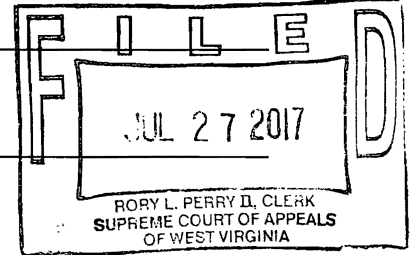


IN THE SUPREME COURT OF APPEALS OF WEST VIRGINIA

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DOCKET NO. 17-0126

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**ROBERT ANDREWS et al., Plaintiff Below,  
Petitioners,**

**Appeal from the Circuit Court  
of Ohio County (13-C-434)**

v.

**ANTERO RESOURCES CORPORATION et al.,  
Defendants Below, Respondents.**

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**JOINT BRIEF OF AMICI CURIAE  
WEST VIRGINIA OIL AND NATURAL GAS ASSOCIATION AND THE  
INDEPENDENT OIL AND GAS ASSOCIATION OF WEST VIRGINIA, INC.**

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## I. INTRODUCTION

The West Virginia Oil and Natural Gas Association ("WVONGA") and the Independent Oil and Gas Association of West Virginia, Inc. ("IOGA") submit this joint brief in support of respondents Antero Resources Corporation and Hall Drilling, LLC (together, "Respondents").<sup>1</sup> WVONGA and IOGA respectfully support Respondents' request to affirm the Final Order Granting Defendants' Motions for Summary Judgment, entered October 11, 2016 (the "Judgment Order") by the West Virginia Mass Litigation Panel, In re: Marcellus Shale Litigation (the "Panel") and the Order denying Petitioners' Motion to Amend or Alter the Final Order, entered January 11, 2017 (the "Post-Judgment Order").

This Court should affirm the Judgment Order and the Post-Judgment Order (together, the "Orders") entered by the Panel below. The Orders properly held that mineral interest owners hold a separate and distinct mineral interest property estate and have the right to engage in operations that are reasonable and necessary to develop their mineral estate, including the right to utilize horizontal drilling technology. Any other result will devastate oil and gas owners, lessees, producers, secondary suppliers, contractors, users, royalty interest owners, and the State of West Virginia and its local communities. In practical terms, adoption of the legal theories espoused by Petitioners

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<sup>1</sup> Pursuant to Rule 30(b), W. Va. R. App. P., WVONGA and IOGA notified counsel of record for all parties of their intention to file a joint amici curiae brief ("Amici Brief"). Counsel for all parties consented to this filing, and accordingly, this Amici Brief is being filed pursuant to Rule 30(a), W. Va. R. App. P.

Pursuant to Rule 30(e), W. Va. R. App. P., WVONGA and IOGA represent that no counsel for a party to this action authored this Amici Brief in whole or in part. Moreover, neither a party in this dispute nor counsel for a party in this dispute made a monetary contribution specifically intended to fund the preparation or submission of this Amici Brief. Respondents are members of WVONGA and IOGA.

will effectively eliminate future oil and gas development in West Virginia because oil and gas production today is primarily, if not exclusively, driven by the use of horizontal drilling. Accordingly, this Court should affirm the Orders.

## **II. STATEMENT OF INTEREST**

WVONGA, a West Virginia trade association, was chartered in 1915 and serves the entire oil and natural gas industry. Approximately 225 companies, which include independent producers; fully integrated energy companies; and companies engaged in oil and gas storage and transmission, distribution, production, gathering, processing, marketing, service and supply, and consulting and professional services are WVONGA members. WVONGA's board of directors has authorized filing this Amici Brief.

Since 1957, IOGA has served independent oil and gas producers and others directly involved in the production of West Virginia oil and natural gas. IOGA's membership includes approximately 610 companies and individuals who are involved in, or support, the extraction and production of natural gas and oil in West Virginia. IOGA's board of directors has authorized filing this Amici Brief.

WVONGA and IOGA's members operate in almost every county in West Virginia and employ thousands of people in the State. These companies and individuals, together with their secondary suppliers, create payrolls totaling hundreds of millions of dollars annually. Their members have collectively invested billions of dollars in West Virginia to develop the Marcellus Shale play, own approximately 20,000 oil and gas wells, and operate over 20,000 miles of pipeline across the State. Their producer members account for nearly 85% of all oil and natural gas production in West Virginia and the resultant severance tax revenues for the State.

The Judgment Order and Post-Judgment Order impact not only the present litigants, but also mineral owners, oil and natural gas producers, and nearly every other stakeholder in the oil and gas industry because they all utilize or rely upon the most fundamental aspect of current oil and gas development: horizontal drilling. Accordingly, if the Orders are overturned, such a ruling would have a profound and detrimental impact on not only members of WVONGA and IOGA, but also the thousands of West Virginians, including the State, who benefit from the production of oil and gas and its affiliated services and industries. Therefore, WVONGA and IOGA join Respondents in seeking affirmation of the Judgment Order and Post-Judgment Order.

### **III. ARGUMENT**

#### **A. Introduction**

Petitioners assert that horizontal drilling is not reasonable under West Virginia law because it utilizes technology that was not contemplated at the time the minerals were severed from the surface estate and because it develops minerals beyond the surface estate on which a horizontal well pad sits. While Petitioners assert that the issue is not about whether Respondents should be permitted to drill horizontal wells in the Marcellus formation, their attempt to downplay the logical conclusion of their position should be rejected. If horizontal drilling is determined to be unreasonable as Petitioners assert, horizontal drilling will cease to exist in West Virginia and the vast oil and natural gas resources underlying the State will not be developed, creating waste and harming the economy, jobs and job creation, as well as tax revenue streams. In short, West Virginia will be relegated to the sidelines as Pennsylvania, Ohio, and other



states with the fortune of having shale formations within their boundaries reap the rewards of technological advances in natural resource development.

While there is no universal definition of horizontal drilling, it can be generally defined as the process of drilling and completing for production a well that begins as a vertical or inclined linear bore that arcs, or bends, to extend laterally through the shale formation in which the mineral to be developed is located. Generally, the vertical portions of horizontal wells are roughly 5,000 to 9,000 feet deep, and the lateral portions extend between 3,000 to 10,000 feet depending on the target formation.<sup>2</sup> While horizontal drilling is most commonly associated with the Marcellus Shale formation, horizontally drilled wells have been completed in more than 17 other formations in West Virginia.<sup>3</sup>

Typical Marcellus Shale well pads comprise an area of approximately five acres (2.5 football fields) and include enough wells to produce gas from 500 to 1,000 acres.<sup>4</sup> After the pad is constructed, Marcellus Shale wells are drilled directionally from the pad, depending on the location of the play.<sup>5</sup> Generally, Marcellus wells take between 15 to 30 days to drill.<sup>6</sup> After drilling is completed, the hydraulic fracturing process begins.<sup>7</sup>

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<sup>2</sup> United States Department of Energy, National Energy Technology Laboratory, Strategic Center for Natural Gas and Oil, *Modern Shale Gas Development in the United States: An Update*, p. 47 (September 2013) (hereinafter referred to as "NETL") (located at <https://www.netl.doe.gov/File%20Library/Research/Oil-Gas/shale-gas-primer-update-2013.pdf>) (last viewed July 25, 2017).

<sup>3</sup> West Virginia Geological and Economic Survey, *Data Files - West Virginia Horizontal Wells* (located at <http://www.wvgs.wvnet.edu/www/datastat/devshales.htm>) (last viewed July 25, 2017).

<sup>4</sup> NETL, p. 47.

<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

<sup>7</sup> *Id.*

Equipment for the hydraulic fracturing process, used in a closely coordinated manner, includes pump trucks, blending systems, storage tanks for water and chemicals, tanks to capture produced liquids, piping systems to connect elements of the system, and specialized monitoring and control systems.<sup>8</sup> The hydraulic fracturing process generally takes a few days per well as multiple zones along the horizontal lateral are sequentially perforated and fractured.<sup>9</sup> Following this process, the well is flowed back and tested using a controlled flaring process.<sup>10</sup> In some areas a pipeline ready to take gas to market will be in place and flaring will not be necessary.<sup>11</sup> After the flow back period is complete, the wells are ready for production.<sup>12</sup> Water and fluid hydrocarbons (oil, natural gas liquids and condensate) produced along with the natural gas from the multiple wells on the pad are separated and stored in tanks on the pad.<sup>13</sup>

Natural gas plays a key role in meeting the United States' energy demands. As of 2013, natural gas, coal and oil together supplied about 84 percent of the Nation's energy, and natural gas comprised about 27 percent of that total.<sup>14</sup> The United States Department of Energy expects shale gas to play a significant future role, supplying about one-third of the United States' energy demand, possibly even more, over the next several decades.<sup>15</sup> The techniques employed and practices followed by natural gas producers in developing shale gas plays are constantly evolving. Within each developmental play, operators gain experience, and as a result, new technologies are

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<sup>8</sup> *Id.* at 49.

<sup>9</sup> *Id.*

<sup>10</sup> *Id.* at 51.

<sup>11</sup> *Id.*

<sup>12</sup> *Id.*

<sup>13</sup> *Id.*

<sup>14</sup> *Id.* at 6.

<sup>15</sup> *Id.* at 6-7.

invented, old technologies are refined, service company innovations are introduced, and the economic drivers of well costs fall while the product value rises.<sup>16</sup> The Marcellus Shale play is by far the largest shale play in the United States.<sup>17</sup> In states where oil and gas production is already an important part of the local economy, e.g., Texas, Oklahoma, Louisiana and Arkansas, shale gas development is largely seen as an expansion of ongoing mineral development activity.<sup>18</sup>

Horizontal drilling is not just reasonable, it is integral to the development of West Virginia's largest remaining natural resource. West Virginia is the ninth largest natural gas producing state in the nation, largely because of shale gas production.<sup>19</sup> In 2008, horizontal wells only produced 2.3% of all the natural gas produced in West Virginia.<sup>20</sup> Between 2011 and 2012, natural gas production from horizontal wells exceeded production from conventional (vertical) wells in the State for the first time.<sup>21</sup> Since 2015, nearly 90% of all natural gas produced in West Virginia came from

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<sup>16</sup> *Id.* at 47.

<sup>17</sup> *Id.* at 13.

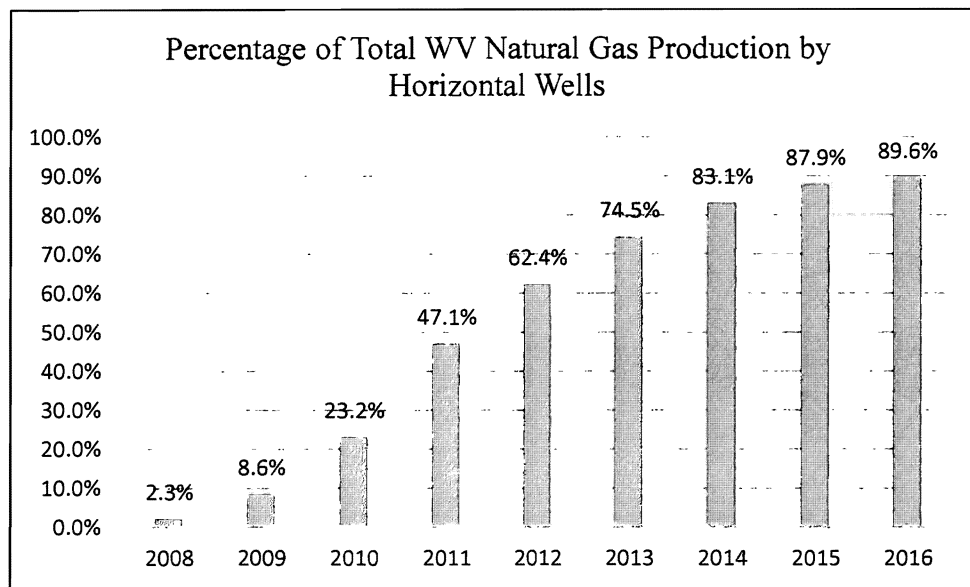
<sup>18</sup> *Id.* at 57.

<sup>19</sup> United States Energy Information Administration, *Independent Statistics & Analysis - West Virginia* (hereinafter "USEIA") (located at <https://www.eia.gov/state/analysis.php?sid=WV>) (last viewed July 25, 2017).

<sup>20</sup> See WVONGA and IOGA Appendix Record (hereinafter "WVONGA/IOGA A.R."), p. 1 (referencing John Kearney, West Virginia Department of Environmental Protection, Office of Oil and Gas, *West Virginia Oil and Gas Production: 2008-2015* PowerPoint); see also John Kearney, West Virginia Department of Environmental Protection, Office of Oil and Gas, *Oil and Gas Production Data and WR-35 Completion Reports Update* (hereinafter "Kearney O&G Data"), pp. 7, 8 (<http://www.dep.wv.gov/oil-and-gas/Resources/Documents/Workshop%20Presentations%202014/Production%20and%20Completion%20Reports%20Powerpoint%20-%20John%20Kearney.pdf>) (last viewed July 25, 2017)

<sup>21</sup> USEIA; WVONGA/IOGA A.R. p. 1; Kearney O&G Data pp. 7, 8.

horizontal wells.<sup>22</sup> The figure below depicts the increased percentage of total West Virginia natural gas production by horizontal wells.<sup>23</sup>



By 2015, the number of horizontal wells in West Virginia reporting production was 2,235.<sup>24</sup> In 2015, West Virginia's estimated shale gas reserves exceeded 19 trillion cubic feet.<sup>25</sup>

As a result of Marcellus Shale production (and to a lesser extent, Utica Shale production, also accomplished by horizontal drilling), since 2010, marketed natural gas production has skyrocketed by an average annual pace of 35 percent.<sup>26</sup> To attest to the industry's rapid productivity gains, while the volume of gas produced has

<sup>22</sup> WVONGA/IOGA A.R. p. 1

<sup>23</sup> Information for 2008 to 2015 was obtained from WVONGA/IOGA A.R., p. 1 and Kearney O&G Data, pp. 7, 8, and information for 2016 was obtained from West Virginia Department of Environmental Protection, Office of Oil and Gas, *Oil and Gas Production Data, 2016 Production spreadsheet* (located at <http://www.dep.wv.gov/oil-and-gas/databaseinfo/Pages/default.aspx>) (last viewed July 25, 2017).

<sup>24</sup> WVONGA/IOGA A.R., p. 1.

<sup>25</sup> USEIA.

<sup>26</sup> Bureau of Business & Economic Research, West Virginia University College of Business and Economics, *2017-2021, West Virginia Economic Outlook* (2016) (located at <http://business.wvu.edu/files/d/f28ea037-57de-4c55-a177-a354b2312751/wv-economic-outlook-2017-1.pdf>) (last viewed July 25, 2017).

increased 139 percent cumulatively since 2012, the number of active wells accounting for the output declined more than 9 percent.<sup>27</sup> Between 2015 and 2016, natural gas production increased by 21 percent and is expected to increase annually by roughly 9 to 10 percent through 2021.<sup>28</sup> For the first time on record, natural gas is expected to overtake coal in terms of accounting for a larger share of overall State GDP by mid-2018.<sup>29</sup> Total employment for the State's energy sector is forecast to grow over the next five years, and all of the growth is expected to come in the natural gas industry, which is expected to rebound from a low of about 7,000 jobs in 2016 to 8,800 jobs by 2021.<sup>30</sup> The West Virginia oil and gas industry is expected to add jobs at a rate of 4.6 percent per year (2017-2021) while natural gas production is projected to increase at nearly 10 percent per year.<sup>31</sup>

The economic impacts of horizontal drilling in the Marcellus Shale are noteworthy. In 2009, Marcellus Shale development generated \$2.35 billion in business volume and approximately \$1.16 billion in total value added in the West Virginia economy.<sup>32</sup> In 2009, the economic activities associated with Marcellus Shale development created approximately 7,600 jobs and \$297.9 million in employee compensation in the State.<sup>33</sup> In 2015, total severance taxes (including local government distributions, workers' compensation debt fund severance taxes, and

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<sup>27</sup> *Id.* at 12.

<sup>28</sup> *Id.* at 22 and 23.

<sup>29</sup> *Id.* at 22.

<sup>30</sup> *Id.*

<sup>31</sup> *Id.* at 16.

<sup>32</sup> Amy Higginbotham et al., *The Impact of the Natural Gas Industry and the Marcellus Shale Development in West Virginia in 2009* (December 2010) at 24 (located at <http://energyspeakswv.com/Resources/Docs/Studies/Economic%20Impact%20of%20the%20Marcellus%20Shale%202009%20FINAL.pdf>)(last viewed July 27, 2017).

<sup>33</sup> *Id.*

regular state severance taxes) for oil and natural gas in their entirety were \$215,361,550.<sup>34</sup>

Simply put, the economic benefits of horizontal drilling, past, present and future, cannot be reasonably disputed, and they should not be overlooked. As discussed below, West Virginia law clearly provides a mineral owner and lessee with the right to develop the mineral estate in a manner that is reasonable and necessary. West Virginia law recognizes that a mineral rights holder is entitled to utilize technological advances to more efficiently and effectively develop the mineral estate. The West Virginia legislature not only recognizes the concept that advances in technology should be utilized to secure opportunities to develop Marcellus Shale, but the legislature also has expressly encouraged it.<sup>35</sup> Because the use of horizontal drilling is reasonable and necessary to develop oil and natural gas, including those minerals in the Marcellus Shale play, this Court should affirm entry of the Judgment Order and Post-Judgment Order.

**B. Mineral Interest Owners and Lessees Have the Right to Take All Reasonable and Necessary Actions to Develop the Mineral Estate.**

West Virginia law is well settled: absent express language to the contrary, a mineral severance deed grants the mineral interest owner the right to use all reasonably necessary means to develop and produce the mineral estate, including the right to use the surface estate. *Squires v. Lafferty*, 95. W. Va. 307, 121 S.E. 90 (1924) ("The owner

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<sup>34</sup> See Mark B. Muchow et al., West Virginia Department of Revenue, *Joint Select Committee on Tax Reform, Severance Tax & Property Tax*, at p. 9, PowerPoint slide 18 (Sept. 14, 2015) (located at [http://www.legis.state.wv.us/legisdocs/2015/committee/interim/TAX/TAX\\_20150914092541.pdf](http://www.legis.state.wv.us/legisdocs/2015/committee/interim/TAX/TAX_20150914092541.pdf)) (last viewed July 25, 2017). Of this total, \$194,200,833 was attributable to natural gas and \$21,160,717 to oil production.

<sup>35</sup> See Section E, *infra*.

of the mineral underlying land possesses, as incident to this ownership, the right to use the surface in such manner and with such means as would be fairly necessary for the enjoyment of the mineral estate"); *Martin v. Hamblet*, 230 W. Va. 183, 191, 737 S.E.2d 80, 88 (2012) (citing *Buffalo Mining Co. v. Martin*, 165 W. Va. 10, 14, 267 S.E.2d 721, 723 (1980) ("A mineral owner generally has the right to utilize the surface for purposes reasonably necessary for the extraction of minerals.")).

Similarly, mineral estate lessees, absent express language to the contrary, hold the right to utilize the surface estate to "do all things necessary for the purpose of acquiring and enjoying [i.e., developing and producing] the [mineral] estate granted." *Montgomery v. Economy Fuel Co.*, 61 W. Va. 620, 57 S.E. 137, 138 (1907). As the *Montgomery* Court stated, the rights associated with the severed mineral estate are all-encompassing: "[w]hen anything is granted, all the means of obtaining it, and the fruits or effects of it, are also granted." *Id.* As a practical matter, the existence of such implied right is sensible. If a mineral owner or lessee could not use the surface to develop the mineral estate, his or her mineral property interest would have little or no value.<sup>36</sup>

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<sup>36</sup> As this Court held more than 100 years ago, oil and gas leases are to be construed so as to promote development and prevent delay and unproductiveness. Syl. Pt. 3, *Parish Fork Oil Co. v. Bridgewater Gas Co.*, 51 W. Va. 583, 42 S.E. 655 (1902). In construing oil and gas leases, implied covenants, and implied rights, are an integral part of oil and gas law:

[I]mplied covenant law remains a vital force in the current law of oil and gas ... As the oil and gas laws mature, new problems emerge ... [W]hatever express provisions are put into leases, there will always be the unanticipated problem produced by unforeseen and unforeseeable developments - political, economic, legal, and technological. It is believed, therefore, that the law of implied covenants will continue to regulate the relationship of lessor and lessee in significant respects in this country.

Williams and Meyers, *Oil and Gas Law*, § 801 (2014) (citations omitted). Due to the reality that the technology and methods used to extract oil and gas shall inevitably evolve over the life of a lease, certain lease terms and conditions should be "rationally left to implication," and further operations should be "reasonably calculated to effectuate the controlling intention of

This Court, and federal courts applying West Virginia law, have addressed numerous disputes over the years concerning the reasonableness of the use of the surface estate in connection with developing the mineral estate. Courts have held that a mineral developer acted reasonably when it constructed a road to bring in machinery, drilled a gas well, laid pipeline over the surface, and constructed an open ditch for refuse drainage, *Adkins v. United Fuel Gas Co.*, 134 W. Va. 719, 725, 61 S.E.2d 633, 636 (1950); a mineral owner acted reasonably when constructing a new access road over the surface, *Adams v. Cabot Oil & Gas Corp.*, No. 13-1299, 2014 WL 6634396 (W. Va. Nov. 24, 2014); an operator acted reasonably in building a road to haul material and machinery for drilling, *Coffindaffer v. Hope Nat. Gas Co.*, 74 W. Va. 107, 81 S.E. 966 (1914); and depositing drilling waste and other material in pits on the surface was reasonable, *Teel v. Chesapeake Appalachia, LLC*, 906 F. Supp. 2d 519 (N.D. W. Va. 2012) *aff'd*, 542 F. App'x 225 (4<sup>th</sup> Cir. 2013).

The impact of horizontal drilling on surface estates today pales in comparison to the surface estate impacts that were deemed to be reasonable for mineral development in the past. Because the issue of unreasonableness is one to be determined by the court,

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the parties as manifested in the lease, which was to make extraction of oil and gas from the premises of mutual advantage and profit." *Brewster v. Lanyon Zinc. Co.*, 140 F. 801, 811 (8th Cir. 1905).

Accordingly, not only are leases construed to promote development, mineral estate lessees have an implied duty to develop mineral estate. For example, West Virginia law recognizes an implied covenant to develop, *Jennings v. Southern Carbon Co.*, 73 W. Va. 215, 80 S.E. 368, 370 (1913), *St. Luke's United Methodist Church v. CNG Development Co.*, 222 W. Va. 185, 663 S.E. 2d 639, 647 (2008); an implied covenant to protect against drainage, *Jennings, supra, Parish Fork Oil Co.*, 51 W. Va. at 591, 42 S.E. at 658, *Ohio Fuel Oil Co. v. Greenleaf*, 84 W. Va. 67, 75, 99 S.E. 274, 278 (1919); and an implied covenant to market, *Wellman v. Energy Resources, Inc.*, 210 W. Va. 200, 557 S.E. 2d 254, 265 (2001). It strains logic to impose implied covenants to develop on a lease but to prohibit the lessee from utilizing current technology to facilitate that development.



*Adkins*, 134 W. Va. at 724, 61 S.E.2d at 636, and the Panel held that Petitioners failed to offer any admissible evidence that the use of the surface was not reasonable and necessary to develop the mineral estate, Appendix Record at 2495 ¶ 18, this Court should affirm the Orders. Putting the determination of reasonableness in the hands of the Panel assures the continuity of those substantive rights and obligations of the parties which were defined generations ago. See *Justice v. Pennzoil Co.*, 598 F.2d 1339, 1342 (4<sup>th</sup> Cir. 1979).

**C. Absent Language to the Contrary, a Mineral Severance Deed Does Not Prohibit the Use of Advancements in Technology.**

Petitioners assert that severance deeds granted decades ago on which Respondents rely for operational rights do not contemplate Respondents' use of horizontal drilling technology that did not exist at the time those deeds were executed. Instead, Petitioners assert that a mineral owner's right to develop the mineral estate is limited solely to technology that existed at the time of the severance of the oil and gas estate. (Petitioner's Brief pp. 15-16.) Petitioners' position is contrary to both the law and logic.

West Virginia law clearly holds that the grantors of mineral severance deeds are presumed to have contemplated future advancements in the technology for natural resource development. At the turn of the last century, this Court held that a purchaser of a coal estate was not limited to operational rights existing at the time of the conveyance, but could employ more modern machinery reasonably necessary to mine the coal reserve in the absence of express restrictions in the grant. *Armstrong v. Maryland Coal Co.*, 67 W. Va. 589, 69 S.E. 195, 203 (1910). In *Bassell v. West Virginia Central Gas Co.*, 86 W. Va. 198, 103 S.E. 116, 117 (1917), an oil and gas lessor

objected to the accelerated production of natural gas from the premises through the newly introduced use of compressors. Rejecting the lessor's contention, this Court held that the lessor:

executed the lease and conferred this [development] right in an age of rapid and startling invention which wrought its wonders and transformations in no department of human activity more suddenly, progressively, and radically than in mining, transportation, and enlargement of enterprises and undertakings. Parties to contracts are held, in the absence of agreements to the contrary, to have contemplated modifications of their relations under their contracts, by the development of improvements and new methods in the progress of science and invention.

*Id.* In describing the severance of the surface from the mineral estate, this Court has found that "[o]wners convey an interest in land to a recipient knowing that, in a hundred years, the use of the land may change. Surface used for farmland today may be a city office complex tomorrow. Worthless mineral shale too deep underground yesterday can today produce natural gas through hydraulic fracturing." *West Virginia Department of Transportation v. Veach*, 799 S.E.2d 78, 96 (2017).

Petitioners gloss over these clear statements of law and focus on minor factual details of each case which did not impact this Court's ultimate holdings in the cases. (Pet'r Br. pp. 21-22.) Unless development and operational rights are expressly limited in the mineral severance deeds, West Virginia case law clearly provides that such rights shall evolve with changes in technology reasonably necessary for mineral development. Absent such a conclusion, how could the oil and gas industry, or any industry using technology to develop natural resources, evolve over the years? When oil and gas reserves were first being discovered in the 1800's, the operators used primitive spring pole drilling that only penetrated a few hundred feet into the earth. David A. Waples,

*The Natural Gas Industry in Appalachia*, pp. 10-12, (Second Edition, 2012). The spring pole method was soon replaced by the cable-tool method. *Id.* at 122-123. During the early twentieth century rotary drilling came into practice as the preferred method to efficiently drill oil and gas wells into much deeper formations in Appalachia. The efficiency of rotary drilling was further enhanced by various fracturing techniques. *Id.* at 125-127. Since approximately 2003, horizontal drilling in the Marcellus and Utica shales have revolutionized the oil and gas industry in the Appalachian Basin. *Id.* at 229-233. If operational rights are tied directly to techniques originally contemplated at the time of the severance of the oil and gas, then every few years as technological advancements occur, producers would not be able to develop the oil and gas resources of the State in any sort of ongoing and efficient manner. Adoption of the legal paradigm espoused by Petitioners would result in the perverse situation of prohibiting mineral development when technological advances are made. The effective result would put West Virginia in the proverbial dark ages of oil and gas, and other natural resource, development.

**D. Utilization of the Surface to Develop Adjacent Mineral Tracts Is a Reasonable and Necessary Practice.**

Petitioners assert that Respondents are prohibited from utilizing horizontal drilling because it develops minerals within parcels laying beyond those underneath the surface on which the well pad sits. (Pet'r Br. p. 24.) While Petitioners attempt to obscure the gist of their argument by couching it in terms of creating a nuisance, they are unquestionably asserting that horizontal drilling should be prohibited because it develops minerals beyond the estate severed from the surface. *See* Pet'r Br. p. 26 ("In other words, a mineral owner

cannot make use of the surface on one's property to enjoy the mineral estate underlying a separate tract.")

To accept Petitioners' idea that development operations cannot exceed the area of the parcel on which they originate would destroy the whole idea of unitization which is imbedded in West Virginia statutory law.<sup>37</sup> Prior to the era of horizontal drilling, the unitization of various parcels for a vertical well was sometimes necessary because when using horizontal fracturing, even a vertical well would sometimes drain mineral parcels extending beyond the surface tract on which that well was drilled. By contrast, unitization is essential to horizontal drilling because the well bores nearly always extend horizontally to mineral tracts located far beyond the surface tract on which they are drilled.

Moreover, Petitioners do not even have standing to take advantage of these objections, because they do not own the surface being disturbed as a result of the development of mineral rights in the situations involved with these cases. Petitioners have misconstrued West Virginia case law in attempting to support their position. Petitioners have relied upon decisions such as *Quintain Development, LLC v. Columbia Natural Resources, Inc.*, 210 W. Va. 128, 556 S.E.2d 95 (2001), *Coffindaffer, Squires*, and *Adkins* that involved surface owners whose surface estate was directly disturbed by the oil and gas operations on their property in question. This is not the situation in the current case. Petitioners own surface properties that are in the vicinity of the oil and gas operations of Respondents and they are complaining about the remote effects of noise, dust, light, and emissions that do not originate from their property.

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<sup>37</sup> W. Va. Code § 22-6A-2(a)(2) ("These practices have resulted in a new type and scale of natural gas development that utilize horizontal drilling techniques, allow the development of multiple wells from a single surface location, and may involve fracturing processes that use and produce large amounts of water ...").

Understanding that distinction, the factual question of whether a particular surface parcel can be utilized to develop the minerals on adjoining parcels is not even an issue before this Court.

Nonetheless, the narrow issue of the interplay between the exercise of a mineral owner's express and implied rights to develop the mineral estate by horizontal drilling and a nearby surface owner's right to reasonable use and enjoyment of the surface estate is one of first impression for this Court. The majority rule in other jurisdictions, which should be adopted here, is that unitization and pooling of mineral estates grant with them the reasonable right to use the surface of any tract in the drilling unit. *See Gulf Oil Corp. v. Deese*, 275 Ala. 178, 153 So. 2d 614 (1963); *Miller v. Crown Cent. Petroleum Corp.*, 309 S.W.2d 876 (Tex. Civ. App. 1958); 53 A.L.R.3d 16, § 8(a) (1973); *see also, Nelson v. Texico, Inc.*, 525 P.2d 1263 (1974); *Kyser v. Amoco Production Co.*, 135 N.M. 767 (2004); and *Remeir v. Gulf Oil Corp.*, 664 S.W.2d 456 (Ark. 2004). For example, in *Deese*, the Alabama Supreme Court relied on an interpretation of Alabama's pooling statute in finding that the surface of any tract in the unit maybe used to develop the entire mineral estate. *Deese*, 275 Ala. at 182, 153 So. 2d at 618. In West Virginia, similar legislation leads to the conclusion that the surface of any tract in a pooled unit may be used in connection with the reasonable development of the unit. West Virginia legislation seeks to promote the conservation of natural resources by pooling and unitizing parcels and to ensure economical returns on production investments. W. Va. Code §§ 22C-9-7(a) and (b). Pooling allows for the efficient production of a large area of land through the sharing of resources and eliminates the need to drill a well on each parcel of land, reducing waste and more widespread surface disturbance.

In following the rule in other jurisdictions and West Virginia's own legal precedent of allowing the dominant mineral estate to utilize and burden the corresponding surface estate in order to develop the mineral estate, it is entirely consistent that the surface estate of each mineral tract in a drilling unit would be accessible for any reasonable use necessary to horizontally drill that mineral estate. By extension, the right to utilize the surface parcel for the development of the subsurface minerals surely incorporates the ability to temporarily and remotely affect the surface parcel in the same unit as well, since this is a far lesser burden on the surface owner than constructing a well pad, pipeline or road.

Petitioners' argument is, in practical terms, an argument to prohibit pooling and unitization because Petitioners assert that a surface tract cannot be used to develop a mineral estate unrelated to the surface tract on which the development activity occurs. Taking Petitioners' position to its logical conclusion, Petitioners are advocating for the construction of a well pad and well on each surface tract in a pooled unit in order to allow the temporary use of each surface estate for purposes of developing the underlying mineral estate. Rather than develop the mineral estate in a manner that is that is most efficient and least intrusive on the surface estates as a whole, Petitioners desire to turn back the clock; assuming producers wanted to invest the money to construct a well on each surface tract, the landscape of West Virginia would be littered with drilling rigs similar to Huntington Beach, California, or Spindletop, Texas, in their drilling heyday. It strains credulity to believe that West Virginia law demands this result.

As discussed below, consideration should be given to our State legislature's stance on the necessity and public value of horizontal drilling. Through various statutory provisions, our legislature has established a public policy to promote horizontal drilling. In

addition, West Virginia has recognized the right to pool drilling units for horizontal drilling. Unitization includes the right to use adjacent tracts to develop the mineral estate. The intent of the regulatory and statutory environment of West Virginia grants the right to use the surface estate of any mineral tract in a pooled unit for the drilling of those minerals. It is therefore well within the rights of operators to utilize horizontal drilling to develop the mineral estate, notwithstanding that such reasonable development may temporarily interfere with the use and enjoyment of a surface tract within the pool.

**E. West Virginia Public Policy Promotes Horizontal Drilling.**

The West Virginia legislature has made clear that the State's public policy is to promote efficient development of oil and gas through horizontal well technology. *See McGregor v. Camden*, 47 W. Va. 193, 197, 34 S.E. 936, 937 (1899) ("The drilling of oil and gas wells is not only a legitimate business, but public policy upholds it, as being for the general welfare."). The West Virginia Legislature made the following declarations and findings of public policy in support of horizontal drilling in the Horizontal Well Act of 2011 (effective December 14, 2011):

The advent and advancement of new and existing technologies and drilling practices have created the opportunity for the efficient development of natural gas contained in underground shales and other geologic formations;

These practices have resulted in a new type and scale of natural gas development that utilize horizontal drilling techniques, allow the development of multiple wells from a single surface location, and may involve fracturing processes that use and produce large amounts of water; [and]

Allowing the responsible development of our state's natural gas resources will enhance the economy of our state and the quality of life for our citizens while assuring the long term protection of the environment.

W. Va. Code § 22-6A-2(a)(1), (2), (8).

Furthermore, in establishing the Oil and Gas Conservation Commission for the regulation of deep wells, the Legislature declared the following:

- (a) It is hereby declared to be the public policy of this state and in the public interest to:
  - (1) Foster, encourage and promote exploration for and development, production, utilization and conservation of oil and gas resources;
  - (2) Prohibit waste of oil and gas resources and unnecessary surface loss of oil and gas and their constituents;
  - (3) Encourage the maximum recovery of oil and gas; and
  - (4) Safeguard, protect and enforce the correlative rights of operators and royalty owners in a pool of oil or gas to the end that each such operator and royalty owner may obtain his just and equitable share of production from such pool of oil or gas.

W. Va. Code § 22C-9-1(a).

Additionally, in enacting the Marcellus Gas and Manufacturing Development Act (effective July 1, 2011), the West Virginia Legislature made the following declarations:

The advent and advancement of new and existing technologies and drilling practices have created the opportunity for the efficient development of natural gas contained in underground shales and other geological formations.

With development of the Marcellus shale comes the opportunity for economic development in related areas of the economy including, but not limited to, manufacturing, transmission of natural gas and related products and the transportation of manufactured products.

It is in the interest of national security to encourage post-production uses of natural gas and its various components as a replacement for oil imported from other countries.

The Legislature declares that facilitating the development of business activity directly and indirectly related to



development of the Marcellus shale serves the public interest of the citizens of this state by promoting economic development and improving economic opportunities for the citizens of this state.

W. Va. Code § 5B-2H-2(a)(1)—(3), (b).

Finally, the Legislature has acknowledged the significance of removing impediments to oil and gas development. *See* W. Va. Code § 55-12A-1 ("It is the intent of the Legislature . . . to facilitate development of coal, oil, gas, and other minerals, as part of the public policy of the state, by removing certain barriers to such development . . . ."). As embodied in the declarations above, the West Virginia Legislature seeks to facilitate the development the State's oil and gas resources in a manner that maximizes efficiency, prevents waste, improves the economy, and enhances the quality of life for West Virginia's citizens. Accordingly, protecting the mineral owner's right to develop the mineral estate, which includes the right to utilize advanced and evolving production technologies, would support this exceptionally important public good.

#### IV. CONCLUSION

Reversing the Orders and adopting Petitioners' legal positions will dramatically change the oil and gas landscape in West Virginia and effectively prohibit mineral interest owners and producers from developing mineral interests in West Virginia. Moreover, the implications of this Court's decision reach beyond state borders: in an age where the global energy landscape is uncertain, improving our country's energy independence through responsible development of its natural resources is essential. *See* W. Va. Code § 5B-2H-2(a)(3) ("It is in the interest of national security to encourage post-production uses of natural gas and its various components as a replacement for oil imported from other countries."). Horizontal drilling is efficient and effective and accounts for nearly 90% of the total natural gas produced in West Virginia. The law in West Virginia has been clear: mineral interest owners have the right to use all reasonable and necessary means to develop the mineral estate, including the right to use the surface estate in connection with horizontal drilling. Accordingly, WVONGA and IOGA join Respondents in seeking affirmation of the Judgment Order and the Post-Judgment Order. Respectfully submitted this 27th day of July 2017.



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**CERTIFICATE OF SERVICE**

I hereby certify that on this 27th day of July 2017, I caused true and accurate copies of the foregoing **JOINT BRIEF OF AMICI CURIAE WEST VIRGINIA OIL AND NATURAL GAS ASSOCIATION AND THE INDEPENDENT OIL AND GAS ASSOCIATION OF WEST VIRGINIA, INC.** to be served on the foregoing by electronic mail and U.S. First Class Mail:

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