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The Equity Illusion of Surface Ownership in Coalbed Methane Gas; The Rise of Mutual Simultaneous Rights in Mineral Law and The Resulting Need for Dispute Resolution in Split Estate Relations

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The author is a graduate of the University of Missouri-Columbia Dispute Resolution Program, LL.M., and graduate of the Appalachian School of Law. I would like to thank Professor Peter Davis, instructor *par excellence*, who has forgotten more than I know about the laws of mining and oil & gas. My efforts herein are for the benefit of the folks of Appalachia and the mountains that are home, and for my extraordinary children Cay and Marshall, to whom I say, advocate your world.

INTRODUCTION

The push for alternative energy resources in America has caused a phenomenon in American jurisprudence: the dichotomizing of legal approaches to interpreting mineral law. Analysis of the small collection of landmark coalbed methane gas (CBM) ownership cases reveals a chaotic trend in the interpretation of mineral law as a movement from traditional judicial reverence for property rights toward a growing preference for contract theory. Problematically, this trend is redefining mineral law in a manner foreign to traditional interpretations of mineral theory and in contravention to historical practices of mineral conveyancing. Much of the problem lies in courts' collective resistance to addressing specific extraction issues of a new group of split estate mineral owners who now share *mutual simultaneous rights* to CBM. As a result, coalbed methane case law resembles the practice of ad hoc interventions in equity, wholly lacking in consistent principles of mineral theory. Moreover, the property rights of split estate surface owners have suffered from the chaos, as functional solutions to diminished rights of quiet enjoyment and environmental protection have not been forthcoming.

This article is an effort to scrutinize the coalbed methane phenomenon and its effect on a new class of split estate surface owners. Analysis will include my assessment of historical conflicts between

contract theory and property law which have come to disturb the continuity of modern mineral law. As a centerpiece to understanding these historical conflicts, I explore the issue of equitable intervention on the part of the courts in mineral production issues. In concluding my analysis, I illustrate why alternative dispute resolution is the single best alternative to the pandemic of legal uncertainty in mineral law as it trends away from property rights protections.

In accomplishing these goals, Part I of this article addresses the physical properties of CBM and describes its new mineral value. Part II analyzes the chaos behind CBM case law as it involves the Virginia Supreme Court Case *Harrison-Wyatt, LLC v. Donald Ratliff, et al.*[1] Part III considers the "interface"[2] issues between contract theory and property law, which disturb the continuity and predictability of mineral law. Part IV retraces the historical conflict between contract theory and property law. Part V looks at the big picture in coalbed methane production as it affects the nation. Part VI reviews the nature of equitable intervention on the part of recent courts in the treatment of split estate issues. Part VII explains why there exists the equity illusion of just intervention in CBM ownership cases. Part VIII suggests the best practice in managing CBM issues is a focus on extraction rights. Part IX advocates for the use of alternative dispute resolution to mitigate the chaos of CBM extraction issues.

I. COALBED METHANE GAS AND ITS NEW MINERAL VALUE

Coal has been, and still is, the centerpiece in America's natural resource recovery efforts. A shift in coal production trends is underway however, and with it, a shift in the jurisprudential valuation of alternative mineral resources. The result is a comprehensive national effort to exploit indigenous fuel resources, which involves an expansive mining effort westward. For example, "[i]n 1994, Appalachia produced 467 million short tons of coal, and the western states produced 408 million short

[1] 593 S.E.2d 234 (Va. 2004).

[2] *See generally* Thomas W. Merrill & Henry E. Smith, *The Property/Contract Interface*, 101 COLUM. L. REV. 773 (2001) (Part III will analyze "interface" issues in detail).

tons."[3] "By the year 2000, Appalachia was producing 420 million short tons, while the West produced 567 million short tons."[4] Clearly, "[t]he last decade has seen a steadily increasing share of coal production shift from Appalachia and the mid-western states to the west."[5] This shift has brought a changing dynamic in the production of alternative fuels, particularly in the extraction of coalbed methane gas (CBM).

A. Coalbed Methane Gas Production

Coalbed methane is a natural gas created as peat turns into coal. In her research on the history of mining and coalbed methane gas production, Elizabeth McClanahan explains how CBM is formed.

> Utilizing GRI research, producers have learned that the coalbed methane was not "stored" in the coalbeds in the same manner as a conventional gas reservoir. Methane is *adsorbed* onto the internal surface of the coal and held there by the water pressure in the formation. In order to remove the coalbed methane, the water pressure must be reduced. Once the pressure is reduced, the coalbed methane desorbs and flows to the wellbore through the fractures in the coal.[6]

The process of *adsorption* discriminates coalbed methane from other gases, such as natural gas, which tends to be freer flowing. Uniquely, "CBM has a tendency to remain adsorbed to the surface of coal."[7] It is released "only when the coalbed is depressurized by faulting

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[3] Ric Richardson, *Governing Western Mineral Resources: The Emergence of Collaboration*, 43 NAT. RESOURCES J. 561, 564 (2003).
[4] *Id.*
[5] *Id.*
[6] Elizabeth A. McClanahan, *Coalbed Methane: Myths, Facts, and Legends of Its History and the legislataive and Regulatory Climate into the 21st Century*, 48 OKLA. L. REV. 471, 476 (1995) (emphasis added).
[7] Katina L. Francis, Note, *Mining Law -- Ownership of Coalbed Methane – A Judicial Step Toward Efficient CBM and Coal Development. Southern Ute Tribe v. Amoco*

or drilling."[8] "This characteristic complicates classification of CBM since it is inevitably interrelated to the coal in which it is found."[9] Now that CBM is a fuel in itself and not merely a bi-product, commercial mining practices have grown at rapid pace to include CBM extraction.

Commercial mining for CBM began in the United States in the 1980s.[10] Production of CBM has increased dramatically over the last two decades, from several dozen wells in the 1980s to over 14,000 by the end of the century.[11] Clearly, natural gas is playing an increasingly important role in America's energy policy, as natural gas currently provides 24% of the country's energy needs and 16% of its electricity generation.[12] In the Appalachian Basin of Virginia alone production increased more than 300% from 1992 to 1993[13] to account for approximately 3% of total production.[14] CBM extraction continued to rise, and in 1995 exceeded the production of *conventional* gas in Virginia at almost twice the production rate.[15]

In his work on the coalbed methane conflict in the American west, Robert Duffy describes the production of CBM as an attractive alternative to other natural gases.

> In addition to its relative abundance, coal bed methane is attractive from an economic perspective. Coal bed seams are often much closer to the surface than conventional natural gas fields, so methane wells are much cheaper to drill and operate. In fact, the typical CBM well is approximately six times cheaper to drill. Overall, according to industry analysts the cost of finding and

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Production Company, 119 F.3d 816 (10th Cir. 1997), 33 LAND & WATER L. REV. 469, 472 (1998).

[8] *Id.* at 472-73.

[9] *Id.* at 473.

[10] *Id.*

[11] Robert J. Duffy, *Political Mobilization, Venue Change, and the Coal Bed Methane Conflict in Montana and Wyoming*, 45 NAT. RESOURCES J. 409, 413 (2005).

[12] Michael W. Brown, *Coalbed Methane in Utah: Designing a Successful Approach*, 26 J. LAND RESOURCES & ENVTL. L. 357, 360 (2006).

[13] McClanahan, *supra* note 6, at 474.

[14] *Id.* at 561 n.24.

[15] *Id.* at 561 n.25.

> developing coal bed methane averages about one-third the cost of traditional deep-well natural gas.[16]

CBM is historically a waste product. However, today it is the most rapidly growing source of alternative energy in the United States. According to L. Lyman's research on CBM, "the United States Geological Survey estimates that there are 700 trillion cubic feet of CBM trapped in coal deposits in the United States, of which up to 100 trillion cubic feet--worth nearly $1 trillion--are recoverable."[17] "Rather than being captured and utilized, however, much of the recoverable CBM is released into the atmosphere as coal mine methane ("CMM"), a byproduct of coal mining."[18] "At current prices, this wasted methane is worth over $1.5 billion per year."[19]

Much of the reason for ventilation of CBM, rather than its capture, is the nature of complex legal and practical issues surrounding ownership and extraction rights and responsibilities faced by split estate surface owners and their subterranean counterparts, mineral owners and lessees. "Extraction of minerals from different strata underlying a single tract [of land] has long been a source of conflict between the oil and gas industry and the coal industry."[20] Litigation of these issues has been slow and piecemeal. Conversely, state and federal statutory law has ballooned with complex standards for extraction, production and regulation of mineral estates. Unfortunately, neither judicial nor legislative efforts have eased the tensions between split estate relationships, improved environmental protection or prompted balanced use of split estate lands. Recently, the Virginia Supreme Court added to the complexity surrounding CBM

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[16] Duffy, *supra* note 11, at 413.

[17] L. James Lyman, Comment, *Coalbed Methane: Crafting a Right to Sell from an Obligation to Vent,* 78 U. COLO. L. REV. 613, 613-14 (2007); *see also* U.S. Geological Survey, Coalbed Methane – An Untapped Energy Resource and an Environmental Concern (Jan. 17, 1997), http://energy.usgs.gov/factsheets/Coalbed/coalmeth.html (showing data used by Lyman).

[18] Lyman, *supra* note 17, at 614.

[19] *Id.* at 614.

[20] Jeff L. Lewin, *Coalbed Methane: Recent Court Decisions Leave Ownership "Up in the Air" But New Federal and State legislation Should Facilitate Production,* 96 W. VA. L. REV. 631, 674 (1994).

production. Its decision in *Harrison-Wyatt, LLC v. Donald Ratliff, et al. (Harrison-Wyatt)*[21] radically transformed the nature of CBM ownership in the Appalachian Basin of Virginia.

B. Virginia's Treatment of Coalbed Methane under the Law

"In order to economically produce coalbed methane an artificial stimulation of the coalbed or coal seam must occur."[22] In other words, CBM will normally not escape in mass absent a method of fracturing the coal seam. This fact is ironically problematic for Virginia owners of CBM after the 2004 holding by the Virginia Supreme Court. In *Harrison-Wyatt, LLC v. Donald Ratliff, et al.*, the Virginia Supreme Court held that title to CBM does not pass to the coal owner but is retained by the fee surface owner even if the only way to retrieve CBM is through mining activities. This result renders Virginia's *Harrison-Wyatt* holding antithetical to the historical practices of coal conveyancing in the Appalachian Basin and impractical in its effect on CBM extraction. Problematically, the necessity of coal fracturing impedes newly claimed surface ownership rights to CBM, causing old mining practices and new ownership rights to collide.

Much of the problem with Virginia's new law lies in what the state Supreme Court did not decide. The Court did not resolve the question of what rights or liabilities surface owners have in retrieving CBM or what rights coal extractors have in ventilating and/or capturing hazardous gas from coal seams. In other words, the Virginia Court imposed a narrow decision on the issue of ownership, leaving questions regarding extraction rights unaddressed. Therefore, Virginia law stops short of a determinative answer on how surface owners can lawfully extract CBM from coal seams they do not own, and further, how coal owners can ventilate the CBM they do not own, but must manage.

Virginia Law Stops Short of Extraction Issues

Significantly, most severance deeds in the Appalachian Basin date back to the early to mid 1800s and have no language addressing the ownership of CBM in conveyance language. Trade custom and operation of law, however, have historically mandated coal mining operations to

[21] 593 S.E.2d 234 (Va. 2004).
[22] McClanahan, *supra* note 6, at 476.

vent CBM from mining sites so to reduce health and safety hazards caused by CBM. Both of these conditions, taken together, industry practice and deed language, have created an historic inference that liability for coalbed methane and its extraction is integral to coal ownership and production. In the Virginia Supreme Court's analysis in *Harrison-Wyatt*, the Court had to consider exactly how to qualify ownership of a substance which has been, until the early 1980s, a waste product[23] and effectively excluded from virtually all conveyance language in the region, as general practice.

In *Harrison-Wyatt*, the Virginia Supreme Court took up the issue of whether ownership of CBM remains with the surface owner, even after he conveys interests in the coal to other parties. Three severance deeds from the late 1800s were put into question. Language in the deeds conveyed "all the coal in, upon, and underlying" mineral tracts 18, 19, and 56 in Buchanan County. In this case, the Virginia Supreme Court affirmed the trial court's decision in its entirety to hold that "title to the CBM [does] not pass to the coal owner."[24] The holding instantly re-qualified virtually all legal relationships in the ownership, extraction and production of subterranean coal minerals in Virginia's Appalachian Basin region. The Court added conflict to the confusion by limiting its holding to the issue of ownership of CBM without addressing lower court limitations on surface owners' extraction rights to CBM.

In *Harrison-Wyatt,* the trial court limited surface ownership by holding that surface owners' rights to CBM extend *only* to gas which has already escaped or separated from the coal. The lower court added further restriction by deciding that "[a] surface owner does not have the right to fracture the coal in order to retrieve the CBM."[25] Essentially, the lower court instituted an *ownership-in- place* rule for CBM, restricting extraction rights without limitation. In other words, even if the surface owner has title to CBM, the surface owner does not have the right to fracture coal seams conveyed to other owners in order to retrieve methane gas.

The Virginia Supreme Court declined to address production limitations placed on surface owners by the lower court, finding the issue of extraction non-responsive to the legal question before it. In its holding,

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[23] Harrison-Wyatt LLC v. Ratliff, 593 S.E.2d 234, 235 (Va. 2004).
[24] *Id.* at 238.
[25] *Id.* at 238 n.3.

the Virginia Supreme Court expressed "no opinion"[26] regarding CBM extraction. Consequently, Virginia's refusal to address the ownership-in-place ruling creates a virtual nullity in meaningful efforts to establish fee ownership in CBM. The result suggests that surface ownership of CBM was either narrowly diagnosed by the Court or severely limited as a matter of law. Unfortunately, the state Supreme Court's failure to qualify the question of extraction leaves a host of production issues unaddressed. Further, as will be seen, its decision has implications for the way in which future courts may construct ownership arguments for extraction of valuable minerals in a manner which strips settled authority from property law.

To a large degree, the Court's decision in *Harrison-Wyatt* may well represent a new legal approach to managing mineral estates through greater emphasis on contract theory rather than on settled property law. In a broad swing of the legal pendulum, the Virginia Supreme Court's analysis of specific mineral case law illustrates a progressive jurisprudential shift toward contract-based arguments for ownership of CBM. Not surprisingly, Virginia's dramatic shift in its interpretation of mineral law is part of a larger general trend in legal jurisprudence toward contractualizing property ownership issues. Arguably, Virginia's analysis of relevant case law in *Harrison-Wyatt* was a doctrinal effort to re-caste earlier cases based on property rights into issues of contract theory. As a result, elements of contract theory, and not property law, decided the landmark holding in favor of surface ownership of CBM in Virginia.

C. A Trend toward Preferring Contract Solutions to Property Issues

A broad range of legal scholars have advocated for the ascendance of contract theory into a variety of property issues such as landlord-tenant law, real estate conveyancing, and leasing law, to note a few.[27] Proponents of the "Contract Approach"[28] suggest that notions of fairness

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[26] *Id.*

[27] *See generally* Michael Madison, *The Real Properties of Contract Law*, 82 B.U. L. REV. 405 (2002).

[28] *Id.* at 405.

are best served by flexible contracts with bargaining expectations which shift in response to society's changing needs.[29] It has been argued that "[s]uch a move will jolt [property law] out of its comatose state and make conveyancing law more responsive to the needs of a modern society and more sensitive to the intentions and common sense bargaining expectations of the parties."[30] Intertwined with this sentiment is the view that "land owners have limited foresight,"[31] whereby restricting land use into the future may frustrate their own land use preferences for the future.[32]

A general trend toward property law reform has developed within courts through the context of the Restatement (Third) of Property.[33] "At present the Restatement appears to be the best vehicle for property law reform by advocating a contract approach to the law of real estate contracts and conveyancing."[34] Evidence of this is the increased use of Restatement propositions. For example, "[t]otal published citations to Restatements by 1998 were up to 141,087."[35] What real effect new contract theory and the new Restatement of Property have on CBM case law is still uncertain. Once parsed into detail, however, the chaos of current CBM case law demonstrates a clear analytical "focus on the differences between modern contract theory and ancient property law."[36]

With this in mind, Part II will address the jurisprudential chaos behind CBM case law as it was analyzed in Virginia's *Harrison-Wyatt* decision. This section will attempt to discern the split in legal authority between camps of state courts, and investigate the circumstances under which coal owners prevailed in CBM ownership issues, and when they did not.

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[29] *Id.* at 406; *see generally* Stewart E. Sterk, *Freedom from Freedom of Contract: The Enduring Value of Servitude Restrictions*, 70 IOWA L. REV. 615 (1985).
[30] *Id.* at 405.
[31] Sterk, *supra* note 29, at 617.
[32] *Id.*
[33] Madison, *supra* note 27, at 469.
[34] *Id.*
[35] *Id.*
[36] *Id.* at 470.

II. CASE LAW CHAOS BEHIND VIRGINIA'S SURFACE OWNERSHIP DECISION

A. Virginia Analyzed Relevant Case Law

The Virginia decision was made after the state Supreme Court reviewed a legal split in authority over CBM ownership. In deciding *Harrison-Wyatt*, the Virginia Supreme Court analyzed six cases, five of which were decisions of other state Supreme Courts. The Virginia Court relied on the United States Supreme Court decision *Amoco Prod. Co. v. Southern Ute Indian Tribe*, (*Amoco*)[37] however, to define *coal* as the term was used at the turn of the twentieth century.

1. Amoco Prod. Co. v. Southern Ute Indian Tribe

In *Amoco* (1999), the United States Supreme Court reversed a Tenth Circuit Court of Appeals *en banc* decision on the issue of CBM ownership. The Tenth Circuit held that CBM had rightfully been reserved to the Southern Ute Indian Tribe in 1938 when the U.S. government returned to the Utes equitable title to coal underlying homestead lands historically annexed from tribal territory. The *en banc* or full court decision was reached through judicial interpretation of conveyance language found in the 1909 and 1910 Coal Lands Acts. The Coal Lands Acts initially reserved to the federal government the subsurface lands of early homesteaders for the benefit of federal coal reserves.[38] The Circuit Court found ambiguity in the Acts' conveyance language, to be resolved in favor of the Ute Tribe. The Tenth Circuit's statutory construction analysis was subsequently rejected however, by the United States Supreme Court whose decision turned instead on the "ordinary and popular sense" of coal's 1909 mineral definition.

Although a host of experts in *Amoco* failed to agree on the physical nature of coalbed methane's relationship to coal, the Supreme Court held

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[37] 526 U.S. 865 (1999).

[38] Stacy L. Leeds, Note, *Southern Ute Indian Tribe v. Amoco Production Company: Judicial Construction of Coalbed methan Gas Ownership*, 17 ENERGY L. J. 489, 492-93 (1996).

that "reservation of 'coal' in [the 1909 and 1910 Coal Lands Acts] did not encompass CBM gas, since the common conception of coal at the time . . . was limited to solid rock substance."[39] The Supreme Court held, therefore, that CBM had not been reserved to the Ute Indian Tribe when coal rights in homestead lands were returned to them by the U.S. government in 1938. Therefore, even though the Ute tribe had rightfully reacquired coal ownership in 1938, it did not own the CBM embedded within the coal reserves in 1999.[40]

Prior to *Amoco*, the Department of Interior reviewed reservation language in the Coal Lands Acts. In 1981, the U.S. Department of Interior Solicitor General issued an opinion on the reservation language "in order to expedite the development of [the CBM] energy source."[41] The Solicitor General "conclude[ed] that the reservation of coal under the [Coal Lands] Acts did not encompass CBM gas."[42] The opinion had profound effect on the *Amoco* decision and subsequently Virginia's *Harrison-Wyatt* case. The Solicitor General later retracted his opinion[43] in light of the Tenth Circuit's decision *en banc* in support of the Tribe's position.[44] However, the withdrawal of his opinion, on the eve of *Amoco's* argument, was too late to stem the tide of new legal analyses of coalbed methane ownership.

With the *Amoco* decision, ownership disputes between coal patent owners and mineral lessees under the Coal Lands Acts were eliminated, resolved in favor of a host of new private lessees.[45] By "eliminating ownership disputes"[46] between coal patent holders, *Amoco* "greatly increased"[47] CBM production efforts, particularly in the Powder River Basin of Montana and Wyoming.[48] Even more, new legal arguments had

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[39] *Amoco Prod. Co.*, 526 U.S. at 870.
[40] Leeds, *supra* note 38, at 496.
[41] *Amoco Prod. Co.*, 526 U.S. at 872.
[42] *Id.*
[43] *Id.* at 872.
[44] *Id.*
[45] M. Kristeen Hand & Kyle R. Smith, Comment, *The Deluge: Potential Solutions to Emerging Conflicts Regarding On-Lease and Off-Lease Surface Damage Caused by Coal Bed Methane Production*, 1 WYO. L. REV. 661, 667 (2001).
[46] *Id.*
[47] *Id.*
[48] *Id.*

successfully opened the west to energy expansion. The Supreme Court's *Amoco* decision was resoundingly divergent, however, from the first state court case ever to consider the issue of CBM ownership, *U.S. Steel Corp. v. Hoge*.[49]

2. United States Steel Corporation v. Hoge (1983)

The very first case to determine CBM ownership illustrates a very broad insight into the functional state of mineral law and its jurisprudential history in America. *United States Steep Corp. v. Mary Jo Hoge* (*Hoge*) asserts legal arguments representative of mainstream practices and standard constructions of mineral law over the course of a hundred years of American coal mining.

In *Hoge*, the Pennsylvania Supreme Court quieted title to a coal severance deed in favor of the appellant coal owner, United States Steel Corporation. The Court examined ownership rights against the backdrop of experimental hydro-fracturing of coal seams in the commercial development of coalbed gas.[50] At the time, state justices labeled CBM as a mineral *ferae naturae*, or free moving mineral, and held that gas within the coal seam "*must necessarily belong to the owner of the coal,*"[51] so long as it remains within his property and subject to his exclusive control."[52] The Court, however, qualified United States Steel's ownership of CBM interests as "less than perpetual."[53] Qualification not withstanding, *Hoge's* holding secured CBM extraction rights for the coal owner by denying them to surface owners, who themselves, wanted to lease drilling rights to CBM reserves in the coal.

The Pennsylvania Court buttressed its decision by highlighting the far greater value of coal over CBM.[54] It determined that "the [energy] value of the coalbed gas is only one percent of the b.t.u. value of the coal."[55] Justices credited United States Steel with expending costly

[49] 468 A.2d 1380 (Pa. 1983).
[50] *Id.* at 1383.
[51] *Id.*
[52] *Id.*
[53] *Id.* at 1384.
[54] *Id.* at 1383.
[55] *Id.*

drilling operations to extract CBM reserves from the coal seam in question.[56] In that light, the Court held that all means of drilling was rightful extraction even hydro-fracturing, since the "damage to coal inflicted by these processes is within [the company's] dominion to inflict."[57] The result was a holding, which not only decided the question of CBM ownership in Pennsylvania, but also determined the extent of the coal owner's *right to develop* CBM from reserves within the coal seam. In its conclusion, the Court noted that "it strains credulity to think that the grantor intended to reserve the right to extract a valueless waste product with the attendant potential responsibility for damages resulting from its dangerous nature."[58]

3. NCNB Texas Nat. Bank, N.A. v. West (1993)

Ten years after the *Hoge* decision, Alabama weighed in on the CBM debate. In *NCNB Texas Nat. Bank, N.A. v. Neva Watkins West* (*West*),[59] the Alabama Supreme Court quieted title to a coal severance deed which reserved to the grantor interests in "all gas." The court held in favor of coal lessees' rights to recover *in situ* CBM held within the coal seam until the gas migrated into other strata, at which time the holder of the gas estate had the right to reduce CBM to possession. Alabama concluded, "[t]he resolution of this issue answers the question, What is necessary for a grantor to convey separate estates in coal and coalbed methane gas?"[60] "In making this determination of law, the Court must consider . . . the methods, rights, and obligations of mining and extraction; and the ways parties have dealt with mineral rights."[61]

In *West*, the Alabama Supreme Court tempered the *Hoge's* holding by constraining a broad trial court decision which found that "as a matter of law, a reservation of 'all gas' does not include coalbed methane."[62] Alabama limited the trial court's all or nothing decision by holding that

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[56] *Id.*
[57] *Id.* at 1384.
[58] *Id.* at 1385.
[59] 631 So.2d 212 (Ala. 1993).
[60] *Id.* at 213.
[61] *Id.* at 217.
[62] *Id.* at 222.

ownership of coalbed methane rests on its location at the time it is reduced to possession, or "captured."[63] The State Supreme Court noted that its holding in *West* was not inconsistent with *Hoge*, except for the Court's distinction between state ownership theories. The Court commented, "[o]ne must bear in mind that it is not the gas that is owned in Alabama, but the right to reduce the gas to possession, and the analysis of *Hoge* must be applied with this distinction."[64] Alabama acknowledged however, that such distinction "does not affect the extent of extraction rights."[65] "The issue here is who has the right to recover coalbed methane gas."[66]

Accordingly, Alabama relied on reservation language in the deed to determine extraction rights to CBM. In this case, the deed of conveyance *specifically* reserved in the Grantor "all of the oil, gas, petroleum and sulphur in, on and under . . . with full right of ingress and egress . . . to explore, develop, operate . . . for the purpose of mining, drilling and developing the said lands and holdings for the production of oil, gas, petroleum and sulphur . . . including the right to inject or return gas . . . including the right to drill input wells or shafts for those purposes . . ."[67] The Court summarized Alabama law construing mineral leases, and explained that, absent clear reservation language in a deed of conveyance, an express grant of "all coal necessarily implies the grant of coalbed methane gas."[68]

In its holding, the Alabama Supreme Court effectively protected coal owners' rights to CBM. The Court affirmed that "appellant gas owners have no interest in coalbed gas recovered from horizontal or vertical wells drilled directly into coalbeds before coal is mined."[69] It determined that "[m]ining rights are peculiar, and exist from necessity, and the necessity must be recognized, and the rights of the mine and land

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[63] *Id.*
[64] *Id.* at 224 n.13.
[65] *Id.* at 223 (quoting Jeff L. Lewin et al., *Unlocking the Fire: A Proposal for Judicial or Legislative Determination of the Ownership of Coalbed Methane*, 94 W.VA. L. REV. 563, 619 (1992)).
[66] *Id.*
[67] *Id.* at 216-17.
[68] *Id.* at 221.
[69] *Id.* at 229.

owners adjusted and protected accordingly."[70] However, the Supreme Court reversed in part to find that appellant gas owners do have the right to "produce and own all of the coalbed methane gas that has been, or that will be, produced from gob wells [(escaped gas)] on the [sic] Property."[71] Alabama's partial reversal did not go far enough for the Montana Supreme Court.

4. Carbon County v. Union Reserve Coal Co. (1995)

In *Carbon County v. Union Reserve Coal Co. Inc.* (*Carbon County*),[72] the Montana Supreme Court reversed a decision "finding methane gas part of the coal estate and included in the conveyance of coal and coal rights by Carbon County [political subdivision] to Union Reserve's predecessor-in-interest."[73] The lower court held that as a matter of law CBM rights were inherent in the right to mine coal. However, subsequent to the trial court's ruling, the state statutory definitions of coal and oil and gas changed in a new provision to the Montana Code (MCA).[74] "In 1993, the Montana Legislature deleted the definition of gas from the state Code, and added that "gas means all natural gases . . . including methane gas." Further, "coal" means a combustible carbonaceous rock . . . coal does not include: (a) methane gas . . ."[75]

On appeal to the Montana Supreme Court, the issue in *Carbon County* centered on the question "Is coal seam methane gas [still] a constituent part of the coal estate?"[76] The Montana Supreme Court held that it was not. The Montana Court aligned with the decision in *Southern Ute Indian Tribe v. Amoco Production Co. (D. Colo. 1995)*[77] which stated that "common sense dictates that in 1909 and 1910, Congress intended

[70] *Id.* at 228 (quoting Chartiers Block Coal Co. v. Mellon, 25 A. 597, 598 (Pa. 1893)).
[71] *Id.* at 229.
[72] 898 P.2d 680 (Mont. 1995).
[73] *Id.* at 682.
[74] *Id.* at 686.
[75] *Id.* at 689.
[76] *Id.* at 686.
[77] 874 F. Supp. 1142 (D. Colo. 1995).

'coal' to mean the solid rock substance."[78] Montana's holding hinged on newly revised definitions and the rules of common contract theory.

Using the "plain meaning" doctrine of contract law, The Montana Court distinguished the holding in *Hoge* from the case on appeal by stating that "the Court in *Hoge* did not attempt to determine the intent of the parties by looking to the plain meaning of the grant."[79] Further, Montana opined that *Hoge* "went beyond the plain meaning of the reservation and determined that the parties could not have intended to reserve what was considered . . . merely a waste product."[80] The Court used the maxim "expression unius est exclusion alterius" or "the expression of one thing is the exclusion of another" to support its determination that "the express grant of one specific mineral does not imply the grant of all other minerals not referred to in the grant."[81] With the *Carbon County* decision, Montana departed from conventional mineral law. Wyoming followed suit.

5. Newman v. RAG Wyoming Land Co. (2002)

In *Mary Newman, et. al. v. RAG Wyoming Land Co.*, (*Newman*)[82] The Supreme Court of Wyoming reversed the trial court's summary judgment in favor of the coal operators' rights to CBM as part of the coal estate. In reversing, Wyoming framed the issue to be resolved as a question of "whether the parties to the deed in question intended the coalbed methane to be conveyed along with the coal estate or reserved to the grantor as part of the oil and gas estate."[83] The Wyoming Supreme Court held that coalbed methane gas was reserved to the landowners and was not intended to be part of the coal conveyance. In its decision, the Court analyzed the intent of the parties as represented in the language of the conveyance itself.

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[78] *Union Reserve Coal Co. Inc.*, 898 P.2d, at 686 (1995).
[79] *Id.* at 684.
[80] *Id.*
[81] *Id.*
[82] 53 P.3d 540 (Wyo. 2002).
[83] *Id.* at 544.

The Court's curious goal was to "interpret"[84] the "unambiguous language"[85] of the deed in question. The Court held: "[i]n interpreting unambiguous contracts involving mineral interests, we have consistently looked to surrounding circumstances, facts showing the relations of the parties, the subject matter of the contract, and the apparent purpose of making the contract."[86] Further, "[d]iffering interpretations of contracts alone do not constitute ambiguity requiring extrinsic evidence."[87] In other words, the Court saw plain meaning in the contract but incorporated an interpretation scheme used in mineral law to support the plain meaning with parol evidence.

The language of the conveyance read, "all coal and minerals commingled with coal that may be mined or extracted in association therewith or in conjunction with such coal operations."[88] The Court noted that "the coal operator argues it intended to acquire all minerals that were *commingled* with the coal in order to eliminate the possibility of conflicts between the development of those minerals and its mining operation."[89] For the sake of clarity, Wyoming used the Webster's Dictionary to assess the plain meaning of the word *commingled*, and other words such as *extracted, released, escaped* and *ventilated.* As a result, the Court could not conclude that CBM "as a mineral" may be "mined or extracted in association therewith or in conjunction with such coal operations when it can only be produced through wells as any other gas."[90] It concluded instead that "[r]ather than following some rigid rule of law, we believe this issue should be governed by the facts and circumstances surrounding the execution of this warranty deed."[91] By using the dictionary method, Wyoming's Supreme Court therefore found "explicit severance"[92] of CBM, even in the absence of clear reservation language. The West

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[84] *Id.*
[85] *Id.*
[86] *Id.*
[87] *Id.*
[88] *Id.* at 550.
[89] *Id.* at 549 (emphasis added).
[90] *Id.* at 545.
[91] *Id.* at 549.
[92] *Id.* at 550.

Virginia Supreme Court would take issue with Wyoming's treatment of ambiguous reservation language.

6. Energy Dev. Corp. v. Moss (2003)

In *Energy Development Corp. v. Nancy Louise Moss et. al.* (*Moss*),[93] the West Virginia Supreme Court addressed the narrow question of whether a standard oil and gas lease executed in 1986 conveyed to the lessee the right to drill into the lessor's coal seams for CBM.[94] The West Virginia Supreme Court held that "absent any specific language on the issue [of coalbed methane gas],"[95] a standard oil and gas lease does not give the oil and gas lessee the right to drill into the lessor's coal seams in order to produce CBM.[96] After reviewing the Pennsylvania and Alabama decisions, West Virginia determined that the greatest common factor among all related decisions was "a consideration for the intent of the parties, with emphasis on the state of affairs at the time of the grant, lease, or conveyance."[97] With this focus, the *Moss* Court affirmed the lower court's finding of latent ambiguity in the lease language reading "all of the oil and gas." A finding of ambiguity successfully discouraged contract analysis and any potential application of the plain language doctrine.

Having found latent ambiguity, West Virginia deferred to the "general uses of the gas business"[98] to infer the intent of the contracting parties. "If the leases included the right to develop coalbed methane, then they would also carry an implied right . . . to invade the coal seams . . ."[99] "Generally, 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."[100] In accordance, West Virginia adhered to "a perspective that reflects the longstanding dominance of the coal industry

[93] 591 S.E.2d 135 (W. Va. 2003).
[94] *Id.* at 138.
[95] *Id.* at 143.
[96] *Id.* at 146.
[97] *Id.*
[98] *Id.* at 145.
[99] *Id.*
[100] *Id.*

of this state,"[101] as written in the West Virginia Code.[102] In its summation of the Code, the Court observed that "worthy of note is the way the statute completely avoids and eschews any attempt at deciding ownership of coalbed methane."[103] The Court noted further that "the Legislature chose a path that would resolve conflicts on a case-by-case basis, encourage cooperation among potential claimants, and foster the safe production of coalbed methane, while protecting the safety of miners and the economic value of coal."[104]

In short, the Court's circumvention of contract theory in *Moss* salvaged coal producer's rights to CBM. It's reasoning, "a gas lessee . . . holding a conventional gas lease need only obtain the express right to produce coalbed methane from the lessor, or other party deemed to have ownership,"[105] or "the parties may seek 'resolution of conflicting claims . . . by voluntary agreement or a final judicial determination.'"[106] Contract theory, however, would be the focus of Virginia's subsequent *Harrison-Wyatt* case, and the basis for addressing the CBM ownership issue in question.

B. Virginia Assessed a Split in Legal Authority

While analysis in *Harrison-Wyatt* was all too brief and equally perfunctory in nature, the Court did survey the small group of cases driving CBM ownership issues thus far. Cases analyzed in *Harrison-Wyatt* fall into two opposing camps, clearly illustrating that state courts have decided CBM ownership questions in one of two ways, either in favor of the coal owner or against the coal owner.

1. Circumstances in which Coal Owners have Prevailed

[101] *Id.* at 151 n.25 (quoting W. VA. CODE § 22-21-1(a) (1994)).
[102] *Id.*; W. VA. CODE § 22-21-1(a) (1994).
[103] *Id.* at 152.
[104] *Id.* at 153.
[105] *Id.*
[106] *Id.*

Over thirty years of legal chaos have passed since *United States Steel Corp. v. Hoge*,[107] the first case to decide the issue of CBM ownership. *Hoge* was decided during the birth of coalbed methane commercialization inside the Appalachian coalfields at a time when technologies such as hydro-fracturing were relatively new, safety hazards abounded, and extraction costs were extensive.[108] Coal production was viewed as much more valuable than coalbed methane at that time[109] and both safety and technology barriers in capturing CBM were believed to "interfere with full development of the coal, [causing] considerable additional costs to the coal operator."[110] In that light, the *Hoge* court relied on settled mineral law dating as far back as 1889[111] to decide the question of CBM ownership.

Subsequent cases in Alabama and West Virginia, *supra,* reinforced the *Hoge* decision, not on theories of ownership, which were different, but on extraction rights to CBM and the laws of reservation of property. In other words, differing ownership laws among the states failed to negate the courts' collective rationale that coalbed methane gas is part of the coal estate as it lies within the coal seam, as a matter of settled law. In these cases, CBM, which lies within the coal seam, is rightfully extracted by the coal owner as a convention of mining law.

In focusing on extraction rights, the courts of Pennsylvania, Alabama, and West Virginia were reluctant to imply rights or responsibilities to "ambiguous" contract language. The courts were uncomfortable assessing conveyances outside the scope of property rights preserved within the "bundle of sticks" paradigm by rules of the reservation of property. The *Moss* Court noted that "if leases included the right to develop coalbed methane, then they would also carry an implied right . . . to invade the coal seams . . . and stimulate them in a fashion that could make it more difficult or dangerous to later produce the coal."[112] In *West*, the court noted that releasing CBM in mining operations was a

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[107] 468 A.2d 1380 (Pa. 1983).
[108] *Id.* at 1383.
[109] *Id.* at 1382-83.
[110] *Id.* at 1387 (Flaherty, J., dissenting).
[111] *Id.* (quoting Westmoreland & Cambria Natural Gas Co. v. DeWitt, 18 A. 724, 725 (1889)).
[112] Energy Dev. Corp. v. Moss, 591 S.E.2d 135, 145 (W. Va. 2003).

correlative right of the coal estate, and that "to construe away this right would be to construe away the grant itself, which cannot be enjoyed without it."[113] Much of the courts' reluctance to imply rights against the coal producer came from a shared view that property rights are immutable and supported by a history of mining convention.

2. Circumstances in which Coal Owners have not Prevailed

Courts of Montana, Wyoming, and subsequently, Virginia, were unified in finding coalbed methane a constituent of gas and therefore not part of the respective coal estates in question. Each holding was primarily the result of examining the plain language of contract conveyances and/or leases at issue. Montana and Wyoming courts reached decisions on CBM gas with virtually no reliance on historical rules of construction or conclusions as matters of law. Neither court commented on the technological implications of the various means of extracting CBM from coal, nor did they expound on state histories of mineral production or mining law. These courts focused explicitly on the intent of parties to a contract agreement, after having decidedly defined CBM as a separate constituent gas from the coal which created it. Both Montana and Wyoming decided CBM ownership based on the plain meaning of coal as defined by standards used in the mineral industry of the intermountain west.

During the time when western courts like Montana and Wyoming were making initial determinations about the ownership of CBM, these inter-mountain states were just beginning to manage the commercial production of CBM as an entirely new natural resource. For much of the west, CBM production occurs in complex federal/private split estate environments within public regions of the country.[114]

Federal split estate lands in the west are regulated differently than private split estate lands in the east. In the west, mineral production occurs regularly on public lands where the federal government owns either subterranean minerals, surface lands, or both by virtue of a history of

[113] NCNB Tex. Nat'l Bank, N.A. v. West, 631 So.2d 212, 228 (Ala. 1993).

[114] Andrew C. Mergen, *Surface Tension: The Problem of Federal /Private Split Estate Lands*, 33 LAND & WATER L. REV. 419, 426 (1998).

federal land grants which reserved ownership of valuable minerals to the federal government.[115] This means that on most mineral bearing lands in the west, land owners are only surface land owners on otherwise public government lands. "Public lands" are defined as "any interest in land owned by the United States and managed by the Bureau of Land Management (BLM)."[116] "The BLM is required to manage the public lands under principles of multiple use and sustained yield, in accordance with federal land use plans"[117] through "easements, permits, leases, licenses, published rules, or other instruments . . . the use, occupancy and development of the public lands."[118] Conversely, in the east, decisions to sever land have generally always been made through personal choices of private individuals, regulated primarily through state intervention via statutory law or the courts.

Given the dichotomy of experience between split (severed) estates in the east and those in the west, it is not surprising that two different regions would decide differently on natural resource issues like coalbed methane gas. What is surprising is Virginia's *Harrison-Wyatt* decision in light of its regional and historical ties to mineral production and privately severable estates.

Appalachian states have been pro-mineral development, historically, for reasons of economy and regional development. Appalachia's system of railroads and roadways are examples of the early reliance states had on mineral production for vital development of the economically depressed region of the Appalachian Basin.[119] Given the severity of poverty and the geography of isolation,[120] implications for true dependency of the region's infrastructure on the productivity of local mining industries are great. In addition to that dependency is the desperate need for employment and alternative sources of income which

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[115] *Id.*
[116] *Id.* at 443.
[117] Mergen, *supra* note 114, at 444.
[118] *Id.* (quoting 43 U.S.C. section 1732 (b) (2000)).
[119] Bryan C. Banks, *High above the Environmental Decimation and Economic Domination of Eastern Kentucky, King Coal Remains Firmly Seated on Its Gilded Throne*, 13 BUFF. ENVTL L.J. 125, 132 (2006).
[120] *Id.* at 148 n.140.

selling severable mineral rights could allay. With such rife dependency, mineral production quickly overcame the region.

In the span of 50 years following the Civil War, the private land owning populations of the Appalachian Basin states deeded away most of their subterranean rights to mineral producers, often through unconscionable instruments like broad form deeds.[121] Frequently, "[t]hese deeds left only a nominal title to the surface and total responsibility for property taxes with the landowner."[122] "The assault was so successful that by 1910, nearly 85 percent of the mineral rights had been relinquished by the Appalachians and were under the control of outside interests."[123] "To add insult to injury,"[124] regional courts often held that such deeds "conveyed the rights to excavate and remove all subsurface minerals and permitted the subsurface owner to use the surface as necessary for either removal or storage of those minerals."[125] Appalachian surface owners clearly suffered from early privatized mineral production, and in fact, still suffer generations later.

With the *Harrison-Wyatt* decision, Virginia has become a unique case within the Appalachian Basin in its shift away from traditional analysis of mineral law. The distinguishing nature of Virginia's holding in *Harrison-Wyatt* warrants a closer look at underlying legal decision-making in the case of coalbed methane gas. Arguably, one of the most important benefits of having a unified legal system, is the reliability on predictable and consistent interpretation of the law. Predictability and consistency are absent, however, in the unfolding of modern mineral law as illustrated by the upheaval in CBM litigation, clearly illustrated in the Court's analysis in *Harrison-Wyatt.*

3. The Case of Virginia

> Potentially, when institutions reflect a mixture of in personam and in rem rights, they will adopt legal rules that

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[121] *Id.* at 132.
[122] *Id.* at 133.
[123] *Id.*
[124] *Id.*
[125] *Id.*

> reflect a kind of muddled blend of principles associated with contract systems and property systems . . . in an irregular fashion that corresponds to no clear pattern.[126]

Coalbed Methane case law since *Hoge* has grown into an incoherent "muddled blend" of legal principles. Subsequent courts have commented on the forced reasoning in cases coming out of *Hoge*, noting that courts have used "confusing and inconsistent reasoning,"[127] in issues "focused upon the bundle of property rights incident and necessary to the recovery of coal."[128]

Legal chaos is readily exemplified in the pivotal West Virginia case of *Energy Development Corp. v. Moss.*[129] The West Virginia Court struggled against issues of *intent* which dominated the ownership question in *Moss*, as it has in virtually all other CBM ownership cases. Tangled analysis in *Moss* clearly demonstrates the paradigmatic struggle between core values of property law and contract theory prevalent in most issues deciding modern mineral cases. Virginia's response to *Moss* is a good example of the turmoil.

One year after *Moss* safe guarded protections for coal owners against intruding gas lessees, Virginia's Supreme Court stripped CBM ownership from coal estates with little or no comment on West Virginia's decision. The *Moss* dissent caught Virginia's attention, however. Justice Albright dissented in *Moss*, reproaching the majority for finding ambiguity in plain language, avoiding deciding the meaning of *gas*, and construing the leases involved in order to prevent the gas lessee from exploring for gas by drilling into the coal seam.[130] Justice Albright concluded his argument by summarizing the practical effect of West Virginia's decision.

> The reality is that the majority's ruling is not a victory for most small landowners in this state . . . Rather it is a huge

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[126] Merrill, *supra* note 2, at 779. The authors offered this possibility along with the possibility that organizations which blend contract and property principles could also potentially create a consistent pattern of behavior. *Id.*

[127] Newman v. RAG Wyo. Land Co., 53 P.3d 540, 548 (Wyo. 2002).

[128] *Id.* at 547.

[129] Energy Dev. Corp. v. Moss, 591 S.E.2d 135, 145 (W. Va. 2003).

[130] *Id.* at 153.

> victory for the owners of large tracts of coal who hold that coal by virtue of severance deeds made decades ago, long before the economic potential of coalbed methane or, for that matter, the economic potential of natural gas generally had been recognized.[131]

Arguably, Albright's dissent in *Moss* became the basis for the holding in *Harrison-Wyatt*. Albright opined that had gas lessees been able to drill into coal seams and found CBM, they would have been required to pay royalties to lessor surface owners, as a benefit of production. In *Harrison-Wyatt*, the Virginia Supreme Court tacitly engaged Albright's argument. It reasoned that plaintiff surface owners were, in fact, entitled to royalties placed in escrow for the production of coalbed methane gas by finding *plain meaning* in contract language and by defining coalbed methane *gas* as a separate mineral entity from coal. In sum, Virginia's recognition of surface ownership illustrates a contemporary preference for contract theory in mineral conveyance cases.

With an understanding of courts' legal analyses of landmark CBM cases, Part III will consider the "interface"[132] issues between contract theory and property law which have disturbed the continuity and predictability of modern mineral law, particularly with respect to categorizing CBM as a new natural resource. Part III will focus on the issue of *intent* in contract theory and on those mineral theories which bind property rights to mineral law. The benefits and hazards of relying on in rem and, conversely, in personam theories in the context of mineral law will be explored.

III. "INTERFACE" ISSUES DISTURB CONTINUITY & PREDICTABILITY IN MINERAL LAW

Decisions notwithstanding, the primary effort of courts in their deliberation of CBM ownership has been to reveal the original intent of conveying parties. In *Moss*, the West Virginia Supreme Court noted that "while [CBM] decisions do differ in many regards, the greatest common

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[131] *Id.* at 156.

[132] *See generally* Merrill, *supra* note 2.

factor among these decisions is a consideration for the intent of the parties, with emphasis on the state of affairs at the time of the grant, or conveyance."[133]

Prescribing *intent* to conveyance language however, has resulted in the rivaling of contract theory against laws of property. The judiciary's varied attempts to create significant precedent in CBM case law has achieved only one clear result so far; courts have generated sufficient confusion to blur clear legal analysis in the matter of *intent* and coalbed methane ownership. In simple terms, the dilemma has resulted in a legal contretemps between contract theory and rules of property over how to apply mineral law to CBM issues.

A. The Issue of "Intent"

The primary issue emerging from CBM ownership analysis is how to interpret conveyance language which is silent on the reservation of coalbed methane gas. Across the board, courts in which coal owners have prevailed as concurrent owners of CBM have done so by virtue of the strict interpretation of the rule of reservations of property rights, whereby all reservations must be specifically termed. On the other hand, courts in which coal owners have not prevailed have lost on the analysis that, historically, original fee owners were not in the position at the time of conveyance to appreciate the value of CBM and therefore did not convey interest in it to coal owners. Courts like Montana, used the latin maxim "expression unius est exclusion alterius," or the expression of one thing is the exclusion of another, in order to hold that "express grant of one specific mineral does not imply the grant of all other minerals not referred to in the grant."[134]

Rectifying competing conveyance rules under the law of minerals is sometimes difficult. The conundrum lies in courts' disposition of property rights via contract constructions that render clearly incongruent outcomes. In his work on contract construction, Keith Rowley summarizes the rule for valid reservation of rights under property law:

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[133] *Moss*, 591 S.E.2d at 146.

[134] Carbon County v. Union Reserve Co., Inc., 898 P.2d 680, 684 (Mont. 1995).

> A valid reservation in or exception to a conveyance must contain words 'as definite as those required to convey title.' Everything 'not unequivocally and specifically reserved' is deemed to be 'conveyed by the granting clause.' The reservation must 'describe the interest reserved with certainty,' must be 'of some portion of the granted premises, which without the reservation, would be conveyed by the deed,' and must 'necessarily be of something which belongs to the grantor at and before the execution of the deed.'[135]

Courts deciding CBM ownership issues have followed the rule for reservation of property with differing results. Rowley suggests that different approaches to interpreting *ambiguity* cause differences in the way courts conclude deed reservation issues. For example, courts in which coal owners have prevailed as concurrent CBM owners have found ambiguity in the relevant conveyance language. Courts who find ambiguity often use *surrounding evidence* to create a "practical construction"[136] of the meaning of the conveyance, a common practice in mineral cases. On the other hand, "[a] minority of courts adheres to a more 'objectivist approach,"[137] or *four corners* approach, in which the contract itself is isolated for analysis without the use of extrinsic evidence. As a matter of law, a court is free to deny "interpretational aides"[138] after finding that a conveyance is unambiguous on its face *as a whole.* In effect, those courts in which coal owners did not prevail, did not find ambiguity, and relied as a result on the plain language rule analysis to re-script reservation language by defining-out CBM as a non-constituent of coal.

In CBM cases, courts clearly imposed a variety of external evidence onto deed agreements in order to decide ownership issues. As described, some courts like *Hoge*, *West* and *Moss* regarded matters of mineral convention and public policy with greater reverence, while others

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[135] Keith A. Rowley, *Contract Construction and Interpretation: From the "Four Corners" to Parol Evidence (and Everything in Between)*, 69 MISS. L.J. 73, 202 (1999).
[136] *Id.* at 148.
[137] Rowley, *supra* note 135, at 86 (quoting CHARLES L. KNAPP ET AL., PROBLEMS IN CONTRACT LAW: CASES AND MATERIALS 422-33 (4th ed. 1999)).
[138] *Id.* at 86.

such as *Carbon County*, *Newman* and *Harrison-Wyatt* gave fuller effect to the contract language involved. In other words, courts deciding CBM case law have managed the intricacies of *intent* rules in ways which ultimately justified their own rulings, whatever those rulings may have been. Unfortunately, the bevy of contorted arguments made as a result has proved a disservice to understanding functional principles of mineral law as they apply to CBM ownership.

B. Origins of Ties that Bind Property Rights to Mineral Law

Fortunately, there are a few clear principles of mineral law which are not in question in CBM ownership issues. Together, these principals of mineral law have combined historically to create an early predisposition for using real property law to decide issues of ownership and extraction of coalbed methane: (1) early development of real property ownership theories; (2) the practice of mineral estate dominance; and (3) the inherently migratory nature of coalbed methane gas. Doctrines arising out of these aspects of mineral theory bind property rights to mineral law, albeit with potentially negative results for surface owners.

1. Ownership Theories

In reality, conflicting state ownership theories have had little real impact on how courts have decided CBM ownership issues. Courts have differed in their analyses between ownership-in-place and non-ownership theories and still emerged with oddly consistent decisions for CBM ownership. This is a curious effect which deserves further attention.

Ronald Polston has traced the historical evolution of ownership theories of property in a manner which clarifies the changing dynamics of modern American property law. He illustrates how ownership theories evolved through judicial efforts to develop mineral estates. Essentially, "[t]he theory upon which mineral ownership is based was created to serve the coal industry as it developed."[139] Polston's explanation of differing ownership theories and their origins is instructive in this regard.

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[139] Ronald W. Polston, *Mineral Ownership Theory: Doctrine in Disarray*, 70 N. DAK. L. REV. 541, 45 (1994).

Property law historically divided ownership interests into the *residual* estate, or fee estate, and thereafter any lesser interests, or *several rights*, granted from the fee estate were granted as servitudes, one being "access for a limited purpose."[140] Coal *ownership* was an anomaly for early courts because it defied definition as an incorporeal servitude, or an interest in land less than fee simple ownership.[141] Any interest less than fee simple could not be transferred by livery of *seisin*, or physically delivered, and therefore was incorporeal or intangible, non-possessory.[142]

Courts, therefore, had to determine if underground coal seams were possessory interests in land or were merely several rights to enter for the limited purpose of removing coal. For some courts, a corporeal right to remove coal from the land was contradictory, particularly because coal ownership was unquantifiable.[143] In other words, prior to opening a mine, coal owners could not be sure if any coal even existed or to what degree.[144] The *ownership-in-place* theory emerged from this contradiction in property law.[145]

Ownership-in-place theory enabled courts to uphold access to coal removal by upholding interests to coal *in-place*.[146] The courts constructed a possessory interest in coal by conceiving of the coal interest as tracts of land below the surface at a depth sufficient for surface owners to hold the residual estate above.[147] Ownership-in-place theory gave mineral owners access to remove coal underground without owning the surface estate overhead. As Polston explains, coal owners had a right "to only such coal as may be present, and if there is none, or if it is mined out, the interest ceases to confer a right of access to the land."[148] Subsequent courts weakened these quasi-corporeal limitations by expanding a coal owner's exclusive right to occupy open space, such as tunnels already mined out of

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[140] *Id.* at 544.
[141] *Id.* at 448.
[142] *Id.* at 541-42.
[143] *Id.* at 545-46.
[144] *Id.* at 545.
[145] *Id.*
[146] *Id.*
[147] *Id.* at 545.
[148] *Id.* at 549.

the coal, until all coal had been mined.[149] Polston notes that "with respect to oil and gas, [the ownership-in-place] approach has been rendered meaningless by the rule of capture, which holds that the ownership is lost if those substances migrate across boundary lines."[150] This is precisely the issue left unresolved in *Harrison-Wyatt*. Virginia's trial court effectually prescribed ownership-in-place for surface owners of CBM in Virginia. The Virginia Supreme Court imposed little more in the way of functional rights when it held that surface owners had become owners of CBM.

Not all courts adopted the corporeal ownership theory of mineral estates. Some courts found it difficult to entitle mineral owners to more than a right to access the land for mining purposes. In addition, some early courts perceived that oil and gas flowed like underground rivers[151] unattached to any given surface estate, and therefore were not corporeal to any estate until reduced to possession.[152] Courts analogized subterranean minerals with animals *ferrae naturae*, or animals free in the wild, which were not considered owned until hunters or the like reduced them to possession.[153] This analogy reinforced the incorporeal, or non-possessory, nature of mineral estates, and is often called the *non-ownership* theory.[154] The non-ownership theory provides that transmigratory minerals are not the same as solid minerals and therefore the nature of ownership is different.[155] Therefore, "the ownership-in-place theory was required to make an accommodation for that fact, and it did so by accepting the rule of capture."[156]

Rule of capture provides estate owners the right to capture and reduce to possession any or all transmigratory minerals obtainable, without liability to adjoining landowners who consequently share the same right.[157] Some courts use the percolating waters analogy to the rule of

[149] *Id.* at 549-50.
[150] *Id.* at 547.
[151] *Id.* at 551.
[152] *Id.* at 550.
[153] *Id.* at 551-52.
[154] *Id.* at 551-52.
[155] *Id.* at 552-53.
[156] *Id.* at 552.
[157] *Id.* at 552.

capture because of the settled nature of water law.[158] However, because of the potentially harsh outcomes of the rule, correlative rights of competing surface owners have since attached to the implied right to capture.[159] Under the *correlative rights doctrine*, proceeds from the production of oil and gas are shared by overlying property owners based on the idea that each could have produced according to the rule of capture.[160]

Polston opines that courts today have difficulty differentiating ownership theories even to the extent that decisions are made "contrary to the theory which the state purports to follow."[161] Further, "leading writers in the field have concluded that the results in decided cases do not seem to depend upon the theory which the state has adopted."[162] As described, this is particularly true in coalbed methane cases.

Realistically, undermining ownership theories in mineral cases can diminish the force of property law. Issues of mineral production are unavoidably anchored to property rights. Courts that impose contract theory onto corporeal rights of mineral ownership do so at the risk of assaulting clear principles of mineral law. As can be seen, these rights were created early in mineral production and are the glue holding multiple-owner relationships together under the auspice of the mineral estate dominance doctrine. Mineral estate dominance is a contrived doctrine. It was born from the political fervor to maximize mineral production during the era of early industrialization. For that reason, mineral dominance is the primary precept in mineral law and virtually insurmountable.

2. Mineral Estate Dominance Doctrine

Mineral rights dominate the law of severed estates. Even incorporeal theories of ownership acknowledge the dominance of mineral

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[158] Jared C. Bennett, *Ownership of Transmigratory Minerals, Utah and Zebras: Proof That Oil and Gas Ownership Law Needs Reform*, 21 J. LAND RESOURCES & ENVTL. L. 349, 350 (2001).
[159] *Id.* at 357.
[160] *Id.* at 357.
[161] Polston, *supra* note 139, at 553.
[162] *Id.*

rights against severed surface estates.[163] Mineral estate dominance is attributed to early ownership-in-place theories. Early ownership-in-place theories meant that severed mineral interests were subject to the same rights as other corporeal interests in Real Property.[164] Generally however, subsurface owners have always enjoyed additional incidental rights to enter upon the land of the surface owner during extraction of subsurface minerals, to some degree as public policy.[165]

Discussion on the mineral estate dominance doctrine usually traces its way back to early cases in Pennsylvania, and to the Supreme Court case, *Steel v. St. Louis Smelting and Ref. Co. (Steel)*[166] In *Steel,* the United States Supreme Court upheld a mineral patent for mining in the middle of the town of Leadville, Colorado. The Supreme Court held that "land embraced within a town site on the public domain, when unoccupied, is not exempt from location and sale for mining purposes."[167] "Whenever, therefore, mines are found in lands belonging to the United States, whether within or without town sites, they may be claimed and worked."[168] Eastward, the Pennsylvania Supreme Court embellished the public policy approach of mineral production by describing mineral development as a public good. In *Chartiers Block Coal v. Mellon,*[169] the Pennsylvania Court held:

> To place [coal, oil, gas, and iron] beyond the reach of the public would be a great public wrong. Abounding, as our state does, with these mineral treasures, so essential to our common prosperity, the question we are considering becomes of a quasi public character. It is not to be treated as a mere contest between A and B over a little corner of earth.[170]

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[163] Bennett, *supra* note 158, at 351, 353.
[164] *Id.* at 351.
[165] *Id.* at 354.
[166] 106 U.S. 447 (1882).
[167] *Id.* at 450.
[168] *Id.*
[169] Chartiers Block Coal Co. v. Mellon, 25 A. 597 (Pa. 1893).
[170] *Id.* at 599.

By virtue of public policy, tenets of mineral law have always observed the general rule of mineral estate dominance.[171] Attached to this rule is the observance of incidental rights of mineral extractors to use surface land to access and remove subterranean minerals.[172] Over time, and with industrial development of the mining industry, mineral estate dominance and the incidental rights of mineral owners were curtailed by the courts to a limited degree.[173] The pick axe gave way to large machine operations, multiplying the degree of surface and environmental damage caused by poorly restrained mineral law.[174] Today in fact, "the mineral industry has the muscle to inflict damage to the surface to a degree unfathomable to lawmakers in the nineteenth century."[175]

Theoretically, two "limiting principles" [176] were eventually constructed by courts in order to balance some power between mineral extractors and surface owners. First, a reasonableness standard for measuring excessive surface damage was imposed,[177] and later a strict liability measure for failure to provide subjacent support was introduced through the courts in order to mitigate surface damage.[178] Initially, courts created a reasonableness standard against which miners were enjoined from damaging surface lands once their mining activities were proved by surface owners to be excessive.[179] It was, and still is, the surface owner's burden of proving unreasonableness, however.[180]

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[171] Keith G. Bauerle, *Reaping the Whirlwind: Federal Oil and Gas Development on Private Lands in the Rocky Mountain West*, 83 Denv. U.L. Rev. 1083, 1093 (2006) (citing Kenney-Costal Oil Co. v. Kieffer, 277 US 488, 505 (1928)).

[172] *Id.* at 1084 (citing Wyo. Outdoor Council v. U.S. Army Corps of Eng'rs, 351 F. Supp.2d 1232, 1245 (D. Wyo. 2005)).

[173] M. Kristeen Hand & Kyle R. Smith, *The Deluge: Potential Solutions to Emerging Conflicts Regarding On-Lease and Off-Lease Surface Damage Caused by Coal Bed Methane Production*, 1 WYO. L. REV. 661, 672 (2001).

[174] Bauerle, *supra* note 171, at 1084.

[175] Hand, *supra* note 173, at 673.

[176] Michelle Andrea Wenzel, Comment, *The Model Surface Use and Mineral Developoment Accommodation Act: Easy Easements for Mining Interests*, 42 AM. U.L. REV. 607, 628 (1993).

[177] *Id.* at 626-27.

[178] *Id.* at 627-28.

[179] *Id.* at 626.

[180] *Id.* at 630.

Over time, the courts created an absolute right to subjacent support for surface owners' land.[181] As a result, mineral producers must provide "subterranean support for the land surface and for improvements existing or reasonably anticipated to be constructed on the surface after mining commences."[182] In other words, the right of subjacent support incurs strict liability on mineral owners who damage surface lands by failing to support surface structures from under the ground. Legal protection is rare, however, for surface owners who have waived their rights to subjacent support. Virginia courts have been unforgiving of waiver language in deed conveyances. In *Ball v. Island Creek Coal Co.*,[183] the court found that plaintiff's predecessors in interest had effectively waived rights to subjacent support because of deed language which permitted mining "without leaving any support for the overlying strata."[184]

Better Protection Through Accommodation

Texas courts went a step beyond finding liability for failure to provide subjacent support for surface lands. Through case law, the Texas Supreme Court added weight to the reasonably necessary standard by requiring mineral producers to use "alternative means of access to a mineral site"[185] when practicable. In *Getty Oil Co. v. Jones*[186] the court held that oil pumps which blocked a surface owner's irrigation system amounted to unreasonable access because without the irrigation system the surface owner's land would become agriculturally unsustainable, and because there were alternative means of access to the oil under the land.

Surface owners are still burdened to prove that current mineral use is unreasonable, however, in addition to showing that an alternative means of access exists which is less damaging to surface land. "The accommodation of the surface owner's interests does not envision a balancing of surface owner harm or inconvenience against mineral owner rights, but rather, the surface owner must prove that the mineral owner's use of the surface is not reasonably necessary as shown by reasonably

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[181] *Id.* at 627.
[182] *Id.* at 627.
[183] 722 F. Supp. 1370 (W.D. Va. 1989).
[184] *Id.* at 1372 (citing Mullins v. Beatrice Pocahontas Co., 432 F.2d 314, 317 (1970)).
[185] Mergen, *supra* note 114, at 435.
[186] 470 S.W.2d 618 (Tex. 1971).

available alternatives."[187] Unfortunately, only a handful of mining states adhere to the Accommodation Doctrine.[188]

On federal lands in the west, the Bureau of Land Management (BLM) regulates public split estate lands under a doctrine somewhat similar to the Accommodation Doctrine. [189] The BLM regulates mining practices in accordance with a federal "unnecessary and undue degradation" [190] standard. This standard defines unreasonable use as "surface disturbance greater than what would normally result when an activity is being accomplished by a prudent operator in usual, customary, and proficient operations of similar character."[191] Some scholars argue that the "unnecessary and undue degradation" standard "vests considerable regulatory discretion in the BLM and that the agency has the authority to prohibit mineral exploration and extraction where necessary to protect the environmental values served by the surface estate."[192] As will be seen, the BLM has not always used its authority for that purpose.

3. The Migratory Nature of CBM

The migratory nature of CBM has necessitated a different kind of ownership analysis from that of solid mineral deposits. Essentially, mineral analysis segmented into separate bodies of law with the emergence of oil and gas production. Oil and gas law fills a unique niche in property theory because of the complexity of the ownership issues generally involved. Oil and gas law is, in effect, property law's most recalcitrant theory, as illustrated by the *West* case. *Location* is a key detail in the mechanics of oil and gas law.

In *West,* the Alabama Supreme Court ordered the disposition of CBM ownership interests depending on where the CBM was located at the

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[187] Drake D. Hill & P. Jaye Rippley, *The Split Estate: Communication and Education Versus Legislation*, 4 WYO. L. REV. 585, 594 (2004).
[188] *See* Mergen, *supra* note 114, at 433 (noting that the doctrine is followed in Utah, Texas, Arkansas and New Mexico).
[189] *Id.* at 444.
[190] *Id.*
[191] *See id.*; 43 C.F.R. § 3809.0-5(k) (1997).
[192] Mergen, *supra* note 114, at 444-45, (quoting Marla E. Mansfield, *On The Cusp of Property Rights: Lessons from Public Land Law*, 18 ECOLOGY L. Q. 43, 46 n.13 (1991)).

time it was captured.[193] The Court's analysis illustrates the physical limitations of contract theory in negotiating positive rights between specific parties to an in rem action. Theoretically, contract law simply cannot negotiate *where* parties will find CBM. Gas is either in the seam upon extraction or it is not. Therefore, there are natural limitations to the freedom of contract in mineral law. Natural contract limitations illustrate the need for an underlying scheme of in rem rights to define the scope of contract actions used to negotiate mineral ownership.

To illustrate, there are three primary methods used to extract CBM: horizontal boreholes, vertical degasification, and gob wells.[194] All methods require that coal seams are fractured. Further, all methods are generally necessary to fully degasify mines during production.

Horizontal boreholes are holes drilled horizontally into the coal seam "from a point within the coal mine itself."[195] Gas flows into the borehole when released by drilling and can then be captured for production.[196] Vertical degasification, often improperly referred to as hydro-fracturing, is a method of venting which drills vertical shafts from the surface into underlying coal seams, releasing trapped gas to the surface.[197] Vertical degasification was originally intended for use in extracting oil and natural gas from deep wells. Hydraulic fracturing is often used in conjunction with vertical degasification as an "enhancement technique"[198] for extracting CBM for production purposes. Hydraulic fracturing occurs when high intensity water is forced into vertical wells so to break through, or fracture, underlying coal seams in a manner which ruptures segments of the coal.[199] "Hydraulic fracturing facilitates the desorption of the methane from the coal's internal surfaces."[200] Upon

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[193] NCNB Texas Nat. Bank, N.A. v. West, 631 So.2d 212, 223 (Ala. 1993) (noting that the ownership of coalbed gas is dependent on its location at the time it is reduced to possession).
[194] *Id.* at 215.
[195] *Id.* at 215.
[196] *Id.*
[197] *Id.*
[198] Marcus G. Puder, *Did the Eleventh Circuit Crack "FRAC"? – Hydraulic Facturing After the Court's Landmark LEAF Decision*, 18 VA. ENVTL. L.J. 507, 510 (1991).
[199] *Id.* at 510.
[200] *Id.* at 514.

fracturing, "[c]oalbed methane gas tends to flow in a sluggish trickle from the seam to the well because it is so tightly attached to the cleats within the crystalline structure of the coal."[201]

Gob wells are the result of longwall mining practices.[202] Seams of coal are often mined using a large machine grinder which breaks up the coal as it grinds forward into the coal wall.[203] As the wall is pushed back, open areas become unsupported and overlying strata fracture and collapse, freeing CBM to move upward and out of the coal.[204] Of all methods of CBM collection, gob wells are most frequently used.[205] The Alabama Supreme Court held that only gob wells were part of the surface estate's interest in coalbed methane because of the physical position of the escaped gas.[206]

In an attempt to determine the weight of contract rights on the extraction of CBM, the Alabama Supreme Court created a *two-tiered* ownership model which focused on interests according to how parties would capture CBM from the ground.[207] The Court held that coal owners/lessees "have the exclusive right to produce and own coalbed methane gas from horizontal boreholes and vertical degasification wells drilled directly into the source coal seam."[208] At the same time, gas owners have an "interest in coalbed gas that migrates out of the coal seams, such as that gas collected within the gob zone."[209] The Court reached its conclusion by deciding that terms of the conveyance in question offered a clear showing of parties' ownership intent. However, the Court determined that absent a clear showing of intent, the in rem laws of property would apply, namely that a reservation of CBM does not include CBM contained "within its source coal seam."[210] Thus, Alabama

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[201] *Id.*
[202] NCNB Texas Nat. Bank, N.A. v. West, 631 So.2d 212, 215 (Ala. 1993).
[203] *Id.*
[204] *Id.*
[205] *Id.*
[206] *Id.* at 229.
[207] *See id.*
[208] *Id.*
[209] *Id.*
[210] *Id.*

maintained an in rem framework for use in cases where *intent* was questionable and in personam issues avoidable.

C. The Relational Dynamics between Contract Theory and Property Law Explained

Arguably, no better analysis exists to explain the relational dynamics between contract theory and property law, as it pertains to mineral law principles, than Merrill and Smith's work on *The Property/Contract Interface.*[211] Therefore, ideas from their work are used here to explain the seemingly chaotic and, at times, nonsensical efforts of the courts in deciding coalbed methane ownership. Application of some of the authors' basic principles to the issues of mineral ownership provides a much clearer understanding of why competing and inconsistent legal determinations have been made in courts across the country, as judges decide the question of "Who owns coalbed methane gas?"

The question "Who owns coalbed methane gas?" has not been easy to answer in recent mineral ownership cases. Much of the reason lies in the historic combining of contract and property theory into the field of early mineral law, a "hybrid partaking of some of the features of property rights and some of the features of contract rights."[212] As a result, modern issues of mineral ownership inescapably experience what Merrill and Smith call the "interface dilemma," or "muddled blend of principles"[213] resulting from competing contract and property theories as adopted into early American mineral law. An uneasy and perhaps unnatural interface of the two has succeeded, however, in creating stringent systemic protection for coal mineral in the courts for more than a century, and is omnipresent in virtually all coal controversies even today. Without exception, intrinsic "interface" issues still lurk behind each coal mineral deed conveyed almost a century later, particularly as contract issues grow in complexity.

Parsing out meaningful explanations for the "interface dilemma" requires understanding basic legal principles of contract and property law

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[211] *See generally* Merrill, *supra* note 2.
[212] *Id.* at 777.
[213] *Id.* at 779.

and how they function comparatively. The difference, initially, between contract theory and property law is the question, "To whom is a party bound?"[214] Essentially, differences in the answer are matters of the kind of relationships parties to a conveyance have with each other.

To begin, "[c]ontract rules are generally default rules,"[215] called to bear on contracting parties only when an agreement has gone awry. In other words, people are free to customize[216] the terms of a contract in any manner without effectuating contract rules unless they are invoked for reasons such as breech of contract or failure of the agreement. Property law, in contrast, requires that parties to a real property agreement define the nature of their legal rights at the start, from which everyone else is automatically excluded through public forms of disclosure or notice rules.[217] Property rights are generally defined through documentary processes, like deeds, in which parties "adopt one of a limited number of standard forms that define the legal dimensions of [a property] relationship."[218] A contract, on the other hand, is as informal and private as parties wish to make it.

In contract law, a party binds the person or persons with whom she contracts as a holder of "in personam" rights.[219] Conversely, in property law, a holder of real property binds "the rest of the world"[220] with the duty not to infringe against her enjoyment of private ownership, or possession, as the case may be. "In rem" or real property rights are generally guided by immutable forms or rules of standard legal behavior.[221] As such, in rem principles are often bright line rules with clear dimensions, and not generally subject to revision by agreement.[222]

Another aspect of the relationship between contract theory and property law is the nature of the goals for performing the obligations of legal acts. In personam rights are affirmative reciprocal obligations to

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[214] *See id.* at 776-77.
[215] *Id.* at 776.
[216] *Id.*
[217] *Id.*
[218] *Id.*
[219] *Id.* at 776-77.
[220] *Id.* at 777.
[221] *Id.* at 778.
[222] *Id.* at 799-804.

perform or to uphold a specific duty.[223] By contrast, in rem rights are "negative in character"[224] and "require that persons [not holding the rights] abstain from certain types of interference."[225] They are rights of exclusion,[226] meant to disavow use and enjoyment by others not holding the right. In rem rights associated with tangible property are all claims that exclude others and prevent others from performing certain acts.[227] Creating exclusionary interests in ownership was an early goal for real property owners of mineral rights.[228] Applying in rem theory to coalbed methane case law illustrates the significance courts have historically placed on exclusionary rights in mineral ownership.

1. Applying In Rem Theory to CBM Case Law

Early coalbed methane ownership decisions tended to articulate legal principles in support of in rem rights. Courts who decided ownership rights of CBM in favor of coal owners were approaching the issues from the legal locus of classic in rem property rights. Essentially, when coalbed methane gas is owned by the coal owner it assures against the interference of other property users in coal mining operations, via the protection of uniform property law. Specifically, early courts were interested in excluding competing estate interests from the rights associated with safety practices and extraction rights of miners and mine operators.

Language was replete in *Hoge*, *West*, and *Moss* with discourse addressing the in rem rights of coal producers.[229] For example, in 1983, the *Hoge* Court used absolute language to impose real property rights in the ownership of CBM. The Court held that "*[g]as as is present in coal must necessarily belong to the owner of the coal*, so long as it remains

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[223] *Id.* at 789.
[224] *Id.*
[225] *Id.*
[226] *Id.* at 793.
[227] *Id.* at 789.
[228] Wenzel, *supra* note 176, at 623.
[229] *See* U.S. Steel Corp. v. Hoge, 468 A.2d 1380 (Pa. 1983); NCNB Tex. Nat'l Bank N.A. v. West, 631 So.2d 212 (Ala. 1993); Energy Dev. Corp. v. Moss, 591 S.E.2d 135 (W. Va. 2003).

within his property and subject to his exclusive dominion and control."[230] The holding in the subsequent *West* case illustrates the effect of *Hoge's* prescriptive precedent:

> [O]mission of any specific reference to Coalbed Gas in the Center Coal Deeds and the need for uniformity and predictability in the law of real property and minerals require this Court to declare, as a matter of law, whether Coalbed Gas belongs to coal owners/lessees.[231]

By holding in favor of coal owners, the *West* Court reiterated the importance of uniformity in the relevant property rule, as follows:

> To the extent that any minor distinctions in facts or rationale exist between Hoge and the cases at bar, they are outweighed by the need for continuity and predictability in the law of real property.[232]

Clearly, early courts decided CBM cases with the intent that in rem mineral rights were black-letter in nature. The agenda of setting precedent was an important goal for these courts. In a theoretical sense, setting precedent for CBM extraction was important generally because standardizing in rem rules is a necessary step if they are to be widely obeyed.[233] In large part, legal conventions of mining law were rooted so deeply in American property jurisprudence specifically because they were precedential in nature, as functions of in rem rights.

As mentioned, early courts interpreted issues based in large part on the social conventions of the mining industry. For example, in *Moss*, the West Virginia Supreme Court lamented the loss of coal miners to explosions attributed to coalbed methane.

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[230] *Hoge*, 468 A.2d at 1383.
[231] *West*, 631 So.2d at 217.
[232] *Id.* at 218.
[233] Merrill, *supra* note 2 at 796.

> Coalbed methane has long been regarded as one of a coal miner's greatest foes . . . may have produced more widows and orphans than any other workplace hazard . . . leaving 362 dead in the Monongah Mine Disaster in 1907, the worst mining disaster in American history.[234]

In addition, the West Virginia Supreme Court summarized the Federal Coal Mine Health and Safety Act, the Black Lung Compensation Law, and the West Virginia Code as support for its decision. The Court's holding reflected "the highest possible priority placed upon the safety of miners and due consideration given to our long established case law regarding mineral interests."[235]

Clearly, early courts were interested in retaining in rem rights for the benefit of workers in the mining industry. In practice, in rem courts implemented what Merrill calls *exclusion strategies* in their discussions in order to "restrict[ ] access to a particular resource,"[236] namely coal. These efforts are apparent in the *West* case where the Alabama Supreme Court determined "it is not the role of this Court to disturb existing property rights by redefining existing property law in order to promote economic efficiency."[237]

Property rights are a fairly static system of laws, and as such are very old and slow to change. They implicate broad groups of persons who must honor exclusive rights of ownership. Because of this, there are benefits to building mineral law from in rem rules of property.

The Benefits of In rem Theory in Mineral Law

Clear benefits exist to following in rem rules of property in mineral law. As described, in rem rules are generally bright line rules which settle into law as standard benchmarks. Real property law is time honored and future minded, framing property rights for future generations. As a result, black letter law eases the burden of judicial interpretation of issues sparked by one generation and experienced by the next. As discussed, in rem rules are exclusionary. The rules are protective. In rem rules err

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[234] Energy Dev. Corp. v. Moss, 591 S.E.2d 135, 142 (W. Va. 2003).
[235] *Id.* at 143.
[236] Merrill, *supra* note 2 at 791.
[237] NCNB Tex. Nat'l Bank N.A. v. West, 631 So.2d 212, 227 (Ala. 1993).

against short term contractual agreements which modify the original intent of parties to a conveyance. Perhaps the best example of long term protection *in rem* can be seen through the issue of liability.

In rem theory is oriented toward defining and assessing liability. Since at least the late 1800s, with the signing of the first federal coal mine safety laws, the mining industry has been indentured to prevent disasters associated with the volatile nature of coalbed methane gas. Early in this history, deeds were generally written with the clear understanding that coal producers were liable for damage due to coalbed methane explosions and loss of life. This natural liability followed coal production rights as they were ascribed in mining law of the time, surface access issues notwithstanding.

To take the liability example further, classic property law is where early courts looked to improve protections to surface estates through tort laws of trespass, nuisance, and negligence.[238] When courts stepped in to construct a strict liability theory for subjacent support of split estate surface lands, they used classic property law theory to broadly shape those protections for land users.[239] The history of broad form deeds is one case in point proving that, left to their own devices, surface owners have historically been sorely inept at negotiating contract protections for property transfers.[240]

Hazards of In Rem Theory in Mineral Law

Even with tort protections, damage to surface lands due to the encroaching access needs of mineral producers has been a problem poorly managed by in rem theory. Much of the problem is the inherent nature of in rem theory itself. Once mineral estate dominance established access rights superior to surface ownership, in rem theory perpetuated those rights as immutable protections in mineral production.[241] On this basis, scholars have searched and courts have attempted to construct an evolved contract theory to increase surface owners' ability to improve use and enjoyment of their lands. The result has been judicial practices estranged from real property rules.

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[238] Wenzel, *supra* note 176, at 628-29.
[239] *Id.* at 627-28.
[240] *Id.* at 627-29.
[241] *Id.*

2. Applying In Personam Theory to CBM Case Law

Supreme courts in the west have staunchly supported in personam theories of CBM ownership. By the time the issue of CBM ownership came before the Montana Supreme Court, over a decade after *Hoge*, the maiden case's holding had complexified, as had Montana's statutory law regarding the mining of coalbed methane. In *Carbon County*, the Montana Supreme Court noted the following recent change in Montana state law:

> [T]he legislature inserted a new section into the Montana Code to insure that all *instruments* regarding coal, oil and gas are interpreted according to sec. 82-1-111, MCA.[242]

State statutory law opened the door for the Montana Supreme Court to more easily frame the question of CBM ownership as a contract issue. As a result, the Montana Supreme Court reversed *Carbon County's* lower court ruling favoring coal owners. Montana's lower court originally determined that coalbed methane "was part of the coal estate."[243] Arguably, the State Supreme Court modified the holding on appeal because of strong language in the new statute which centered legal interpretation of ownership on the intent of conveyance *instruments*, and not on property law.

In 2002, the Wyoming Supreme Court highlighted Montana's interpretation of CBM ownership as a contract issue. The Court declared that "[r]ather than following some rigid rule of law, we believe this issue should be governed by the facts and circumstances surrounding the execution of this warranty deed."[244] Almost twenty years after *Hoge*, CBM ownership clearly evolved into a question of contract theory. Accordingly, restrictive in rem rights to vent coalbed methane progressed into affirmative in personam duties to pay royalties to oil and gas owners of severed estates. In the span of twenty years, the CBM industry has

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[242] Carbon County v. Union Reserve Coal Co., Inc., 898 P.2d 680, 689 (Mont. 1995) (emphasis added).
[243] *Id.* at 682 (1995).
[244] Newman v. RAG Wyo. Land Co., 53 P.3d 540, 549 (Wyo. 2002).

figuratively shifted from the land to the pen. This evolution is important in understanding how the Virginia Supreme Court reached its holding in *Harrison-Wyatt* in 2003, by perceiving the benefits of a contract-based decision.

The Benefits of In Personam Rights in Mineral Law

"Allowing in rem property rights to be supplemented by in personam contract rights, in particular, introduces an enormously larger set of options for the use and control of resources than would be possible using exclusion rights alone."[245] These benefits include a broader range of performance opportunities and "customization of in personam rights"[246] in contract terms. Merrill and Smith add that contract law has a "majoritarian meaning"[247] governing what "most parties would prefer to adopt to govern their relationship,"[248] as measured by a collection of case by case situations. Scholars call this majoritarian meaning the *plain meaning* rule of contracts.

Hazards of In Personam Rights in Mineral Law

Time is relative in contract law whereby "a mutating menu of default rules"[249] changes over time. The pliability of in personam rules comes from the fact that only parties to an agreement are bound.[250] Even large groups of parties can be bound to default rules, like "industry-specific default rules," [251] for example. Often, the more industry-specific default rules are, the less likely it is that third parties are negatively impacted.[252] However, with every mutation that occurs, the more difficult it becomes for third parties to have notice of the rights and responsibilities involved in a particular menu of rules.[253] As a result, in rem principles, the "social glue that allows any group of individuals of any size and

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[245] Merrill, *supra* note 2 at 797.
[246] *Id.* at 800.
[247] *Id.*
[248] *Id.*
[249] *Id.* at 801.
[250] *Id.*
[251] *Id.* at 801-02.
[252] *Id.*
[253] *Id.*

complexity to function on a day-to-day basis,"[254] weaken, and can fail in their functions as limitations on contractual behaviors.[255]

In the context of real property, affirmative rights without restrictive protections run the risk of creating a notice regime devoid of ownership norms and notice requirements.[256] Furthermore, contract rights create inevitable conflict in protecting future interests. Advocates for the *pure contract* approach disagree, and suggest that "neither liberty nor efficiency concerns justify the common law restrictions, or any restrictions, on contractual freedom to create servitudes that burden successors-in-interest."[257] Arguably, protests over the place of private agreements in restricting land use[258] is part of a larger historic debate, perhaps unduly complexified by the body of mineral law itself.

With that view, Part VI retraces the historical conflict between contract theory and property law. In the process, the recent phenomena of functional contract principles re-contractualizing property law will be addressed.

VI. THE HISTORICAL CONFLICT BETWEEN CONTRACT THEORY AND MINERAL LAW

Courts have relied on specific principles of property law in deciding mineral cases since the birth of the mining industry in early America. As noted, early cases deciding mineral ownership conferred *corporeal* interests on mineral extractors, and the principle of mineral estate dominance gave them the freedom to produce, virtually without restriction. Mineral theory, therefore, is very much the product of early American energy policy and activist judicial intervention which entrenched mineral law in a definitively property-esque paradigm.

In coalbed methane cases, recent courts have attempted to deconstruct traditional theories of mineral law and the law of oil and gas

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[254] *Id.* at 795.
[255] *Id.*
[256] Richard Epstein, *Notice and Freedom of Contract in the Law of Servitudes*, 55 S. CAL. L. REV. 1353, 1357 (1982).
[257] *Id.* at 1358-60 (1982).
[258] Sterk, *supra* note 29, at 616.

in order to adjudicate issues as modern contract principles. In this effort, courts have collided with historical legal barriers protecting mineral ownership, barriers created primarily by property/contract interface issues. These barriers arise most often as the cumulative effect of early judicial manipulation of *contract-like* conveyancing practices in mining law.

A. Early Property Law Diminished "Contract-like Relationships"[259]

Historically, *contract-like relationships* were severed from the law of deeds for the sake of implementing a new legal paradigm for mineral law.[260] Early American courts integrated in rem theory into contract-like relationships dealing with real property ownership in order to make mineral conveyance more property-esque.[261] Courts' corporeal treatment of subterranean mineral rights was the initial step toward defining split estate relationships and mainstreaming emerging mineral laws of conveyancing. These property-esque relationships included "rules relating to transferability and divisibility, implications of adverse use, the right to use mined-out space for a continuing mining operation on other lands, and immunity from application of rules relating to abandonment."[262] Judicial constructs of mineral law, for example, have historically eschewed abandonment and adverse possession claims[263] against mineral owners to such a degree that eventually "legislatures in several states were forced to adopt statutes to deal with these problems."[264]

Essentially, constructs of mineral law were molded to observe early corporeal treatment of subterranean mineral estates. This being the case, some scholars see an historical error in early courts' decisions to make mineral ownership interests corporeal.[265] The result is a historic disconnect between contract theory and mineral law. With the assistance of extensive research by David Pierce, it becomes clear that explicit severance of contract theory from mineral law can be found in three

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[259] Polston, *supra* note 139, at 569.
[260] *Id.*
[261] *Id.* at 546.
[262] *Id.* at 556-57.
[263] *Id.*
[264] *Id.* at 566.
[265] *Id.* at 568-69.

primary situations: (1) implied covenants in mineral leasing; (2) energy custom and trade usage; and (3) parol evidence rules.

1. Implied Covenants Were Used as Equitable Instruments

Mineral leasing practices have not historically followed the law of contracts with any exclusivity. Rather, implied covenants or "unwritten promises that generally impose burdens on lessees"[266] have been used to normalize general intent language in mineral leasing agreements. Implied covenants have historically functioned as generalizing principles for split estate relationships within the mining industry. Generally, implied covenants hold lessees to a "prudent operator" standard under general leasing terms of a mineral contract.[267] Absent specific contract language, "the lessee must act as a 'prudent operator,' which includes not only technical competence, but also an awareness of the dual lessor/lessee interests it must promote."[268] For example, with evidence of demonstrable risk to a lessor's liability due to lessee's activities, the prudent lessee may have to alter its operating practices[269] as an idiosyncrasy of oil and gas law.

In his research on oil and gas law, David Pierce explains that "dynamics of the oil and gas lease, and the evolution of the law of oil and gas, provide a jurisprudential laboratory to evaluate why and how courts react to situations they believe require their equitable intervention."[270] The habit of equitable intervention was prompted by early scholarly arguments which viewed leases between landowners and oil producers the result of inherently unequal bargaining power.[271] The resulting disregard for "four corners" arguments in oil and gas law is the consequence of a convention of equity in mineral law which standardizes general intent

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[266] David E. Pierce, *The Impact of Landowner/Lessor Environmental Risk on Oil and Gas Lessee Rights and Obligations*, 31 Tulsa L.J. 731, 746-47 (1996).
[267] Pierce, *supra* note 266, at 746.
[268] *Id.* at 746 (1996); *see also* JOHN S. LOWE, OIL AND GAS LAW IN A NUTSHELL 36-48 (3d ed. 1995).
[269] Pierce, *supra* note 266, at 747.
[270] David E. Pierce, *The Renaissance of Law in the Law of Oil and Gas: The Contract Dimension*, 42 WASHBURN L.J. 909, 937 (2004).
[271] *Id.* at 911.

presumptions by parsing out vital interests in mineral leases.[272] The problem with this kind of equitable intervention is the presumption of mineral estate dominance, which has caused greater formalization of implied covenants and thereby diminished judicial discretion to re-contractualize challenged terms of lease agreements in question.[273]

In contract law generally, language in a deed of conveyance is strictly construed by the courts against the grantor in favor of the grantee. However, in oil and gas leases, absent specifics, language is liberally construed in favor of the lessor and against the lessee.[274] In fact, absent specific contract language, an oil and gas lease does not give the oil and gas lessee the right to drill into the lessor's coal seams to produce coalbed methane gas, which is a standard application in oil and gas law.[275] Another of these conventions is the judicial practice of granting extra protection for lessors through royalty sharing benefits under oil and gas leases.[276] This turn of the rules illustrates the nature of implied covenants in oil and gas law in effect since the turn of the twentieth century.[277] The irregular nature of implied covenants in mineral law often does little, however, to improve contract language or to equalize bargaining power in many cases.

2. Custom and Usage Permeate Conventions of Mineral Law

In the Restatement (Second) of Contracts, the term *usage* means a "habitual or customary practice."[278] David Pierce, the author of *Defining the Role of Industry Custom and Usage in Oil & Gas Litigation*,[279] explains that *usage* is not a legal rule but a "practice in fact."[280] When

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[272] *Id.* at 937-39.
[273] *Id.*
[274] *Id.* at 918.
[275] *Id.* at 916.
[276] *Id.* at 927-929.
[277] Pierce, *supra*, note 266 at 746; *see* Brewster v. Lanyon Zinc Co., 140 F. 801, 814 (8th Cir. 1905).
[278] RESTATEMENT (SECOND) OF CONTRACTS § 219 (1981).
[279] David E. Pierce, *Defining the Role of Industry Custom and Usage in Oil & Gas Litigation*, 57 SMU. L. REV. 387 (2004).
[280] *Id.* at 390.

parties in contract are engaged in a trade, they are presumed to know or have reason to know about the circumstances surrounding the trade industry.[281]

Problematically, "[w]hat some courts define as 'industry usage' may be better described as an acknowledgement of past 'judicial usage' in dealing with a particular problem."[282] Pierce calls this judicial practice "custom-as-law analysis,"[283] where usage is treated as "part of the common law."[284] The problem lies in a court's adoption of legal conclusions based on inaccurate usage information taken from "assertions of counsel"[285] or "the judge's general knowledge."[286] Occurrences such as these often take place over issues involving deed reservation language where a court majority "relies on historical information concerning custom and usage to determine both the ambiguity of the term minerals and its meaning."[287] In fact, mineral cases are replete with judicial practices of historicizing public energy policy and referencing custom and usage practices, often as gap fillers for indirect evidence.[288] Arguably, conventions of mining law sprang into use in order to minimize contract issues of ambiguity. Early courts diminished ambiguity by piecemeal adoption and often judicial construction of early mining practices and "camp" rules.[289]

3. Mineral Cases Complexified Parol Evidence Rules

Parol evidence is a limiting rule which prevents use of extrinsic or concurrent evidence in the interpretation of contract language.[290] Generally, parol evidence does not work to limit trade custom and usage

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[281] *Id.* at 391; *see also* RESTATEMENT (SECOND) OF CONTRACTS §§ 220(1) (1982), 222(3) (1981).
[282] Pierce, *supra* note 279, at 427.
[283] *Id.* at 428.
[284] *Id.*
[285] *Id.* at 407.
[286] *Id.*
[287] *Id.* at 468.
[288] *Id.* at 450.
[289] *Id.* at 427-28.
[290] *Id.* at 393-94.

evidence, nor does it limit *surrounding circumstances* evidence in mineral law cases.[291] Surrounding circumstances evidence is a hallmark of mineral litigation.[292] The practice is in accordance with the Restatement (Second) of Property which states that interpretation of conveyance language should be made "in light of the circumstances of its formation."[293]

Generally, a court that uses property rules to analyze an issue of mineral law is likely to construct its argument based on findings as general rules, surrounding circumstances, and matters of law.[294] There has emerged, however, an opposing approach, which David Pierce calls the "procedural contract principles"[295] approach. The "procedural contract approach"[296] focuses exclusively on the intent of the parties to a conveyance.[297]

Of primary concern in mineral cases today, is the inconsistency with which any approach uses parol evidence to ascertain relevant "surrounding circumstances" of the conveyance in question. Often, for courts applying general rules and matters of mineral law, "[p]ublic policy and common sense . . . step in when legal jargon fails."[298] Traditionally, the goal has been uniformity in the practice of mineral conveyancing.[299] The same is not the case under the procedural contract approach.[300] Under the contract approach, the plain meaning rule can diminish or even exclude from evidence usage of trade "not adopted by the contracting parties in the terms of the contract itself."[301] As a result, the inconsistent use of parol evidence rules in recent mineral law cases has created a host of evidentiary issues, the least of which is when to allow circumstantial

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[291] *Id.* at 393-99
[292] *Id.* at 426.
[293] *Id.* at 398; *see also* RESTATEMENT (FIRST) OF PROPERTY § 242 (1940).
[294] David E. Pierce, *Evaluating the Jurisprudential Bases for Ascertaining or Defining Coalbed Methane Ownership*, 4 WYO. L. REV. 607, 609 (2004).
[295] *Id.* at 612.
[296] *Id.*
[297] *Id.*
[298] Rowley, *supra* note 135, at 116.
[299] Pierce, *supra* note 294, at 612.
[300] *Id.*
[301] Rowley, *supra* note 135, at 116.

evidence to fill in the gaps of conveyance language.[302] At present, courts are running anarchical on this issue.

B. Functional Theories are Re-contractualizing Property Law

As described, courts have strayed from using implied covenants and incidental rights analysis in recent CBM ownership cases. Cases in Montana, Wyoming, and Virginia are evidence of courts' adoption of the procedural contract approach[303] for deciding CBM ownership issues. "This approach is concerned with one thing: the intent of the parties to the document."[304] To this end, "courts have generally assumed that uniformity of result and predictability, in the contract setting, are not all that important."[305] Arguably, Montana, Wyoming, and Virginia agree, and have employed the plain meaning doctrine almost exclusively as the bases for recent mineral decisions.[306]

The recent shift away from property law and mineral practices toward contract rules of conveyancing illustrates a clear judicial preference for the interpretation of CBM conveyances as negotiated agreements born of mutual rights. Recognition of mutual rights to mineral, oil and gas ownership has resulted in states' implementation of statutory construction laws for standardizing interpretations of mineral conveyance language and in the institutionalization of gas pooling agreements between common owners.

1. Mutual Simultaneous Rights Doctrine

The Supreme Court of Montana introduced the premise of *mutual rights* of mineral ownership to the CBM extraction issue. Montana introduced the doctrine of "mutual simultaneous right"[307] as the collective right of both surface and mineral estate owners of property to capture

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[302] Pierce, *supra* note 294, at 612-13.
[303] Pierce, *supra* note 294, at 612.
[304] *Id.*
[305] *Id.*
[306] *Id.*
[307] Carbon County v. Union Reserve Coal Co., 898 P.2d 680, 689 (Mont. 1995).

coalbed methane gas. The Supreme Court of Colorado echoed this idea shortly thereafter, holding that "[b]oth estates are mutually dominant and mutually servient because each is burdened with the rights of the other."[308] Ultimately, the Virginia Supreme Court highlighted the doctrine in *Harrison-Wyatt*.[309]

Today, the states of Montana, Colorado, and Virginia have adopted a presumption of mutuality into the litany of mineral law. The presumption of mutuality infers a positive gain and mutual benefit for both lessors and lessees in the extraction of CBM, whereby ownership rights are protected by good faith capture and sale.[310] Mutual simultaneous rights doctrine reinforces the bi-lateral nature of mineral agreements which presumes arms length negotiation between parties.[311] With the advent of the mutual simultaneous rights doctrine, courts have begun to revise historically implied rights of mineral owners. This was clear in Justice Kennedy's remarks in *Amoco* when he determined that venting methane gas *may* be an implied right of coal mining but in no way implies ownership rights in the gas.[312]

The advent of mutual simultaneous rights theory of capture has changed the nature of incidental rights of mineral ownership, arguably creating a relational theory of ownership shared between estate holders, in tandem.[313] With this turn, mineral dominance doctrine has evolved in effect from an absolute right to extract CBM as a safety issue into a shared right, and potential *duty*, to extract CBM mutually or bi-laterally in a growing number of states.[314] The result is a new kind of CBM "possessor-producer" who must negotiate with others on how best to produce a migratory fuel controlled by any number of estate holders at any given time during extraction. As part of this evolution, mutual simultaneous rights are increasingly decided by the language of state statutory construction laws.

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[308] Gerrity Oil & Gas Corp. v. Magness, 946 P.2d 913, 927 n.8 (Colo. 1997).
[309] *See generally* Harrison-Wyatt v. Ratliff, 593 S.E.2d 234 (Va. 2004).
[310] *Union Reserve Coal Co*, 898 P.2d at 689.
[311] *Harrison-Wyatt*, 593 S.E.2d at 554-55.
[312] Amoco Prod. Co. v. S. Ute Indian Tribe, 526 U.S. 865, 879 (1999).
[313] *See Harrison-Wyatt*, 593 S.E.2d at 555.
[314] *Union Reserve Coal Co*, 898 P.2d at 689.

2. State Statutory Construction Laws

Some states are formalizing rules for interpreting mineral conveyance language through state statutory construction laws. The Montana Supreme Court relied on new state statutory guidelines to decide the question of CBM ownership in *Carbon County*. In fact, after the trial court's ruling in *Carbon County*, but before the Supreme Court's decision, the state statutory definitions of coal, oil and gas changed with a new provision to the Montana Code (MCA).[315] "In 1993, the Montana Legislature deleted the definition of gas from the state code, and added "gas means all natural gases . . . including methane gas."[316] Further, language outlines that "coal" means a combustible carbonaceous rock . . . coal does not include: (a) methane gas . . ."[317] Against the backdrop of the *Carbon County* case, Montana's statute mandates that "all instruments regarding coal, oil and gas are interpreted according to section 82-1-111, MCA."[318]

The primary problem with new state statutory construction laws is the tendency to function retroactively.[319] In other words, courts have tended to apply new statutory language to conveyance issues with less regard for surrounding circumstances evidence relevant to the instruments in question *at the time* they were created. Therefore, judicial use of recent statutory construction laws diminishes the likelihood that in rem arguments will apply. In short, legislative efforts to tie mutual simultaneous rights to mineral ownership have courts embracing strict contract theory via new statutory construction laws. These efforts have created new extraction rights, as well as construction laws.[320] Forced pooling is one example.[321]

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[315] *Id.* at 682.
[316] *Id.* at 689.
[317] *Id.*
[318] MONTANA CODE ANN. § 1-4-110 (1993).
[319] *E.g.*, MONT. CODE ANN. § 1-4-110 (1993).
[320] S. Ryan White, *Who Owns Coalbed Methane in West Virginia?*, 107 W. VA. L. REV. 603, 617-18 (2005).
[321] Jeff L. Lewin, *supra* note 20, at 670-71.

3. Forced Pooling

Some courts have held there is "no common law correlative right for property owners to equitably share in the production of the common gas pool."[322] Therefore, states have enacted forced pooling statutes in large part to "circumvent the obstacle posed by uncertain ownership."[323]

Essentially, forced pooling requires that all potential owners of coalbed methane gas in the same drilling area or unit acquiesce to CBM extraction from their subsurface property.[324] In most cases, producers in pooling states can extract CBM without knowing exactly who else shares rights in the production.[325] As a result, mutual owners who find out later of a shared claim are often restricted to a statutory share in production of generally 8% or 9%, by law.[326]

Forced pooling has been legislated in most states (with such a law) as a primary tool for increasing CBM production.[327] With pooling laws in place, CBM extraction does not require proving shared ownership interests before operations begin.[328] As one of the first states to implement forced pooling laws, Virginia's enactment of the Gas and Oil Act in 1990 caused state production to increase "dramatically."[329] One reason, "[t]he Virginia Oil and Gas Act purports to authorize a tighter spacing of CBM wells than is allowed for ordinary shallow gas wells."[330]

Modeled after Virginia's Gas and Oil Act, the federal legislature subsequently enacted the National Energy Policy Act of 1992 (NEPA) which mandates forced pooling for states "where the Secretary of the Interior finds that uncertainty over ownership is impeding CBM development."[331] "Affected"[332] states are given the choice to use NEPA or create their own pooling statutes, without exception.

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[322] S. Ryan White, *supra* note 320, at 605.
[323] Jeff L. Lewin, *supra* note 20, at 669-70.
[324] *Id.*
[325] *Id.*
[326] *Id.* at 670.
[327] *Id.*
[328] *Id.*
[329] *Id.* at 671.
[330] *Id.* at 678.
[331] *Id.* at 671.

These statutes facilitate CBM production by:

> (1) allowing CBM to be produced by any persons who claims to own an interest in CBM, without requiring them to conclusively prove ownership; (2) minimizing the risk for persons who produce CBM in the face of disputed ownership claims by limiting their liability to payment of a fair royalty or share of the profits if it is later determined that they are not the owners; and (3) protecting the rights of all persons claiming an ownership interest in CBM by establishing an escrow fund to hold their share of royalties or profits pending resolution of competing ownership claims.[333]

Forced pooling, however, diminishes surface owners' ability to negotiate favorable terms in a lease agreement because of inherent benefits to lessees through forced pooling.[334] For example, a lessee will generally attempt to negotiate a *pooling clause* with lessor landowners which benefits the lessee by generalizing extraction efforts to all acreage in a particular space of land, or unit.[335] If a lessee is not successful in negotiating a lease with a pooling clause, then forced pooling is the functional equivalent, and can be used as an exclusive benefit to contracting lessees.[336]

Through his research on oil and gas leases, Joseph Shade has discovered that pooling clauses benefit lessees in a number of ways. First, a pooling clause "allows the lessee to combine acreage from two or more leases together to form spacing units."[337] Second, a pooling clause can

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[332] *Id.* at 672. Lewin lists Illinois, Indiana, Kentucky, Ohio, Pennsylvania, Tennessee and West Virginia as states affected by issues of uncertainty over CBM ownership. *Id.* at 671-72. NEPA excludes Alabama, Louisiana, Utah, Virginia, Washington and Wyoming from federal coverage. *Id.* at 672.

[333] *Id.* at 670.

[334] Joseph Shade, *The Oil & Gas Lease and ADR: A Marriage Made in Heaven Waiting to Happen*, 30 TULSA L.J. 599, 610 (1995).

[335] *Id.*

[336] *Id.*

[337] *Id.*

modify the royalty clause by providing for "apportioning royalty on the basis of the surface acres from the respective leases contained in the unit [acreage]."[338] "Pugh clauses,"[339] on the other hand, restrict a lessee's right to extract from more than the actual leased acreage.[340] However, favorable terms generally found in a negotiated Pugh Clause are not inherent in statutory forced pooling laws.[341] Therefore, lessors experience diminished bargaining power under forced pooling, even though protections are created to balance returns on produced minerals.[342] Moreover, under forced pooling, lessor landowners have little or no control over infringing producers.[343] Often, landowners "suffer increased environmental risk as a result of unit development"[344] with little environmental protection since "status-based environmental statutes do not exempt forced pooling."[345] Most problematically, "the existence of forced pooling does not eliminate the extraction-related conflicts between CBM development and coal mining that may arise whenever CBM development is undertaken by a claimant who is not the owner of the coal rights."[346] Forced pooling statutes, therefore, are often protective rhetoric with an underlying agenda of maximizing mineral production while creating a host of extraction issues for multiple-owner producers.

Against the backdrop of state action, Part V looks at the big picture in coalbed methane production as it affects the nation. This section addresses health and safety issues surrounding split estate mineral production, ending with a close look at the current state of CBM production in the Powder River Basin of Montana and Wyoming, the area of fastest production growth today.

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[338] *Id.* at 610.

[339] *Id.* at 611. Shade describes that a Pugh clause "is to partially negate a pooling clause. The Pugh clause modifies the usual pooling language to provide that operations or production from a pooled unit will not hold the whole lease, but rather will only maintain the lease as to that part of the lease acreage which is actually in the producing unit." *Id.*

[340] *Id.*

[341] *Id.*

[342] *Id.*

[343] *Id.* at 610-11.

[344] Pierce, *supra* note 287, at 749.

[345] *Id.*

[346] Lewin, *supra* note 20, at 674.

V. THE BIG PICTURE IN COALBED METHANE PRODUCTION

Recognizing the progression of CBM ownership rights from in rem to in personam is important for understanding the impact on mineral rights that America's thrust for new energy resources has brought to the modern day landowner. The bundle of rights that is property law follows bright line rules,[347] which are generally resistant to revision.[348] However, bright line rules are being revised in the law of minerals as a result of CBM case law. Greater focus now falls on the actual intent of bi-lateral contracts of present day estate holders, particularly with respect to leasing instruments. As a result, limited but existing safeguards in property jurisprudence are being reframed by ownership theories of contract.

In the case of CBM ownership issues, the effect of new surface ownership rights is a very real restructuring of applications of mineral law and a purposeful redirection in the relationships people have with law and with the land. The law's new direction is failing to improve the real time health and safety of surface landowners, however. In short, focus on ownership has done little to improve equitable land use. The reason why is that courts have failed to address extraction rights and responsibilities of competing estate holders. Greater emphasis on statutory law to regulate mineral production has proved ineffective in protecting landowners. Courts have compounded the problem by its refusal to address key extraction issues necessary to truly balancing the power between newly delegated CBM owners. The result is a growing concern over the management of coalbed methane production on a national scale.

A. Health and Safety Hazards Abound

1. Questions of Shifting Liability Are Problematic

The biggest problem in the evolution of extraction rights may be the unresolved legal issues of liability and compensation for venting and/or capture of CBM from active mines. In CBM litigation courts are unified in leaving these issues unaddressed. For example, the court in

[347] Merrill, *supra* note 2, at 803.
[348] *Id.* at 802.

Montana's *Carbon County* case "[left] to the agreement of the parties or to some future case the issue of whether, and if so, to what extent, the gas estate owner or lessee is entitled to be compensated by the coal owner for gas extracted incident to the coal owner's mining operations."[349] In *Harrison-Wyatt*, Virginia declined to express an opinion on the rights of surface owners to fracture coal owned by mineral producers for the purpose of retrieving CBM.[350] While courts in Pennsylvania, Alabama, and West Virginia were highly constrained by liability issues in mineral theory, which were closely tied to rules of property law, courts in Montana, Wyoming, and Virginia have not wrestled with such constraints.[351] In other words, the trend toward re-contractualizing mineral issues clearly benefits production rights to the exclusion of liability issues.

Arguably, haste for production preoccupied the *Amoco* Court to such a degree that it treated liability as a non issue. Justice Ginsberg was the sole dissenting opinion in the *Amoco* case. She argued the single proposition of liability.

> As the Court recognizes, in 1909 and 1910 coalbed methane gas (CBM) was a liability. . . Congress did not contemplate that the surface owner would be responsible for it. More likely, Congress would have assumed that the coal owner had dominion over, and attendant responsibility for, CBM. I do not find it clear that Congress understood dominion would shift if and when the liability became an asset.[352]

Careful reading of the dissent illustrates the likelihood that prevailing Justices either did not understand or did not value the nature of the liability issue involved in deciding *Amoco*. The decision's author, Justice Kennedy, equivocated on the matter of liability. Kennedy determined that "it *may* be true . . . that the right to mine the coal implies

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[349] Carbon County v. Union Reserve Coal Co., 898 P.2d 680, 689 (Mont. 1995).
[350] Harrison-Wyatt v. Ratliff, 593 S.E.2d 234, 238 (Va. 2004).
[351] Lewin, *supra* note 20, at 672.
[352] Amoco Prod. Co. v. S. Ute Indian Tribe, 526 U.S. 865, 880 (1999).

the right to release gas incident to coal mining where it is necessary and reasonable to do so."[353] In reality, however, it *must* be true that the right to mine implies the right to release CBM. Entrenched in both the legal history and the public policy of American mining law is the inherent liability of coal producers for the prevention of health and safety hazards inescapably associated with coal production. Either Justice Kennedy was wholly uninformed of that condition in mineral law or the question of liability was clearly a non issue. Whatever the reason, the Supreme Court's decision to shift the benefit of production without the attached liability was a bold re-contractualization of mineral law. The outcome was impractical, inequitable, and harmful to an increasingly conglomerated network of split estate owners. In real terms, real property rights attach to the land and move with ownership of the land. When this natural construct is disturbed, intricacies of rights and duties inherent in the bundle of sticks paradigm divide unnaturally from the land. Chaos is the result, in the courts and across communities.

Amoco marks an eerie trend in the dissociation of rights to produce from duties to protect and prevent. CBM ownership cases after *Amoco* have carried this dissociation into state law. Virginia's *Harrison-Wyatt* decision held that title to CBM remains with the surface owner, with no discussion of attendant liability. As a result, plaintiff surface owners were distributed production royalties without caution against liability inherent in new ownership status. Clearly, focus on the duty to ventilate for health and safety purposes has evolved into issues of equitable entitlements to captured gas, raising questions about the nature of shifting and potentially shared liability between multiple possessor-producers of CBM. The issue goes beyond questions of ownership to concerns over multiple possessor rights and responsibilities of conglomerate estate holders in severed estate relationships.

Questions of liability between conglomerate possessor-producers of CBM are problematic primarily because recent CBM case law is inconsistent with a host of established state and federal statutory regulations and with mineral theory itself.[354] Therefore, mineral law is an increasingly alien practice in courts like Wyoming, Montana, and

[353] *Id.* at 879 (emphasis added).
[354] *See, e.g., Harrison-Wyatt*, 267 Va. 549.

Virginia.[355] Generally, where liability is discounted so too is environmental protection. For example, "[u]nlike the coal and hard rock mining industries, which must post a bond to cover the cost of potential damages before mining, the CBM industry is only required to post bonds that cover the cost of plugging and abandoning a well."[356] This example illustrates the potential collision between coal producers and gas owners over production liability. Key questions remain. How should surface owners, with their many varying CBM interests, cover the cost of potential damages inherent in these conglomerate mineral estates? Furthermore, do these conglomerate estate holders themselves have the wear-with-all to safely and equitably negotiate safety issues? And, if legal liability is so easily ignored, how much easier is it to ignore protections for communities and the environment?

In short, courts' progressive interest in contractualizing mining relationships between split estate possessor-producers is not packaged with clearly defined rights and responsibilities for new owners of coalbed methane gas. Further, mining practices and regulatory law may lack the initiative to add even more complexity to mineral policy, which a shifting liability paradigm of conglomerate estate holders requires.

2. States that are Property Rights *Poor* Add to the Problem

Concern over unsettled questions of shifting liability in CBM development is compounded by inadequate surface protection laws. States that are property rights *poor* have failed to develop concurrent legal and statutory protections for landowners in concert with the rapid pace and advanced technological mechanization of mineral production. Theoretically, the common law presumption of mineral dominance is balanced today by state statutory measures to reduce excessive surface exploitation during mineral production. However, as described, only a handful of states subscribe to protective measures, like the Accommodation Doctrine, however.[357] In addition, only a handful more

[355] Lewin, *supra* note 20 at 672.
[356] Duffy, *supra* note 11, at 419.
[357] Mergen, *supra* note 114, at 433.

have legislated surface damage acts.[358] Surface damage acts are legislative attempts to improve accommodation measures on split estate lands through private land use agreements between split estate owners. The state of Virginia has neither a policy of accommodation for alternative access to surface lands,[359] nor has it passed a surface damage act[360] for the specific purpose of imposing surface protections on mineral producers.

"Since 1975, nine states have adopted surface damage acts. . . North Dakota, South Dakota, Montana, Kentucky, Tennessee, Illinois, West Virginia and Oklahoma . . .Texas."[361] Clearly, surface use regulations have not been widely adopted by states, and, arguably, the reasons are politics and the politics of economics.[362] Mineral industries provide the best form of economic development for many states. Therefore, state competition for corporate operators tends to temper, if not control, state regulatory environmental standards and other restrictive measures which could ward off the mineral industry.[363] According to Bryan Bank's research on the Appalachian Basin, production comes at the expense of protection.

> The mineral industry [in Appalachia] has always been well organized. . . The industry's influence is rapidly expanding in both state and federal governments. That influence can be seen in the manner legislatures draft the legislation that ultimately regulates the industry.[364]

3. Disconnect Between Surface Rights and Quiet Enjoyment

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[358] *Id.*
[359] *Id.*
[360] *Id.*
[361] *Id.*; *see also* Jan G. Laitos & Elizabeth H. Getches, *Multi-Layered and Sequential, State and Local Barriers to Extractive Resource Development*, 23 VA. ENVTL. L.J. 1, 8 n.18 (2004).
[362] Banks, *supra* note 119, at 154.
[363] *Id.*
[364] *Id.* at 151-52.

There exists a disconnect between the textbook protections of surface owners' rights and their actual experiences as protected parties. Two reasons can be cited for the disjunction: poor regulation of protective laws, and the overriding benefit to state treasuries of maximized mineral production.

Courts have moved slowly in their efforts to improve surface owners' rights to quiet enjoyment. For example, it took the legal system almost a century to reverse the Supreme Court's finding that a reservation of subjacent support for surface owners was an unconstitutional denial of the full ownership rights of coal producers.[365] In the interim, health and safety concerns such as unmapped wells, unmonitored wells, and small particle nuisance, to name only a few, have inundated the experience of land owners.

Of recent concern is the potential for health and safety hazards due to conglomerations of mineral producers using the same land for different purposes.

> Multiple problems can occur when methane beds are present in the same lands as oil and gas. . . It often is difficult for miners to determine the location of past mines because (1) reporting requirements were not enforced in the past, (2) 'there is no surface evidence of old well locations,' and (3) 'the mining industry has yet to develop technology that will locate existing wells from underground mines.'[366]

Single impact issues like these and others combine to create a comprehensive assault against surface owners' rights to the use and enjoyment of their lands. Statutory laws designed to protect water and air have improved protections in some cases, but the failure to effectively regulate mineral leasing and production activities *directly* has resulted in poor mitigation of other serious hazards facing surface owners, even though laws exist to do so.[367]

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[365] *See* Pa. Coal Co. v. Mahon, 260 U.S. 393 (1922); *see also*, Keystone Bituminous Coal Ass'n v. DeBenedictis, 480 U.S. 470 (1987).
[366] Laitos, *supra* note 361, at 11.
[367] *Id.*

The National Environmental Policy Act (NEPA) was passed in 1969, "chang[ing] the way federal agencies would regulate mining."[368]

> NEPA set forth the principle that alternatives for federal actions resulting in environmental impacts must be examined with public participation and full disclosure. The law established mechanisms intended to make rational environmental choices, promote 'productive and enjoyable harmony between man and his environment,' prevent damage to the environment, and ensure the health and welfare of citizens, among other things.[369]

Regulatory practices are often poor reflections of NEPA policy, however. One example of poor regulation is the negative impact of unconstrained mineral leasing at the federal level. In 2003, a moratorium was placed on the issuance of new Bureau of Land Management (BLM) leases for "failure to assess the impact of CBM development on water quality, soils, and vegetations."[370] The BLM had been in the habit of approving environmental impact statements, which the Environment Protection Agency (EPA) discovered to be wholly inadequate.

> The EPA. . . found the Montana EIS [environmental impact statement] 'environmentally objectionable due to the lack of specifically identified, economically and technically feasible water-management practices that are adequate to assure attainment of water quality standards under the Clean Water Act' and was even more critical of the Wyoming EIS, suggesting that while the Montana document could be remedied, the Wyoming study may need to be scrapped.[371]

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[368] Richardson, *supra* note 3, at 570.
[369] *Id.*
[370] Gary C. Bryner, *Coalbed Methane Development: The Costs and Benefits of an Emerging Energy Resource*, 43 NAT. RESOURCES J. 519, 546 (2003).
[371] *Id.* at 546-47 (quoting Scott McMillion, *EIS on Coalbed Methane Drilling Blasted*, BOZEMAN CHRON., May 2, 2002).

Less like areas in the eastern U.S., for example, where mineral development has a long history and, therefore, experiences more incremental impact from CBM production,[372] land owners in the west are experiencing heavy fallout from rapid new mineral exploitation, compounded by lackadaisical regulatory management. With the surge in alternative fuel production, surface owners in the intermountain west have argued that CBM development diminishes their ability to manage their lands in a "sustainable fashion."[373] Owners argue that "construction and operation of access roads, drill pads, pipelines, power lines, and transmission stations produce noise, dust, air pollution, and water pollution that adversely affect humans and wildlife."[374] The multiplicity of these effects is virtually unmanageable when surface owners are poorly informed and underrepresented. Ostensibly, land owners' rights have been subrogated by fast paced federal leasing mechanisms, which create affirmative rights in contract with little sensitivity to the practical impact and long term effect on surface lands.[375] Researcher Gary Bryner summarizes the severe impact on western basin communities with the onset of heavy CBM production:

> [Landowners] report that they were not given the option to not sign development agreements, that they were not notified when subsurface minerals were leased, that surface lease agreement were not required, that eminent domain was used to install pipelines, and that communications towers have been installed without their permission. [They] also report that there is a lack of planning for infrastructure needs, a failure to deal with threatened and endangered species, no planning to protect air quality, little information sharing with land owners regarding CBM development, and inadequate bonding, which has resulted in orphan wells. For these residents, such oversights do not represent merely damage to their lands

[372] *Id.* at 544.
[373] *Id.* at 542.
[374] *Id.*
[375] *Id.* at 545.

> and the wasting of scarce and precious water; they also foster a sense of powerlessness and the violation of property rights. These residents feel powerless to protect their lands and ensure their sustainability.[376]

Economics is the second reason for a growing disconnect in the inequities of production and protection. The economies of scale have enticed states to welcome the coalbed methane boom. After the *Amoco* decision in June of 1999, CBM production in Wyoming "increased exponentially."[377] "Wyoming's 1999 state budget deficit was nearly $200 million; when oil and gas prices rose in 2000 . . . the budget experienced a $700 million surplus," [378] earned primarily through royalty interests in CBM.

In New Mexico, another dense production region, the oil and gas industry brings in $1.25 billion in state royalties.[379] "In 2000, the federal government received $211 million in CBM royalties from federal leases . . . from the San Juan Basin alone."[380] "Revenues from oil and gas production provided approximately 21 percent of New Mexico's general fund in fiscal year 2002."[381]

The trend after *Amoco* is convincing: multiplying the number of potential producers of CBM through conglomerated ownership environments increases national energy supplies and funding returns in triple digits. In short, estate severance has become the gold mine of mineral policy.

B. CBM Development in Montana and Wyoming Illustrates the Gold Rush

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[376] *Id.* at 542.
[377] Hand, *supra* note 176, at 667.
[378] Bryner, *supra* note 392, at 532; *see also* Hand, *supra* note 297, at 667-68.
[379] Duffy, *supra* note 11, at 415.
[380] Bryner, *supra* note 392, at 532; *see also* Catherine Cullicott et al., *Coalbed Methane in the San Juan Basin of Colorado and New Mexico*, in COALBED METHANE DEVELOPMENTS IN THE INTERMOUNTAIN WEST, 51, 68 (Natural Resources Law Center, University of Colorado School of Law CD-ROM, July 2002).
[381] Duffy, *supra*, note 11 at 415.

The Powder River Basin is most recently the fastest growing CBM production site in the U.S.[382] "In 1996 there were only 193 producing CBM wells in the Powder River Basin in Montana and Wyoming; current projections call for as many as 70,000 wells within the next decade."[383] Since Montana's Oil and Gas Conservation Act was passed in 1953, no exploratory well proposal has ever been rejected "for environmental reasons,"[384] however. The stark contrast between the numbers of wells drilled and well proposals denied makes it difficult to find confidence in Montana's state regulatory practices. This problem is compounded by the amount of surface land encumbered by mineral rights belonging to the federal government. In Montana "90 percent of the federally owned CBM reserves are located under private lands."[385] In short, private surface owners cannot escape the energy gold rush.

Split estate relationships are strained in the Powder River Basin. "Agencies responsible for granting drilling permits have done so with minimal regulations and have often taken steps to limit public knowledge of and involvement in the permitting process."[386] It has taken legal action on the part of organizations like the Wyoming Outdoor Council to give voice to the distress felt by area land owners.[387]

Another level of concern lies with the preemptive power of federal law to override any state action which tightens regulation of the oil and gas industry. In 2005, Wyoming passed the Wyoming Surface Owner Accommodation Act (WSOAA).[388] The Act requires notice to landowners prior to drilling operations, good faith negotiations, and surface use agreements which compensate landowners for damage to land, among other things.[389] These requirements are not echoed in Bureau of

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[382] Bryner, *supra* note 396, at 531.
[383] Duffy, *supra* note 11, at 413.
[384] *Id.* at 420; *see also* Ray Ring, *Backlash: Local Governments Tackle an In-Your-Face Rush to Coalbed Methane*, HIGH COUNTRY NEWS, Sept. 2, 2002, at 10.
[385] Duffy, *supra* note 11, at 414 (citing N. PLAINS RESOURCE COUNCIL, YOUR LAND, YOUR RIGHTS 1 (2003).
[386] *Id.* at 414-15.
[387] *See generally* J. Benjamin Winburn, Comment, *The Coalbed Methane Boom: The Push for Energy Independence Raises Questions About Water and the Rights of America's Homesteaders*, 19 TUL. ENVTL. L.J. 359 (2006).
[388] WYO. STAT. ANN. §§ 30-5-401 through 30-5-411 (2005).
[389] *Id.* at 384.

Land Management (BLM) regulation, and may be dismissed at the federal level.[390] "Industry sources expect the issue to be litigated, yet harbor doubt as to whether the law will be found to govern BLM activity."[391] Therefore, courts' equitable interventions to improve land owner protections are often overshadowed by the federal regulatory machine which prompts apathetic industry behavior.

Under-protection and apathy are the results of explosive contract behavior on the part of the federal government. Judicial intervention against contract mismanagement has been piecemeal, and equity intervention for surface owners, weak. Issues of equity will be explored in Part VI, which reviews the nature of equitable intervention on the part of recent courts in the treatment of split estate issues. In this section, the debate over whether to use standards of conscionability or of fairness in mineral law issues is addressed.

VI. EQUITABLE INTERVENTION ON THE PART OF THE COURTS

> A society that permits conflicts over the use of scarce resources to be resolved by the threat or the application of physical force has little need for the concept of property, or of law. Once, however, a society commits itself to protect an initial right to use a scarce resource, it must decide upon the role of private agreement in altering the initial allocation.[392]

Property law is the promise of indelible ownership and third party protections. It is the constant through which broad measures of reasonableness can be ordered against the rest of the world, often through acts of equity. Diminished equitable relief is of primary relevance in the recent demise of property law orientations to mineral law, as equity has historically been the legal gauge for how best to resolve property issues holistically.

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[390] *Id.* at 385; *see also* 43 C.F.R. §§ 1610.0-10010.62 (2006).
[391] Winburn, *supra* note 409, at 385.
[392] Sterk, *supra* note 29, at 615.

The evolution of equity in America is a hodgepodge of asymmetrical legal endeavors which ebb and flow with activist court regimes. American courts are strapped with the code of the common law, which dispenses equity with great restraint. Often, balancing common law and equitable circumstances is difficult for judges who must perform both functions in concert. Original equity in law did not function in the same way.

A. A History of English Equity

In his work on equity in dispute resolution, Thomas O. Main traces the history of American jurisprudential equity back to the English courts.[393] He explains that initially, the king's chancellors, secretaries to the king, administered "the king's justice"[394] on a case by case basis at the discretion of the king.[395] Chancellors issued writs "commanding the performance or cessation of certain acts,"[396] which became routinized into issuance of writs according to similar fact patterns.[397] This standardization process became the basis of common law pleas.[398] Subsequently, common law courts were added to the king's court, where petitioners would go for hearings after being issued a writ by the chancery.[399]

Over time, the common law system hardened into fixed writs and stringent rules. "Precise and technical rules of pleading, procedure, and proof, cabined judicial discretion within the form of action."[400] "The ossification of the Common Law made it impossible for many petitioners to obtain writs appropriate to their peculiar problems."[401] There still existed "the royal prerogative,"[402] however, for chancellors to issue writs

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[393] Thomas O. Main, *ADR: The New Equity*, 74 U. CIN. L. REV. 329, 346 (2005).
[394] *Id.* at 346-47.
[395] *Id.*
[396] *Id.*
[397] *Id.* at 347.
[398] *Id.*
[399] *Id.*
[400] *Id.* at 347-48.
[401] *Id.* at 348.
[402] *Id.* at 348-49

of subpoena, a summons to appear in Chancery.[403] The Court of Chancery was, therefore, developed from the practice of "ecclesiastical chancellors" who resolved questions of "ethical rights" through writs heard by subpoena.[404]

Separate Courts of Equity functioned differently from common law courts, providing different relief on the grounds of "natural justice."[405]

> The chancellor unrolled a vast body of legal principle to which we now refer as Equity to offer relief in those cases where, because of the technicality of procedure, defective methods of proof, and other shortcomings in the Common Law, there was no 'plain, adequate and complete remedy' otherwise available. In this context, plain was the opposite of 'doubtful and obscure.' A remedy was not adequate if it 'fell short of what the party was entitled to,' and a remedy that did not 'attain the full end and justice of the case' was not complete.[406]

Against a backdrop of common law rights in American property law, courts have historically prevailed upon the jurisprudential powers of equity to decide the role of private agreements in property rights.[407] *Ambiguity* became a comfortable issue in property cases primarily because the tool of equity was available.[408] The idiosyncrasies of economics and industrialization have recently hampered the work of equity in mineral law cases, however. Courts are now facing hard questions of what role private agreement will take in managing commingled estates, how to measure reasonableness in modern mineral relationships, and when equity should intrude.

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[403] *Id.*
[404] *Id.* at 349.
[405] *Id.* at 350.
[406] *Id.*
[407] *Id.* at 380-81.
[408] *See id.*

B. Ending the Debate over Conscionability and Fairness

Resolving how best to measure reasonableness and, thus, gauge equity with a legal standard is central to defining the nature of mineral relationships. Mineral law is increasingly plagued by incongruous legal standards which have inevitably led to inconsistent legal outcomes. As seen in the phenomenon of CBM case law, property law and its *fairness doctrine* combats contract theory and the *unconscionability* standard for supremacy in the law of minerals. As will be seen, these standards, by nature, function exclusively of one another.

In his study on mineral ownership theory, Ronald Polston differentiates between the property-like development of a *relational* theory of the mineral law of leases and the *ownership* theory of corporeal mineral estate ownership, which often invokes contract law analysis.[409] Polston asserts that courts have historically tended to take a relational approach to oil and gas law rather than a contract approach.[410] "The emphasis tends to be upon what is fair rather than on what the parties own or what they intended."[411] Polston makes his point using language from the *Manges v. Guerra*[412] case in which the court states, "While a contract or deed may create the relationship, the duty . . . arises from the relationship and not from express or implied terms of the contract or deed."[413]

In the world of contract law, however, *unfairness* is not a reason to invalidate or even reform an agreement. It takes much more. In his study of the dimensions of contract theory, David Pierce suggests that finding unfairness is "simply the beginning of the analysis."[414] In contract law, a showing of *unconscionability* is ultimately required.[415] The same cannot be said of oil and gas agreements.[416] *Fairness* is the applicable

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[409] Ronald W. Polston, *Mineral Ownership Theory: Doctrine in Disarray*, 70 N.D. L. REV. 541 (1994).
[410] *Id.* at 573.
[411] *Id.*
[412] 673 S.W.2d 180 (Tex. 1984).
[413] *Id.* at 183.
[414] Pierce, *supra* note 289, at 917.
[415] *Id.*
[416] *Id.* at 918.

contractual measure in mineral theory.[417] "While doctrinal contract law might terminate or modify relationships on the basis of unconscionability, fraud, mistake, etc., the oil and gas cases have no problem doing so simply on the basis that an unfairness has occurred."[418]

Pierce illustrates the difference in legal standards between contract theory and oil and gas law by commenting on relevant cases such as *Gilmore v. Superior Oil Co.*[419] In *Gilmore*, payments for a 1/8 royalty interest were based on the market value of sale "at the mouth of the well."[420] Parties entered into the lease agreement under terms specified in writing without stipulating who would bear the compression costs, which the lessee incurred in transporting the gas from the "mouth of the well" to an interstate pipeline.[421] Finding ambiguity in the language with respect to deduction expenses, the court "nullified" the "mouth of the well" language, and lessee was made to bear the compression expenses alone.[422]

In contract law, however, a court would most likely not have construed silence on the issue of expense deductions as an ambiguity in this case, and would have interpreted according to the plain meaning of the document without modification of terms. *Gilmore* clearly illustrates the judicial practice of interpreting contract terms against oil and gas lessees. Decisions like *Gilmore* illustrate the inclination of courts to provide extra protection for the inferior bargaining positions of lessors of oil and gas. Recent CBM courts have perceived that ownership rights in CBM will provide the same protections. Under the rules of contract, however, standards of unconscionability will not afford the same results.

C. Questioning Extra Protection

Relational theory distinguishes the fee simple determinable estate often held by an oil and gas lessee from the fee simple absolute estate held by a surface owner. Oil and gas lessees often contract to produce for a

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[417] Polston, *supra* note 431, at 573.
[418] *Id.* at 573.
[419] 388 P.2d 602 (Kan.1964).
[420] Pierce, *supra* note 292, at 919 (quoting Gilmore v. Superior Oil Co., 388 P.2d 602., 603 (Kan. 1964).
[421] *Id.* (quoting *Gilmore,* 388 P.2d at 603).
[422] *Id.* (quoting *Gilmore,* 388 P.2d at 603).

term of years, and usually to continue "as long thereafter" as minerals are produced. Here, surface owners receive statutory protection through minimum royalty payments, and ambiguities in leasing terms are decided in favor of the lessor.

Favoritism falls the other way when both surface and mineral estates are owned separately through severance. In this case, mineral owners gain the upper hand against the servient surface owner, and the parade of horribles associated with mineral dominance often dictates surface rights. Recent courts using ownership theory to decide issues between owner estates have approached issues perceiving functional equanimity between owners, and therefore resort to contract theory for analysis. Under the ownership approach, "there is little room for the courts to make adjustments to the relationship based upon fairness and considerations of policy."[423] Results, therefore, are often equity free even if unintentionally.

A third, and more problematic phenomenon exists, however. The U.S. government is the largest owner of mineral interests in the country, and leasing government interests across vast landscapes. Private landowners are hardly equipped with equal bargaining power against the colossal machine that is the Bureau of Land Management. In a relationship where mineral owners literally have the right to "take" private land, surface landowners are hardly co-equal. In cases of this kind, there exists what I refer to as a "triadic ownership" relationship between surface owner, governmental mineral owner and its agent lessee. The mineral estate represented by the sovereign owner and its mineral agent is far from perpetual, yet, the mineral estate is *de facto* interminable during the life of the mineral by virtue of the preeminence of government presence.

Suggested here is the potential for defining a new kind of government taking, "taking by agency," against which landowners are powerless to redress surface harm and destruction against public lands leasing agreements. Saving that argument for another time, sufficed to say here that when courts decide claims concerning triadic issues involving government agent-lessees, their use of the "contract approach" results in a presumption of mutuality of contract where, in reality, there is none. The Courts of Montana, Wyoming and Virginia have applied the "contract

[423] Polston, *supra*, note 323 at 574.

approach" in questions of CBM ownership and, in the case of Montana, claims of unlawful taking were made.

In *Carbon County*, Union Reserve Coal claimed that a legislative amendment to the Montana Code "constituted an unlawful taking of coal seam methane gas from the owners of coal."[424] As described, the Montana Code changed its definition of coal and gas in legislative amendments during the time the Supreme Court prepared to hear the *Carbon County* appeal.[425] The Montana Supreme Court held that "amendments to Title 82 .... do not take away any rights a coal owner may have to coal seam methane gas ....[which]the coal estate did not have a right to . . .under the plain language of the grant."[426] Because Montana held there was a severance of the gas estate from the coal estate, it determined that "the question of taking without compensation is necessarily moot."[427] Results like these create the illusion of equity in contract when, in reality, there is none.

Extending equity issues further, Part VII explains why there exists the equity *illusion* of just intervention in CBM ownership cases. The illusion is defined by unique oddities in the way oil and gas law manages equity issues and is supported through public policy goals focused on expanding fuel production.

VII. EQUITY ILLUSION; WHY EQUITABLE INTERVENTION BY CONTRACT IS PROBLEMATIC

The issues surrounding resolving equitable land use in split estate circumstances is aptly stated by the Wyoming Supreme Court in *Newman*: "While we recognize that separate ownership of coal and coalbed methane may result in conflicts, we agree with the United States Supreme Court when it noted 'that is not the issue before us.'"[428] Arguably, however, severable ownership is precisely the issue confounding split estate regimes across the nation. The future of equity arguments for severed estate

[424] Carbon County v. Union Reserve Coal Co., 898 P.2d 680, 689 (Mont. 1995).
[425] *See supra* notes 74-75 and accompanying text.
[426] Union Reserve Coal Co., 898 P.2d at 690.
[427] *Id.* at 690.
[428] Newman v. RAG Wyo. Land Co., 53 P.3d 540, 550 (2002).

owners lies in courts' willingness to determine extraction rights and duties required of conglomerated estate holders. Unfortunately, problems abound in that effort given the legal circumvention of activist courts, each in search of their own equitable solutions to the mineral law chaos. Equity has become illusive due to a number of shifting ideologies and circular arguments, jurisprudential preference for contract theory notwithstanding.

A. Oil and Gas Law's Circular Argument Defies Predictability

Courts' reverence for contract interpretation has created a maze for any plaintiff or defendant needing to understand which way a case will turn on any given mineral action. Much of the reason lies in the fact that mineral law, and particularly the law of oil and gas, has recently marshaled a circular argument which vacillates[429] between theories of contract and mining law. Some scholars label the circumvention of contract theory in oil and gas law the nature of "equitable intervention."[430] "Courts faithful to contract law enforce the lease contract as written; courts seeking to mitigate the express terms of the lease contract resort to implied covenants and other interpretive devices to avoid giving effect to the contract the parties made."[431] In other words, mineral decisions have come to vary depending on "why and how [the] courts react to situations they believe require their equitable intervention."[432] Hence, equitable intervention becomes a circular argument largely dependent on the philosophical persuasion of the judge or justices and not necessarily on the nature of the claim or relevant legal precedent.

As analyzed, CBM ownership cases are prime examples of the circularity involved in judicial interpretation of mineral law. Courts have vied to tie CBM ownership to competing legal theories, either in rem or alternatively in personam. In so doing, the scope of these dueling arguments remain the same; only the courts change. As a result, legal interpretation becomes juxtaposing, which results in narrow decisions made by judicial ideologues. The scenario is troublesome when growing

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[429] Pierce, *supra* note 289, at 937.
[430] *Id.*
[431] *Id.*
[432] *Id.*

numbers of producers, communities and landowners need a holistic, universal and practical law to invoke for ever complexifying extraction issues.

B. "Public Policy" Still Means Production Policy

The history of mineral dominance and mining culture has codified modern mineral law to the virtual exclusion of grazing, agriculture, conservation and urbanization. To that end, practical public environmental policy still means mineral production policy.

The eastern mining experience is virtually as old as the first European settlements in the mountain basins themselves. While the plight of land owners in the east appears less palpable than in the west, the destructive nature of broad form deeds has created virtually unlimited exploitation of the land from the deepest coal seam to the highest mountaintop. Mountaintop removal is a prime example of how destructive liberally construed mining rights can be. In the east, mineral production has decimated surface lands with little recourse or redress for more than a century. The same can be said of air and water quality.

One example of the continued disregard for the health and safety of Appalachian communities is offered in *J. M. Mullins et al. v. Beatrice Pocahontas Company* (1970).[433] In this case, "property owners contend[ed] that the discharge of the [coal] dust constitutes a nuisance so severe that it blackens lawns and trees, destroys crops, ruins the paint on buildings and corrodes cars and trucks."[434] In a broad form deed dating back to 1905, predecessors in interest were adjudged to have conveyed their right to clean air as a reasonable burden on their surface lands. Equity in this case was a matter of upholding reasonable accommodation through alternative emissions practices. However, the Fourth Circuit decided against equity by deciding against breathable air.

C. Complexity May Defy Equity

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[433] 432 F. 2d 314 (4th Cir. 1970).

[434] *Id.* at 315; *see also* Banks, *supra* note 121, at 171-72.

Courts are often burdened with the weight of the letter of the law. In reality, the practice of equity is an inevitable departure from bright line rules, from which precedent rarely follows.[435] The complexity involved in balancing common law with equity bespeaks the need for consistency and predictability in deciding law.[436] For this reason, consistency and predictability in mineral law and the law of oil and gas lie by necessity in the rules of property.[437] Therefore, real property rules must garner the balance of equity in order for justice to serve the personal and industrial needs of split estate communities. This is critical if for no other reason that that "all environmental problems require a property rights solution."[438]

The problem is the competing nature of statutory and common law decisions[439] in property law issues. Courts must follow fact patterns and precedent based on the arguments put forward, theoretically, in the interests of justice. Legislatures, on the other hand, are "frequently captured by special interests."[440] It can be argued that the success of such a highly privatized mineral industry in America is the result of political and economic endeavors rather than regulatory ones. Bruce Yandle and Andrew Morris frame the issue as such:

> Regulatory property solutions differ in their impact on future technological change. Some solutions, such as tying a right to emit to use of a specific technology, effectively eliminate the incentives necessary to produce the new technologies necessary for the evolution of private property solutions. Others, like tradable emissions permits, offer a path into private property rights solution by creating incentives for technological innovation.[441]

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[435] Main, *supra* note 415, at 360-61.
[436] *See id.*
[437] *See* Polston, *supra* note 323.
[438] Bruce Yandle & Andrew P. Morris, *The Technologies of Property Rights: Choice Among Alternative Solutions to tragedies of the Commons*, 28 ECOLOGY L.Q. 123, 124 (2001).
[439] *Id.* at 164.
[440] *Id.* at 163-64.
[441] *Id.* at 167.

Desirable solutions to environmental health and safety issues lie in the productivity of private enterprise in reducing environmental risks and hazards through technological ingenuity. However, corporate motivation to create this technology is tied to the freedom to command its use, which brings special interests into the forefront of regulatory decision-making. This kind of complexity may defy equitable intervention as a cautious tool of the courts particularly if mineral law evolves into the law of corporations via the dynamics of special interest legislation. In this way, re-contractualization of mineral law is aiding in the defiance of equitable outcomes.

Surface owners are increasingly disadvantaged by progressively privatized regulatory schemes as courts and legislatures promote expansive alternative mineral production. In its current condition, landowners cannot hope to experience improved protection from the chaos of modern mineral case law. In the present scenario, surface owners often experience the illusion of equitable protections through judicially re-contractualized relationships in mineral law and expansionist legislation, rather than by real equity in property ownership.

With this in mind, Part VIII focuses on extraction rights in mineral production as best practice for equitable use of split estate lands. This section highlights the theory of sustainable development and advocates for broader application of surface use agreements for improved environmental protection through accommodation principles of property law.

VIII. BEST PRACTICE IS A FOCUS ON EXTRACTION RIGHTS

The practical effect of the few landmark court cases like *Harrison-Wyatt* is the emergence of a new conglomerated ownership theory in the mining of coalbed methane gas. Recent cases have created new possessor-producers in the mineral industry who now experience new liability issues, are potentially restricted by forced interests, and bear the weight of multiple owner relationships.

Problematically, this multiple owner orientation is recasting an industrial aversion to environmental protection and surface land protection on a magnitude not unlike early industrialized mining operations. The

multiple owner orientation is reflective of the frantically paced and ever complexifying nature of mineral development in the United States. It is a theory in need of realignment for the sake of practical goals in mineral production and to improve the health and safety of America's mining communities.

For this reason, framing mineral issues with theories of ownership is impractical and inequitable. Focus on extraction, on the other hand, eases the burden of newly defined ownership relationships toward the goal of mutual gain and environmental protection in mineral production. Concerted focus on what I call a "multiple owner orientation" to mineral production is arguably one of the most relevant goals of this century. Two recently articulated principles, in combination, have the potential to make that goal a reality: (1) the theory of "sustainable development;" and (2) standardized use of surface use agreements.

A. Sustainable Development

"Sustainable development" is a term more familiar in international environmental protection circles than in discussions on the future of mineral development in America.[442] Yet, the term is potentially powerful as a starting point for building a conservation paradigm for modern mineral development in this country. "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."[443] Keith Bauerle, attorney with Earthjustice, addresses this idea in relation to oil and gas development in the western United States.[444] He suggests that "phasing or staging of development to distribute its impacts over time and geography provides arguably the best means of ensuring the sustainability of the land and its resources in perpetuity."[445] This approach was offered by various advocacy groups in an effort to support the National Environmental Policy

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[442] Bauerle, *supra* note 175, at 1091-92.
[443] *Id.* at 1091 n.41.
[444] *Id.* at 1092.
[445] *Id.*

Act's phased development guidelines for CBM.[446] Bauerle explains the practical steps that can be taken for successful stage development:

> [B]y spreading the number of CBM wells developed in a given watershed over time, the amount of wastewater produced within that watershed at any given time, and its attendant impacts on the ecosystem, ranches and farms, could be reduced. Likewise, spreading development out over a longer period of time could help to prevent an economic boom and bust cycle and its socio-economic harms. Both geographic and temporal phasing of development would thus further sustainable development goal of 'equitably meeting developmental and environmental needs of present and future generations.[447]

The theory of sustainable development is one originally meant to apply to renewable resources, but scholars suggest that "carefully paced mineral development"[448] over a period of 50 years, for example, could approach something very similar to a sustainable development state of mineral production.[449] Sustainable development creates what I call "environmental equity" between mineral production and private enjoyment of surface land. Without solutions like sustainable development, America's landscape cannot sustain the legal turmoil currently causing virtual production anarchy in the backyards of communities everywhere.

Improved land management requires improved "relational equity" as much as it does environmental equity. "Relational equity" is what I term the relationship value of co-managing split estate land use as multiple owners and extractors. Surface use agreements can provide that result.

B. Surface Use Agreements

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[446] *Id.*
[447] *Id.*
[448] *Id.*
[449] *Id.* at 1092-93.

Concerted effort has been made in the west to call for legislation to require mineral rights owners to obtain consent from surface owners "prior to leasing . . . and to provide more adequate notification for surface owners regarding lease sales and drilling applications."[450] Additionally, "critics have been pushing the states to mandate standardized surface use agreements that would give ranchers and other landowners more input into the location of wells, pipelines, roads, and other aspects of CBM activity on their land."[451] Surface use agreements are land use agreements negotiated between surface owners and mineral producers outlining the nature and extent of surface access and damage allowable during mineral extraction.[452] Realistically, mineral producers would stand to lose at least some degree of mineral dominance by engaging in collaborative efforts like these. Consequentially, "[t]hus far . . . the Montana state legislature has defeated virtually all legislation aimed at regulating CBM development."[453]

Some progress has been made in Wyoming, however. The Wyoming Surface Owner Accommodation Act (WSOAA) mentioned earlier, calls for "obtaining a surface use agreement that provides for compensation to the surface owner for damages to the land and improvement, or getting the surface owner to provide a waiver or written consent for entry."[454] The future of Wyoming's broadly protective surface act is uncertain, though, as is the likelihood that split estate owners will agree to negotiate forced surface use compacts with any degree of success. In short, collaborative efforts toward redefining split estate relations on a broad scale is tenuous at best.

Meaningful change in multiple owner orientations to mineral production necessitates a new form of justice. Moreover, the evolution of CBM law into case by case inquiry necessitates a better forum than court for addressing split estate issues. A process that reduces the adversarial nature of split estate relationships and provides owners with greater self-determination is meaningful change for the better. Further, environmental

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[450] Duffy, *supra* note 11, at 428.
[451] *Id.*
[452] *Id.* at 419.
[453] *Id.* at 429.
[454] Winburn, *supra* note 409, at 384.

and relational equity are best improved through collaborative problem solving frameworks, which create co-management orientations to split estate issues. Therefore, Part IX advocates the use of alternative dispute resolution processes to mitigate the chaos of CBM extraction issues as potentially the best solution. Opportunities to negotiate out of court settlements, to promote private initiatives, and to develop collaborative approaches to managing split estate relationships are critical practices offered by a dispute resolution framework.

IX. DISPUTE MANAGEMENT CAN MITIGATE THE CHAOS

The reality for split estate relationships is that they cannot be legislated[455] or adjudicated. They must be mended. Virginia's grant of CBM ownership to fee surface owners effectively granted dominion without control and liability without consent. No better scenario exists to illustrate the need for systemic dispute resolution mechanisms in the Appalachian Basin and beyond than the new possessor-producer relationships springing from *Harrison-Wyatt*.

A. Mediation by Necessity

The search for alternative fuels is happening in our back yards. As a result, issues and impasse are occurring on a broad scale between split estate holders with little probability that either the courts or legislatures will intercede in any timely way. Therefore, private resolution of land use issues is necessary for parties who want to improve their health and safety and the quality of the use and enjoyment of their lands. In the new environment of possessor-producer relationships, informal resolution of split estate issues has become a necessity. The flexible nature of dispute resolution allows parties to choose their negotiation process in a timely fashion with maximized self-determination.

1. Negotiated Settlements

[455] Drake D. Hill & P. Jaye Ripply, *The Split Estate: Communications and Education Versus Legislation*, 4 WYO. L. REV. 585, 586 (2004).

Negotiated settlements have proven to be effective tools for resolution of even the hardest environmental issues. The use of negotiated settlements under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) is a mainstay for voluntary cleanup of environmental waste sites.[456] Reportedly, "ADR [(alternative dispute resolution)] techniques have been critical for the EPA in settling conflicts involving environmental liability"[457] under CERCLA. The process is such that "potentially responsible parties" (PRPs) are encouraged to "admit responsibility, and voluntarily enter into negotiations culminating in a consent decree with the EPA."[458] The language of CERCLA threatens litigation and strict liability remedies for violators of EPA standards. Therefore, PRPs are generally drawn to negotiated settlements with the EPA.

"The EPA finds that the use of ADR techniques leads to quicker and more efficient cleanups of contaminated sites because of the increased cooperation of PRPs in participating with the cleanup of hazardous waste sites."[459] Moreover, the EPA's use of ADR "greatly decreases the potentially large transaction costs of environmental litigation."[460] The primary method used by the EPA is mediation.[461] "In mediating a dispute under CERCLA, a neutral third party mediator promotes a 'voluntary negotiated settlement' between the EPA and a PRP or between two opposing PRPs."[462] The result is "more efficient and beneficial resolutions for improving the public health and welfare."[463]

Negotiated settlements under CERCLA are one example of the effectiveness of alternative dispute resolution practices in highly sensitive environmental issues. The primary rationale for dispute resolution under

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[456] David M. Shelton, *Cooper Industries v. Aviall Services: Destroying the Incentive for Negotiated Settlements and Undermining the Increased Use of Alternative Dispute Resolution Under the Comprehensive Response, Compensation, and Liability Act*, 22 OHIO ST. J. ON DISP. RESOL. 839, 844 (2007).
[457] *Id.* at 839-40.
[458] *Id.* at 844.
[459] *Id.* at 847.
[460] *Id.* at 848.
[461] *Id.* at 847.
[462] *Id.* at 847-48.
[463] *Id.* at 843.

CERCLA is the potential for severe liability for parties in violation of EPA standards. Dispute resolution enables parties to avoid litigated liability through voluntary recovery plans. Realistically, however, the burden of severe liability for surface damage to private landowners in the ordinary course of mineral production is much lower. There would, therefore, have to be other compelling reasons for landowners and mineral producers to agree to privately negotiate surface land use issues. The EPA illustrates that mediation can be an effective tool against commercial violators. The question remains, how to bring parties to the table under less than dire circumstances.

2. Promoting Private Initiatives

In fact, mediation is at work aiding individual landowners in negotiations to improve surface use by severed mineral producers. In an article promoting communication efforts for improving mineral development, Drake Hill and P. Jaye Rippley describe private efforts of various agencies and advocates to *prevent conflict* and *maximize cooperation* with the oil industry of Wyoming.[464] The Wyoming Split Estate Initiative (WYSEI) is a coalition of organizations with the objective to "provide resources and tools that their constituents can utilize to help remove uncertainty as they work through the Surface Use Agreement process."[465] WYSEI has reached out to federal organizations, conservation programs and the Wyoming Department of Agriculture and Natural Resource Mediation Program for input and involvement.[466] One of the key goals of the coalition is to "provide a forum for conflict resolution"[467] of issues that arise during negotiating surface use agreements. Wyoming offers WYSEI services to parties at the inception of every new lease agreement.

WYSEI hosts a multi-step dispute resolution scheme which begins by offering disputing parties an "advisory team" to assist parties and make

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[464] Hill, *supra* note 191, at 603.

[465] *Id.* at 603 (quoting the Wyoming Split Estate Initiative, What is WYSEI?, *available at* http://www.wysei.com/split estate.htm).

[466] *Id.* at 603-04.

[467] *Id.* at 604.

recommendations on the issues involved.[468] If parties are unsuccessful with the help of an advisory team, then the coalition offers mediation or arbitration services.[469] "Follow-up services"[470] are offered "all the way through the mediation phase."[471] Private initiatives like WYSEI are potentially more powerful than either judicial or statutory remedy, and illustrate the meaningful ways private initiatives can invoke positive change in split estate relations.

B. Mitigating the Equity Illusion

Equitable intervention is increasingly illusive for parties seeking redress for surface damages in court. The current jurisprudential trend toward contract theory in mineral law diminishes the fairness doctrine and disables historical property remedies. There are ways to invoke equitable remedy, however, through alternative operations. Collaborative approaches and community action are avenues for improving fairness in land use in an informed and empowered manner.

1. Collaborative Approaches to Split Estate Relationships

Collaboration is the combined effort of mutual stakeholders in defining and addressing issues which affect parties to a decision or action.[472] "Collaboration seeks to avoid conflict, litigation, and problems that have plagued other planning processes and provide a forum for officials from different levels of government and overlapping jurisdictions to work together."[473] Arriving at sound decisions often requires a number of self-actualizing activities such as information gathering, joint fact finding, issues advocacy, conflict management, and consensus building efforts.[474]

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[468] *Id.*
[469] *Id.*
[470] *Id.*
[471] *Id.*
[472] Bryner, *supra* note 396, at 552.
[473] *Id.*
[474] *Id.*

> Collaborative or consensus-based decision making suggests that decision makers recognize the importance of place based decision making and a land ethic and will work to ensure the participation of all affected interests. Collaborative efforts must also integrate overlapping government jurisdictions, develop partnerships for designing and implementing solutions, learn from experience, engage in intellectual trial-and-error, and employ adaptive management techniques and approaches.[475]

Contracts and leasing agreements are often exclusively negotiations rather than collaborations.[476] Under today's umbrella of energy regulation, standards for royalty payments and production costs are easily assessed.[477] More difficult, however, is the balancing of environmental needs each stakeholder has in using her property most productively and in harmony.[478] "Harmonizing surface and mineral owner rights is an essential element of reducing the conflicts surrounding CBM development."[479] Collaboration can impact contract negotiations with a great deal of success, if sufficient strides in preventive planning and collaboration are made.[480] There is such a model in place with collaborative goals at its core: the Model Surface Use and Mineral Development Accommodation Act.

2. Reviving Key Goals of the Model Act

The Model Surface Use and Mineral Development Accommodation Act (The Model Act) of 1990 is a broad effort at improving the welfare of landowners and increasing environmental protection. When drafting the Model Act, the intent of the National

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[475] *Id.*
[476] *Id.* at 551-553.
[477] *Id.* at 555.
[478] *Id.* at 554.
[479] *Id.* at 554.
[480] *Id.* at 560.

Conference of Commissioners on Uniform State Laws was to create a law that states could use to "resolv[e] severance disputes equitably and predictably."[481] The Model Act has received mixed reviews. A section of the act puts forth three worthy goals for improving relations between surface and mineral owners: "(1) quantify surface and mineral rights and obligations, (2) encourage accommodation, and (3) provide efficient severance dispute resolution procedures."[482] Apart from a solid start, the Model Act leaves much "to be decided under common law contract and property principles."[483] Problems notwithstanding, the Model Act is a starting point for improved efforts toward defining the rights and responsibilities of possessor-producer estates, encouraging comprehensive accommodation, and using dispute resolution mechanisms at the state level.[484] Apart from state level intervention, alternative methods of dispute resolution most often find the greatest sustainability in community level support and practice.[485]

3. Practicing Community Involvement and Action

In his research on the emergence of collaboration in the energy field, Ric Richardson traces the beginning of public involvement in energy issues to the 1977 Surface Mining Control and Reclamation Act (SMCRA).[486] "The Act established a framework for public participation in mining and mine reclamation issues."[487] SMCRA's initial findings "concluded that interagency and public cooperation was necessary to prevent or mitigate adverse environmental impacts of surface mining."[488] Public involvement assures improved understanding of the issues which affect split estate relations, and increases negotiating leverage as more persons become involved with community issues. The positive effects of

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[481] Wenzel, *supra* note 179, at 613.
[482] *Id.* at 650.
[483] *Id.* at 661.
[484] *Id.* at 648-50.
[485] Main, *supra* note 415, at 372.
[486] Richardson, *supra* note 3, at 572.
[487] *Id.*
[488] *Id.* at 573.

community involvement in dispute resolution processes are particularly powerful.

> ADR empowers neighborhoods to resolve disputes that are not cognizable in or are otherwise ignored by formal dispute resolution systems. . . incorporate[ing] local values and norms into the decision-making calculus. . . tend[ing] to emphasize compromise, reconciliation, and fairness.[489]

Community involvement in alternative dispute management greatly enhances the potential for social and civic reform. In this way, community involvement "illustrates the progressive role that equity can play in the moral growth of the law."[490]

C. Putting Conciliation Language to Work

Both the 1990 Virginia Gas and Oil Act (VA ACT) and the National Energy Policy Act of 1992 (EPACT) include provisions "to aid in the resolution of competing ownership claims,"[491] such as forced pooling orders and escrow accounts where "conflicting interests" exist.[492] The VA ACT has been replicated by other states, and even EPACT adopted language from the VA ACT.[493] Problematically, EPACT's conciliatory language is mooted by forced or standardized solutions to competing mineral interests. As a result, forced pooling and mandated royalty payments are currently most states' best efforts at managing split estate disputes.

In the article, *The State of the States in Environmental Dispute Resolution*,[494] Rosemary O'Leary, Tracy Yandle, and Tamilyn Mooreb take a state by state look at the effectiveness of each state's environmental dispute resolution programs. In Virginia, for example, the Virginia Code

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[489] Main, *supra* note 415, at 372.
[490] *Id.* at 376.
[491] McClanahan, *supra* note 6, 48 OKLA. L. REV. 471, 519 (1995).
[492] *Id.* at 524.
[493] *Id.* at 482.
[494] *See generally* Rosemary O'Leary et al., *The State of the States in Environmental Dispute Resolution*, 14 OHIO ST. J. ON DISP. RESOL. 515 (1999).

authorizes the use of environmental mediation "under certain circumstances."[495] As a result, Virginia offers ad hoc environmental mediation services through university-based and private mediation services in the state.[496] Virginia could do more, as could most states, in managing mineral production issues.

Unfortunately, even after forced pooling occurs, and royalties are paid, parties must still ultimately resolve land use issues arising out of extraction activity. Problematically, legal regimes have too quickly formulated fixed solutions to relational problems in mineral issues without employing a functional way to address case by case analysis. Until law makers understand the relational dynamics existing between split estate owners, alternative resolution resources will not be tapped. Until that happens, functional resolution of mineral production and environmental resource protection issues will continue to elude courts and legislatures alike, to the exhaustion of court dockets everywhere and to the demise of countless communities across America.

CONCLUSION

There is nothing *plain* in the language of Virginia's ruling on the plain language of intent of predecessors in interest, dead 100 years before coalbed methane gas became a valuable fuel resource. The real truth of the matter is that no jurisprudential tool exists for deciding the ownership of coalbed methane gas in the vacuum of time and place, except the tool of equity. Potentially, the decision in *Harrison-Wyatt* could have been the result of a court's granting of equity to surface estate owners, bearing on the history of marked inequity in mineral production of the Appalachian Basin.

Virginia, however, used the wrong jurisprudential tools in its effort. The Court diminished property law in favor of a new contract approach to mineral conveyancing which argues ownership instead of extraction. Further, it ballooned the difficult work of managing mineral issues by perpetuating a case by case analysis with diminished evidentiary

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[495] VA. CODE ANN. § 10.1-1186.3 (1998).
[496] O'Leary, *supra* note 523, at 601.

tools available under the contract approach. Finally, the Court invoked a higher burden of proof for equitable relief by utilizing contract theory instead of relational equity in fairness. Equity, therefore, is less of what the state Supreme Court achieved than chaos.

Essentially, in re-contractualizing Virginia's mineral law, the Virginia Supreme Court has prompted the deterioration of equity in mineral law. The question becomes therefore, "How can the practice of equity survive Virginia's new common law approach to mineral ownership?" The answer is that it most likely cannot. A systemic tool with greater reach is needed. That tool is alternative means of dispute resolution. The alternative to judicial equity lies in the collaborative efforts of dispute resolution, particularly as alternative fuel production expands to new reaches, and into new communities of surface owners.