights does not permit an activity not covered by those rights, and, second, that even if the general type of activity is

⁴³ The original Oil and Gas Production Damage Compensation Act includes legislative findings and legal presumptions on when rotary drilling, which is used to bore a horizontal well, would have been in the contemplation of the parties to a severance deed. *See* W. VA. CODE § 22-7-1(a)(2)-(4). These provisions are not included in the Horizontal Well Act and their relevance, if any, to horizontal wells in light of the recent enactment has not yet been analyzed.

⁴⁴ *See, e.g.,* Buffalo Mining Co. v. Martin, 267 S.E.2d 721, 725 (W. Va. 1980).

⁴⁵ *See, e.g.,* Lowe v. Guyan Eagles, 273 S.E.2d 91, 92-93 (W. Va. 1980).

permitted under a provision of the easement, the use of particular new technology or techniques was not contemplated by the original parties to the instrument creating the easement and would “unreasonably increase the burden placed upon the servient tenement.”⁴⁶

When the deed does not grant the mineral owner an express easement over the surface, mineral owners have an *implied* easement to use the surface, because, as discussed above, minerals otherwise could not be extracted.⁴⁷ When determining the scope of an implied easement, the surface owner may take advantage of West Virginia’s unique formulation of the accommodation doctrine, which generally restricts a mineral owner’s implied easement over the surface to actions that are necessary to enjoyment of the mineral estate and do not unreasonably increase the burden on the surface estate.

A. Practices that Exceed the Scope of an Easement

This section will elaborate on three legal arguments a surface owner might advance to challenge and ultimately enjoin fracking practices that fall outside the scope of the mineral estate holder’s easement over the surface. One argument applies to unambiguous express easements, a second applies to generally-worded or otherwise ambiguous express easements, and a third applies to implied easements. Because the legal standard defining the scope of the easement varies based on the type of easement, the first step is to discern the type of easement governing the surface and subsurface relationship.

⁴⁶ Kell v. Appalachian Power Co., 289 S.E.2d 450, 454 (W. Va. 1982).

⁴⁷ Phillips v. Fox, 458 S.E.2d 327, 332 (W. Va. 1995) (“It is well-settled that ownership of a mineral estate includes the right to enter upon and use the superjacent surface by such manner and means as is fairly reasonable and necessary to reach and remove the minerals.”); *see also* PATRICK H. MARTIN & BRUCE M. KRAMER, WILLIAMS & MEYERS OIL AND GAS LAW § 218 (Abridged 2d ed. 2004) (“The instrument creating the mineral, royalty or leasehold interest may . . . be completely silent concerning surface easements. In such case, it has been held that such surface easements are implied as will permit the lessee or mineral owner to enjoy the interest conveyed.”).

When a mineral owner's easement over the surface is recorded in a document such as a severance deed, an express easement is formed. An express easement is "a nonpossessory right to enter and use land in possession of another," which is memorialized in writing in such a way that satisfies the statute of frauds.⁴⁸ Such an easement will grant the mineral owner certain rights of way or other rights to use the surface. For example, the express easement contained in one West Virginia severance deed provides:

Grantors . . . do hereby grant and convey unto the Grantee, all the oil and gas in and under the following described tract of land . . . *together with the right of way, the right to lay pipes to convey water, oil, steam and gas, the right to operate machinery and other appliances thereon for the production of gasoline from natural gas, and to have and appropriate sufficient water, oil and gas from the premises . . .*⁴⁹

In construing the scope of a contract (including a deed containing an express easement), West Virginia courts first look to whether the language describing the easement is ambiguous.⁵⁰ Whether the document is ambiguous is a question of law properly decided by a judge.⁵¹ The West Virginia Supreme Court of Appeals allows extrinsic evidence of the original parties' likely intent to be used in determining whether a document is ambiguous, even when the text on its face appears to be clear.⁵² Such extrinsic evidence can include common industry practices at the time the easement was created. For example, in *Energy Development Corp.*

⁴⁸ See generally RESTATEMENT (THIRD) OF PROP.: SERVITUDES, §§ 1.2, 2.7 (2000).

⁴⁹ The language quoted comes from a West Virginia severance deed dated 1940 (emphasis added) (on file with author).

⁵⁰ *Energy Dev. Corp. v. Moss*, 591 S.E.2d 135, 143-45 (W. Va. 2003).

⁵¹ *Id.* at 143; accord *Flanagan v. Stalnaker*, 607 S.E.2d 765, 769 (W. Va. 2004).

⁵² *Energy Dev. Corp.*, 591 S.E.2d at 143 ("We also agree with the lower court that a document that may appear on its face to be free from ambiguity, may be deemed latently ambiguous.").

v. Moss,⁵³ the court examined whether a grant purporting to give “all” of the oil and gas under the subsurface included coalbed methane. It concluded that the deed was ambiguous because the deed was created before the widespread discovery of coalbed methane in the state.⁵⁴ Although the court in *Moss* interpreted deed language constituting the mineral grant itself – rather than deed language creating an easement – it nonetheless supports an argument that an express easement may be ambiguous not only by virtue of inconsistencies in its text, but also when changes in extraction practices call into question whether particular modern practices fall within the easement’s broad language.

1. *Unambiguous Express Easements*

When an easement is deemed unambiguous its plain language will control – even when there is contrary evidence of the parties’ intent.⁵⁵ Given the substantially greater surface impacts of fracking compared to traditional gas development, a broadly-worded easement that is found to be unambiguous will generally allow a gas developer to carry out particular surface operations that would not have been contemplated by the parties to the original transaction. Thus a finding that an easement is unambiguous would generally be unfavorable for a surface owner.

Even in this situation, however, the surface owner is not without legal arguments. In particular, even if a court finds an express easement to be unambiguous, a surface owner can still argue that the developer cannot engage in practices that are not covered by the language.⁵⁶ If a deed contains a list of specific,

⁵³ *Id.* at 138.

⁵⁴ *Id.* at 143.

⁵⁵ See *Flanagan*, 607 S.E.2d at 770 (“An oil and gas lease which is clear in its provisions and free from ambiguity, either latent or patent, should be considered on the basis of its express provisions and is not subject to a practical construction by the parties.”) (quoting *Cotiga Dev’t Co. v. United Fuel Gas*, 128 S.E.2d 626, 631-32 (W. Va. 1962) (internal quotation marks omitted)); *Fraternal Order of Police, Lodge No. 69 v. City of Fairmont*, 468 S.E.2d 712, 715 (W. Va. 1996) (“[I]t is for a trial court to determine whether the terms in an integrated agreement are unambiguous, and, if so, to construe the contract according to its plain meaning.”).

⁵⁶ See *MARTIN & KRAMER*, *supra* note 47 § 218.1 (“If the instrument creating an interest in minerals expressly limits the surface rights of the mineral or

permissible surface uses, one can argue under the interpretive canon *expressio unius est exclusio alteris* that any use not listed is excluded.⁵⁷ If, for example, a deed explicitly permits only vertical drilling, a surface owner could argue that practices exclusively associated with horizontal drilling are not within the scope of the easement. Likewise, if a deed explicitly allows a mineral owner to drill a well to *extract* natural gas, a surface owner could argue that reinjecting water or gas into the well for fracking or storage falls outside the scope of the easement.

This strategy is unlikely to be successful, however, if the deed includes not only a list of specific rights, but also a catch-all provision granting to the mineral owner, for example, all rights necessary

for the purpose of investigating, exploring, prospecting, drilling and mining for and producing oil, gas and all other minerals, laying pipe lines, building roads, tanks, power stations, telephone lines and other structures thereon and on, over and across (the surface estate) to produce, save, take care of, treat, transport and own said products.⁵⁸

A surface owner might argue that, under the principle of *ejusdem generis*, the general grant should be assumed to cover only low-impact uses similar to those that precede it – and, for example, not higher-impact uses that may be associated with fracking.⁵⁹ In West

royalty owner or lessee there appears no basis for the implication of surface easements in excess of those expressly granted.”).

⁵⁷ See *Fisher v. W. Va. Coal & Transport Co.*, 73 S.E.2d 633, 644 (W. Va. 1952) (Given, J., dissenting) (arguing that, through the principle of *expressio unius*, a deed that granted the mining rights relating to “said coal” did not allow the use of the passageways through the property to mine coal from other lands).

⁵⁸ *Ottis v. Haas*, 569 S.W.2d 508, 513 n.3 (Tex. Ct. App. 1978) (referring to this provision as a “general purpose clause”) (emphasis removed).

⁵⁹ *W. Va. Dep’t of Highways v. Farmer*, 226 S.E.2d 717, 719-20 (W. Va. 1976) (applying the doctrine of *ejusdem generis*, which it described as meaning that “where general words follow an enumeration of persons or things, such general words are not to be construed in their widest extent but are to be held as applying only to persons or things of the same kind, class or

Virginia, however, such an argument is unlikely to succeed. In this situation, the West Virginia courts have found that the principle that “the grant of express mining easements restricts or negates implied rights” does not apply.⁶⁰ Indeed, the West Virginia Supreme Court of Appeals has found that, rather than being constrained by the more specific grants that precede it, a broad grant at the end of a list may impliedly expand the specific list to include compatible uses.⁶¹

Nonetheless, because, as discussed below, older easements using such broad language are likely to be construed as ambiguous, West Virginia law offers another option to surface owners seeking to limit mineral owners’ discretion.

2. Ambiguous Express Easements and Implied Easements

When the easement is ambiguous, surface owners are in a stronger position. West Virginia courts will construe the easement to grant only those rights that would have been contemplated by the original parties at the time of its creation. In addition, West Virginia courts limit the rights of mineral owners under ambiguous express easements, as well as implied easements, through a version of the “accommodation doctrine” that is particularly favorable to surface owners. Therefore, when faced with an express easement that contains broad language favorable to the mineral owner, it is likely in the surface owner’s best interest to argue that the easement is ambiguous.

An ambiguity in a deed can be either patent – apparent on the face of the document itself – or latent – apparent only with

nature as those specifically mentioned,” to hold that sand and gravel were not included in a reservation of “the oil, gas and other minerals in and under said land”).

⁶⁰ See *Buffalo Mining Co.*, 267 S.E.2d at 725.

⁶¹ See *id.* (“[W]here the severance deed contains broad rights for utilization of the surface in connection with underground mining activities and these broad rights are coupled with a number of specific surface uses, courts will be inclined to imply compatible surface uses that are necessary to the underground mining activity.”).

reference to extrinsic evidence.⁶² To argue that a given easement is ambiguous and that a court should thus look to extrinsic evidence of the original parties' intent in interpreting it, a surface owner therefore can, but *does not need* to, show that the document is ambiguous within its four corners – for example, because it contradicts itself or uses vague wording.⁶³ Even if the document is not patently ambiguous, in accordance with the *Moss* decision discussed above, the surface owner can bring forward extrinsic evidence of extraction practices known at the time of the easement's creation and argue that, despite any seeming clarity of the instrument's language, the gap between past practices and current practices is so great that the original parties to the easement could not have contemplated the practices presently sought to be employed. If legitimized by a court, this argument would render the easement ambiguous as to whether it includes such practices.

a) The Evolution of the Interpretation of Ambiguous Easements in West Virginia

When specifically-granted rights are deemed ambiguous, West Virginia has common law canons that a surface owner can employ to argue that certain activities undertaken by mineral developers are outside the proper scope of a dominant estate's easement.

First, if a court concludes that the terms of the express easement are ambiguous, it “must embark upon a search for the intent of the parties,” and will “interpret[] and construe[] [the language] as of the date of its execution.”⁶⁴ Courts typically look to extrinsic evidence to determine the likely intent of the original parties to the easement.⁶⁵ Relevant extrinsic evidence

⁶² *Flanagan*, 607 S.E.2d at 769 n.4 (“A latent ambiguity arises when the instrument upon its face appears clear and unambiguous, but there is some collateral matter which makes the meaning uncertain.”).

⁶³ See *Energy Dev. Corp.*, 591 S.E.2d at 143-45.

⁶⁴ *Id.* at 144 (quoting *Oresta v. Romano Bros.*, 73 S.E.2d 622 (W. Va. 1952)).

⁶⁵ *Fraternal Order of Police*, 468 S.E.2d at 716 n.7 (“Exploring the intent of the contracting parties often, but not always, involves marshaling facts extrinsic to the language of the contract document. When this need arises, these facts together with reasonable inferences extractable therefrom are superimposed on the ambiguous words to reveal the parties' discerned

for mining easement cases may include the technological details of contemporary extraction practices and a comparison to historical practices.⁶⁶

In determining whether an activity falls within the scope of an ambiguous easement, the particular question of the parties' intent that West Virginia courts seek to answer is whether the activity burdens the surface estate beyond what the original parties to the deed would have contemplated.⁶⁷ The contours of this inquiry have evolved over the course of the 20th century and into the 21st.

Early case law found that when a given surface use would not have been in the contemplation of the parties to the lease or deed at the time it was created – as indicated by evidence of contemporary mining practices – such use was considered to be beyond the scope of the easement. For example, in *West Virginia-Pittsburgh Coal Co. v. Strong*,⁶⁸ the court found that surface-removal mining exceeded the scope of an easement when

it was the manifest intention of the parties to preserve intact the surface of the entire tract, subject to the use of the owner of the coal 'at convenient point or points' in order 'to mine, dig,

intent."); see also *Flanagan*, 607 S.E.2d at 768 (holding that "it is proper to consider extrinsic evidence in order to ascertain the intention of the parties" to an ambiguous oil and gas lease). The West Virginia Supreme Court of Appeals has not clearly spoken to the line between using extrinsic evidence of intent to find ambiguity in an express easement and using extrinsic evidence of intent to construe that ambiguity if found. See *Energy Dev. Corp.*, 8591 S.E.2d at 143-44 (stating that extrinsic evidence of intent can be used to find ambiguity, and then determining based on parties' intent that a broad grant of gas and oil cannot be read to include coalbed methane, which would have been unknown to parties at the time grant was drawn). For this reason, evidence of a latent ambiguity may look very similar to the evidence of intent used to construe that ambiguity.

⁶⁶ See, e.g., *Lowe*, 273 S.E.2d at 93 (remanding for "evidentiary hearing to determine whether the technology of hauling is so different from anything contemplated in 1902.").

⁶⁷ See *Kell*, 289 S.E.2d at 454-56.

⁶⁸ 42 S.E.2d 46 (W. Va. 1947).

excavate and remove all of said coal' by the usual method at that time known and accepted as common practice in Brooke County.⁶⁹

The court did “not believe that this included the practice known as strip mining.”⁷⁰

In 1980, in *Buffalo Mining*, the West Virginia Supreme Court of Appeals interpreted the *Strong* line of decisions to stand for the proposition that resolving an ambiguous surface easement turns primarily on “whether the easement sought was substantially compatible with the surface rights granted the mineral owner and whether it substantially burdens the surface owner’s estate” – *not* simply the drafting parties’ intent.⁷¹ One reason that the court in *Buffalo Mining* may have decided to abandon the strict rule of limiting surface uses to those in the contemplation of the parties to the deed was its unusual factual context. In that case, the surface use being sought by the mineral estate owner (stringing power cables) would not have imposed any greater burden on the surface owner than a use both contemplated by the original parties and explicitly mentioned in the easement (stringing telephone cables). The two practices were not only compatible, they were almost

⁶⁹ *Id.* at 49.

⁷⁰ *Id.*; see also *Oresta*, 73 S.E.2d at 627 (reaching the same conclusion when “[i]t is evident from the language of the reservation of the mining rights, that, at the date of the deed of severance . . . the parties to the deed intended that the coal should be mined and removed by the usual method then known and accepted as common practice . . . and that such method, as it then existed, did not include the practice of mining and removing coal by strip mining”); *Brown v. Crozer Coal & Land Co.*, 107 S.E.2d 777, 787 (W. Va. 1959) (applying *Strong* to find that auger mining, a form of surface-removal mining, exceeded the scope of an easement).

⁷¹ 267 S.E.2d at 724 n.3 (holding that an express easement to string telephone cables also allowed the easement holder to install power cables, but finding that *Strong* was correctly decided “on the more fundamental principle that a right to surface use will not be implied where it is totally incompatible with the rights of the surface owner”). In dissent, Justice Harshbarger asserted that such an interpretation of *Strong* would essentially do away with parties’ intent as an interpretation tool. *Id.* at 726-27 (Harshbarger, J., dissenting). In practice, the meaning of compatible and contemplated may differ little, if at all, because evidence of the former may be used to demonstrate the latter.

identical. The equities of the case therefore favored the mineral owner's proposed use.

Later cases have interpreted *Buffalo Mining* as creating a two-part test that a surface use must meet in order to fall within the scope of an ambiguous express easement: first, the use must be necessary for enjoyment of the mineral estate, and second, it must not "unreasonably increase the burden placed on the servient" estate as compared to previous practice.⁷² Two cases demonstrate the operation of this test and the continued relevance of the contemplation of the parties.

First, in *Lowe v. Guyan Eagles Coal Co.*,⁷³ the owner of the mineral rights wanted to use a right-of-way over the property "to transport men and materials to and from the strip mine" on another property.⁷⁴ The 1902 deed severing the surface and mineral estates gave the mineral owner "full rights of ways to, from and over said premises by the construction and use of roads . . . or otherwise, for the purpose of . . . shipping or transporting all of said minerals . . . whether contained on said premises or elsewhere."⁷⁵ The express easement thus unequivocally allowed the mineral owner to use the right of way in connection with its coal mine on an adjacent property. In addition, this use of the surface was presumably necessary for mining operations. Nevertheless, the heavy machinery used for transportation in 1980 was quite different from what would have been used in 1902 and could have imposed a greater burden on the surface estate. The court therefore held that "no use may be made of a right-of-way, different from that established at the time of its creation so as to burden the servient estate to a greater extent than was contemplated at the time of the grant."⁷⁶ The court remanded the case "for an evidentiary hearing to determine whether the technology of hauling is so different from anything contemplated in 1902 that it overburdens the surface owner's estate and is beyond the deed's reservation: whether the

⁷² *Kell*, 289 S.E.2d at 454.

⁷³ 273 S.E.2d at 91.

⁷⁴ *Id.* at 92.

⁷⁵ *Id.* at 92-93.

⁷⁶ *Id.* at 93.

burden now is alien to that generally contemplated by parties to such deeds at the time and place of its execution.”⁷⁷

Second, in *Kell v. Appalachian Power Co.*, the court addressed a power company’s right-of-way, in connection with which the company had the right “to cut and at its option, remove from said premises . . . any trees, overhanging branches or other obstructions which may endanger the safety or interfere with the use of said poles and towers or fixtures or wires.”⁷⁸ The court held that, under this language, the power company could not use aerial broadcast spraying of toxic herbicides to control vegetation in the right-of-way.⁷⁹ In reaching this conclusion, the court noted that aerial broadcast spraying of herbicides was “not necessary to the protection of the power company’s equipment” and that it “impermissibly interfere[d] with the grantor-owner’s rights and interests.”⁸⁰ Yet, in addition to citing the two parts of the *Buffalo Mining* test, the court also relied on the contemplation approach, noting that “[t]he use of aerial broadcast spraying of herbicides to control vegetation along a right-of-way was unknown in 1939 and could not have been within the specific contemplation of the parties to the 1939 indenture involved in this case.”⁸¹

A decade later, the Fourth Circuit Court of Appeals, applying West Virginia law, stated that *Buffalo Mining* requires courts to consider “whether the use sought to be included within an easement grant is *substantially compatible* with the explicit grant” and “whether it *substantially burdens* the servient estate.”⁸²

West Virginia law thus requires that a given activity meet three criteria to fall within an ambiguous easement over the surface: it must (1) be substantially compatible with the terms of the easement, (2) be necessary to enjoyment of the mineral estate, and (3) not unreasonably or substantially increase the burden on the surface estate beyond what was contemplated by the original parties to the easement. This test bears a strong resemblance to the

⁷⁷ *Id.*

⁷⁸ 289 S.E.2d at 453.

⁷⁹ *Id.* at 457.

⁸⁰ *Id.* at 456.

⁸¹ *Id.*

⁸² *C/R TV, Inc. v. Shannondale*, 27 F.3d 104, 108 (4th Cir. 1994) (emphasis in original).

accommodation doctrine, as applied in some other states, as well as to the test that West Virginia courts apply to implied easements. We therefore briefly describe the accommodation doctrine and compare it to West Virginia's tests for ambiguous easements and implied easements.

b) The Accommodation Doctrine

The courts of several states have softened the harsh common law rules regarding the surface rights of mineral owners –described in Part III, above – through a balancing test known as the accommodation doctrine. The first clear statement of this doctrine was made in the Texas Supreme Court decision *Getty Oil Co. v. Jones*.⁸³ Jones, the surface owner, farmed the land and used a center-pivot irrigation system that could clear obstacles up to seven feet high.⁸⁴ Getty, the mineral owner, installed pumping units for two oil wells that were seventeen feet and thirty-four feet high. The result was that Jones could not use his irrigation system effectively.⁸⁵ Jones sued to enjoin Getty from using the airspace above the surface in a way that prevented the operation of his irrigation system. The Texas Supreme Court ruled for Jones, relying in particular on the fact that other oil producers on Jones's property had successfully installed pumping units in below-ground concrete cellars that did not interfere with the irrigation system.⁸⁶ In particular, the court held that

where 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

⁸³ 470 S.W.2d 618 (Tex. 1971).

⁸⁴ *Id.* at 620.

⁸⁵ *Id.*

⁸⁶ *Id.* at 622.

the surface may require the adoption of an alternative by the lessee.⁸⁷

The court described this holding as “an accommodation between the two estates.”⁸⁸

Under the accommodation doctrine, as established in *Getty Oil*, there are thus three requirements that must be met to limit a surface use: (1) the surface owner has an existing use of the surface; (2) the mineral owner’s proposed use of the surface will preclude or impair the surface owner’s use; and (3) the mineral owner has reasonable alternatives available.⁸⁹ Some cases add a fourth, countervailing requirement, namely that “the surface owner’s existing use is the only reasonable means of developing the land available to him.”⁹⁰

For several reasons, the original formulation of the accommodation doctrine, while helpful to Mr. Jones in *Getty Oil*, is only marginally more favorable for surface owners than the traditional common law. First, the surface owner bears the burden of proving all of these elements.⁹¹ Second, the Texas Supreme Court subsequently limited the doctrine by specifying that the “reasonable alternative methods” must be available to the developer “on the leased premises.”⁹² Third, “the

⁸⁷ *Id.*

⁸⁸ *Id.* at 623.

⁸⁹ Alspach, *supra* note 22, at 94.

⁹⁰ Daniel R. Hafer, Daniel B. Mathis & Logan W. Simmons, *A Practical Guide to Operator/Surface-Owner Disputes and the Current State of the Accommodation Doctrine*, 17 TEX. WESLEYAN L. REV. 47, 59 (2010); *see also* Haupt, Inc. v. Tarrant Cnty. Water Control & Improvement Dist. No. 1, 870 S.W.2d 350, 353 (Tex. Ct. App. 1994) (“Moreover, the surface owner must also show that any alternative uses of the surface, other than the existing use, are impracticable and unreasonable under all the circumstances.”).

⁹¹ *See* Alspach, *supra* note 22, at 94.

⁹² Sun Oil Co. v. Whitaker, 483 S.W.2d 808, 812 (Tex. 1972). In that case, the surface owner, a farmer, complained that the developer’s use of well water from a non-replenishing aquifer would harm his ability to irrigate his crops. The court held that the developer was not obligated to buy and bring in water from elsewhere to prevent this harm to the surface owner. The court stated that, “[t]o hold that Sun can be required to purchase water from

impairment experienced by the surface owner must be, at the very least, substantial.”⁹³ Fourth, the requirement that the mineral owner have reasonable alternatives available has been held to mean that “if there is but one way to produce the minerals, the mineral owner has the right to pursue his use.”⁹⁴ As a result, in Texas, the accommodation doctrine “has not made a large difference in the ordinary surface use case and the decision of *Getty* has often been limited or distinguished.”⁹⁵

c) The Accommodation Doctrine in West Virginia

As described above, the West Virginia courts have held that, under an ambiguous express easement, a surface use must be compatible with existing uses and/or the terms of the easement, necessary to enjoyment of the mineral estate, and not unreasonably or substantially increase the burden on the surface estate beyond what would have been contemplated by the original parties to the easement. West Virginia applies a similar test when interpreting the scope of an implied easement.

If a severance deed contains no express surface easement, West Virginia law nevertheless recognizes an

other sources or owners of other tracts in the area, would be in derogation of the dominant estate.” *Id.*

⁹³ Hafer et al., *supra* note 90, at 63. In one case, a farmer objected to the construction of caliche roads in place of dirt roads. *Davis v. Devon Energy Production Co.*, 136 S.W.3d 419, 420 (Tex. Ct. App. 2004). The evidence indicated that caliche roads would “cause . . . problems” for the farmer, especially with plowing, but that it “would [not] destroy [the] ability to conduct a profitable farming operation.” *Id.* at 425. The court therefore held that the surface use was permissible under the accommodation doctrine. Similarly, another Texas court found that the surface owners could not have tank batteries removed from grazing land because they had demonstrated only “inconvenience,” not that the surface use “materially interferes with their use of the surface estate.” *Ottis*, 569 S.W.2d at 514.

⁹⁴ Harper Estes & Douglas Prieto, *Contracts as Fences: Representing the Agricultural Producer in an Oil and Gas Environment*, 73 TEX. B.J. 378, 380 (2010); *see also* Alspach, *supra* note 22, at 97 (“[I]f there is only one way to produce the minerals, such as vertical drilling, the mineral owner may pursue that use regardless of damage to the surface estate.”).

⁹⁵ Estes & Prieto, *supra* note 94 at 379.

implied easement.⁹⁶ The West Virginia Supreme Court of Appeals limits implied surface easements to those activities that are “fairly necessary to the enjoyment of the mineral estate.”⁹⁷ On its face, this standard may appear more favorable to mineral developers than the test for ambiguous express easements – a court could conceivably apply it to conclude that any activity that is “necessary” to productive extraction falls within the scope of the mineral owner’s easement, no matter how burdensome it is to the surface owner. However, *Buffalo Mining*, citing *Adkins*, rearticulated the standard, stating that “any use of the surface by virtue of rights granted by a mining deed must be exercised reasonably so as not to unduly burden the surface owner’s use.”⁹⁸ While *Buffalo Mining* required the court to interpret a deed containing an express easement, the court made clear that a reasonableness restriction applies to both express and implied easements, and in fact applies more stringently to implied easements, by stating that “where implied rather than express rights are sought, the test of what is reasonable and necessary becomes *more exacting*.”⁹⁹

In a subsequent decision, the West Virginia Supreme Court of Appeals stated that it would not imply a right to surface mine unless

it is demonstrated that, at the time the deed was executed, surface mining was a known and accepted common practice in the locality where the land is located; that it is reasonably necessary for the extraction of the mineral; and that it may be exercised without any substantial burden to the surface owner.¹⁰⁰

⁹⁶ See *Buffalo Mining*, 267 S.E.2d at 725.

⁹⁷ *Adkins v. United Fuel Gas Co.*, 61 S.E.2d 633, 636 (W. Va. 1950) (citation and internal quotation marks omitted).

⁹⁸ 267 S.E.2d at 725 (emphasis added).

⁹⁹ *Id.* (emphasis added).

¹⁰⁰ *Phillips*, 458 S.E.2d at 335.

This case clarified the nature of the “more exacting” test for implied easements. Whereas the test for an ambiguous express easement is whether the activity is necessary and does not unreasonably *increase* the burden to the surface estate beyond what the easement expressly permits, for implied easements it is whether the activity is necessary and does not place *any* substantial burden on the surface.¹⁰¹ This case also reiterated the requirement that the proposed practice (or, presumably, one with similar surface impacts) was known and considered at the time the easement came into existence.

In sum, for both ambiguous express easements and implied easements, the West Virginia courts apply a modified version of the accommodation doctrine – one that is more favorable for surface owners than the traditional version. There are also two other important distinctions between West Virginia law and the accommodation doctrine.

First, West Virginia shifts the burden of proof from the surface owner to the mineral owner.¹⁰² This much is clear from *Buffalo Mining*'s statement that for a mineral owner's claim of an implied right to use the surface “to be successful, it must be demonstrated not only that the right is reasonably necessary for the extraction of the mineral, but also that the right can be exercised without any substantial burden to the surface owner.”¹⁰³ When “there is only one method for a mineral owner to remove his minerals and this one method will destroy the surface owner's use of his estate,” under the traditional accommodation doctrine, the mineral owner would prevail, but “under . . . West Virginia's undue burden standard, as announced in *Buffalo Mining*, the mineral owner could not use this method of exploitation because it

¹⁰¹ *Id.*

¹⁰² See Alspach, *supra* note 22, at 102 (“West Virginia places the burden upon the mineral owner to demonstrate reasonable surface use, as opposed to placing the burden on the surface owner to demonstrate unreasonable surface use or alternative mining methods.”); Michelle Andrea Wenzel, *The Model Surface Use Act and Mineral Development Accommodation Act: Easy Easements for Mining Interests*, 42 AM. U. L. REV. 607, 638-39 (1993) (describing shift of burden to mineral estate and claiming that this doctrinal change in effect makes the surface estate the dominant estate).

¹⁰³ 267 S.E.2d at 725-26; *accord Phillips*, 458 S.E.2d at 335.

would be totally incompatible with the rights of the surface owner.”¹⁰⁴

This shift in the burden of proof can have a significant impact on the likelihood that a surface owner will prevail on a claim that a particular fracking practice should be prohibited because its impact on the surface estate is overly burdensome. For example, there is still considerable uncertainty about the impacts of hazardous chemicals used in fracking solutions on well water.¹⁰⁵ If the surface owner carried the burden of demonstrating that these chemicals substantially impaired her use of the surface, she might face serious hurdles, not the least of which would be establishing the baseline from which deviation is sought to be proved. If, by contrast, the burden is on the mineral owner to prove the safety of the chemicals, a court is, by definition, more likely to require a mineral owner to use non-toxic chemicals, particularly given that such mixtures are now commercially available.¹⁰⁶

Another aspect of West Virginia law that is unusually favorable to surface owners is its approach to changes in mining technology. While past commentators suggested that limitations on technological advancement applied to coal cases did not apply to oil and gas cases,¹⁰⁷ the contemporary view is that West Virginia “does not make a distinction between the extent of the right to use the surface under coal severance deeds and the right under oil and gas severances.”¹⁰⁸ In *Energy Development Corp. v. Moss*, the West Virginia Supreme Court of Appeals noted that although many technology change “cases concerned rights under coal deeds,

¹⁰⁴ Smith, *supra* note 23, at 821.

¹⁰⁵ The EPA is in the midst of a multi-year study designed to address this uncertainty. See EPA, PLAN TO STUDY THE POTENTIAL IMPACTS OF HYDRAULIC FRACTURING ON DRINKING WATER RESOURCES 1 (2011) (“The overarching goal of this research is to answer the following questions: Can hydraulic fracturing impact drinking water resources? If so, what conditions are associated with these potential impacts?”), available at http://www.epa.gov/hfstudy/HF_Study_Plan_110211_FINAL_508.pdf.

¹⁰⁶ See HALLIBURTON, CLEANSTIM HYDRAULIC FRACTURING FLUID SYSTEM (2010), available at http://www.halliburton.com/public/pe/contents/Data_Sheets/web/H/H07550.pdf.

¹⁰⁷ See Smith, *supra* note 23, at 824 (“[T]he *Strong* rule has never been applied to oil and gas operations.”).

¹⁰⁸ Davis & Aycock, *supra* note 24, at 148-49.

and not an oil and gas lease, we believe the same logic applies.”¹⁰⁹ The court thus held that in the oil and gas context, as in the coal context, “a court will not find an implied right to conduct a given activity (not mentioned in the lease) unless that activity is clearly demonstrated to have been a common practice in the area, at the time of the lease’s execution.”¹¹⁰ *Guyan Eagles Coal Co.* and *Kell* demonstrate the willingness of West Virginia courts to prevent a mineral owner from using new technology that was both unknown at the time the deed was executed and which substantially increases the burden on the surface estate.¹¹¹

Modern gas extraction through hydraulic fracturing involves the use of several new technologies and practices that likely were not in the contemplation of the parties to severance deeds signed decades ago and that substantially increase the burden on the surface estate. For example, the size of the well pad is significantly larger than for a conventional natural gas well.¹¹² There is also substantially more traffic to and from the well site.¹¹³ Fracked wells can also involve the construction of large open-air impoundment pits to store flowback.¹¹⁴ Some of these pits have aerators or misters that increase the rate of evaporation from the pits, thus increasing the air pollution emitted from them. Still other

¹⁰⁹ 591 S.E.2d at 145.

¹¹⁰ *Id.*; see also *Quintain Dev., LLC v. Columbia Natural Resources, Inc.*, 556 S.E.2d 95, 100 (W. Va. 2001) (noting that West Virginia has used the necessity and unreasonably increased burden tests “to restrict the owner of an easement from utilizing a technology that did not exist at the time an indenture was executed”).

¹¹¹ *Guyan Eagles*, 273 S.E.2d at 92-93 (“[N]o use may be made of a right-of-way, different from that established at the time of its creation so as to burden the servient estate to a greater extent than was contemplated at the time of the grant.”); *Kell*, 289 S.E.2d at 454 (“[The] right to use technological innovations must be weighed against the right of the grantor-owner to possess and use the adjacent land.”).

¹¹² NEW YORK STATE DEP’T OF ENVTL. CONSERVATION, REVISED DRAFT SUPPLEMENTAL GENERIC ENVIRONMENTAL IMPACT STATEMENT ON THE OIL, GAS AND SOLUTION MINING REGULATORY PROGRAM, at 5-10 – 5-11 (2011).

¹¹³ *Id.* at Section VI.

¹¹⁴ The new Horizontal Well Act includes provisions on impoundment pits, including authority for more specific regulation by the Department of Environmental Protection. See W. VA. CODE §§ 22-6A-9, 22-6A-23 (2011).

wells are used for the reinjection of fracking fluids after the gas has been extracted. And, of course, the chemical recipes and propping agents being used to frack efficiently are relatively new to the industry. All of these are examples of developments and technologies that a surface owner could potentially challenge as outside the contemplation of the parties to an early severance deed and overly burdensome to the surface estate.

Although West Virginia decisions create a favorable doctrinal framework for surface owners, it is worth considering a limitation to the viability of these arguments. While West Virginia decisions explicitly list necessity and increased burden as two separate requirements,¹¹⁵ courts may be less inclined to find a practice that increases the burden on the surface estate unreasonable when such a practice is absolutely necessary to making the mineral estate productive. The decisions that have found a given action to be outside the scope of an easement did not involve situations in which an action was imperative to enjoyment of the easement holder's estate, such that no adequate less burdensome alternatives existed. For example, the *Kell* court specifically noted that there were methods of keeping power lines clear other than the aerial broadcast spraying of herbicides.¹¹⁶ If the West Virginia courts did adopt this approach to reasonableness, the difference between West Virginia law and the traditional accommodation doctrine would be less than suggested.

Reasonableness and necessity are also considered in relation to each other under the common law duty to make a mineral estate productive for the benefit of royalty interests. Under West Virginia law, a mineral owner must do that which is reasonably necessary to develop the property for the profit of those holding royalty interests.¹¹⁷ This duty requires a mineral estate

¹¹⁵ See *Kell*, 289 S.E.2d at 454.

¹¹⁶ *Id.* at 456.

¹¹⁷ See, e.g., *Adkins v. Huntington Dev. & Gas. Co.*, 168 S.E. 366, 367 (W. Va. 1932) (“[T]here is always, in the absence of an express covenant, an implied obligation on [an interest-holder in the mineral estate’s] part to drill the number of wells reasonably necessary to develop the property and prevent drainage by operation on adjoining lands.”); see also George A. Bibikos & Jeffrey C. King, *A Primer on Oil and Gas Law in the Marcellus Shale States*, 4

owner to do all it reasonably can to make the mineral estate productive, and it treats reasonableness not as an independent consideration but as a qualifier of necessity. If a mineral owner is thus under an *obligation* to take actions necessary to production, a harmonious reading of the law might grant a mineral owner *permission* to take such actions despite their burden to the surface owner. It might then follow that truly necessary actions are inherently reasonable, once again diminishing the difference between West Virginia law and the traditional accommodation doctrine.

CONCLUSION

Owners of surface estates have relatively few legal options available to minimize surface damage from oil and gas operations. The consequences of this lack of options are magnified in the context of the current hydraulic fracturing boom, both because it has brought oil and gas development to areas that have previously seen little of it and because it increases the magnitude of surface impacts. This article articulates legal avenues available to surface owners in West Virginia who may wish to challenge the propriety of specific fracking practices as falling outside the scope of a surface easement held by the mineral owner. It focuses on the interpretation of easements created by severance deeds executed at a time when current unconventional extraction practices could not have been contemplated by the contracting parties.

While easement analyses can include a review of the burden to the surface, the nature of surface uses, the necessity of a practice, and the compatibility of a practice with surface uses and/or easement language, it is sometimes contractual intention that carries the day. What the parties to a severance deed did or could have contemplated at the time of severance can have a bearing on what is permissible today. And given the disparity between extraction technology at the time many

TEX. J. OIL GAS & ENERGY L. 155, 185-86 (2009) (discussing the prudent operator standard in West Virginia).

severances took place in West Virginia and the potential extent of unconventional extraction practices there today, the application of contractual intention to surface use disputes can add a powerful perspective.