

LSU Journal of Energy Law and Resources

Volume 1
Issue 2 *Spring 2013*

5-1-2013

The Frac-as Over Property Taxation of Louisiana Oil and Gas Wells

Andrew M. Heacock

Repository Citation

Andrew M. Heacock, *The Frac-as Over Property Taxation of Louisiana Oil and Gas Wells*, 1 LSU J. of Energy L. & Resources (2013)

Available at: <https://digitalcommons.law.lsu.edu/jelr/vol1/iss2/8>

This Article is brought to you for free and open access by the Law Reviews and Journals at LSU Law Digital Commons. It has been accepted for inclusion in LSU Journal of Energy Law and Resources by an authorized editor of LSU Law Digital Commons. For more information, please contact kreed25@lsu.edu.

The Frac-as Over Property Taxation of Louisiana Oil and Gas Wells

TABLE OF CONTENTS

Introduction.....	179
I. Background.....	182
A. Louisiana’s <i>Ad Valorem</i> Taxation.....	182
B. Anatomy of a Modern Oil and Gas Well.....	186
II. Can the “Hole” Thing Be Taxed?.....	189
A. Principles of Louisiana Property Law.....	189
1. Division of Things.....	190
2. Accession.....	192
B. Jurisprudential Insight.....	195
III. <i>Ad Valorem</i> Tax Administration—Practical Considerations.....	198
A. The Conflict Between Appraisal Procedure and Louisiana Property Law.....	199
B. The Scope of Enforcement.....	201
IV. The Search for Fair Market Value.....	205
A. Overstating Value Using the Cost Approach.....	205
B. Salvage Value—An Alternative Approach to Determining Fair Market Value.....	206
Conclusion.....	209

INTRODUCTION

Along with a breathtaking influx of wealth, the Haynesville Shale’s¹ recent boom in natural gas production has brought its

Copyright 2013, by ANDREW M. HEACOCK

1. The Haynesville Shale is an Upper Jurassic-age shale bounded by sandstone (Cotton Valley Group) above and limestone (Smackover Formation) below. U.S. DEP’T OF ENERGY, *Modern Shale Gas Development in the United States: A Primer* 20 (April 2009), available at <http://dnr.louisiana.gov/assets/docs/mineral/haynesvilleshale/ShaleGasPrimer2009.pdf> [hereinafter “Primer”].

share of new controversies to Louisiana.² Companies exploring the formation use recently developed drilling techniques in order to unlock the prodigious amount of natural gas from the dense, solid rock comprising the reservoir.³ In other states that contain “unconventional” formations,⁴ or those like the Haynesville Shale which hold deposits that are inaccessible without the use of the new techniques, concerns for the preservation of groundwater have been at the forefront of the debate.⁵ Not to be outdone, Louisiana has reacted to the new techniques by making various changes to state and local regulations on oil and gas drilling in order to maximize Louisiana’s natural resources,⁶ sometimes impacting property law concepts as old as the civil law tradition at the heart of Louisiana’s unique legal system.⁷

As companies developing unconventional resources like the Haynesville Shale experience unparalleled success, many state

It is primarily drilled for natural gas in four Louisiana parishes (Caddo, Bossier, Desoto, and Red River), where it is roughly 11,000 feet below the surface. *What is Haynesville Shale All About?*, LA. DEP’T NAT. RESOURCES, <http://dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=442> (last visited Feb. 11, 2013).

2. On March 24, 2008, Chesapeake Energy Corporation announced the “discovery” of the Haynesville Shale and set off a frenzied bidding war for the rights to tap its massive quantities of natural gas. *Chesapeake Announces Haynesville Shale Discovery and Seven Other New Unconventional Discoveries and Projects; Increases Capital Expenditures to Accelerate Development*, CHESAPEAKE ENERGY CORPORATION, <http://www.chk.com/News/Articles/Pages/1121277.aspx> (last visited Feb. 11, 2013). Since Chesapeake’s announcement in 2008, when there were roughly a dozen wells producing from the Haynesville Shale, the formation has become the largest producer of natural gas in the United States. *Haynesville surpasses Barnett as the Nation’s leading shale play*, U.S. ENERGY INFO. ADMIN. (Mar. 18, 2011), <http://www.eia.gov/todayinenergy/detail.cfm?id=570>.

3. Jim Efstathiou Jr. & Kim Chipman, *Fracking: The Great Shale Gas Rush*, BLOOMBERG BUS. WK. MAG. (Mar. 3, 2011), http://www.businessweek.com/magazine/content/11_11/b4219025777026.htm.

4. The US Energy Information Administration estimates that unconventional gas formations represent about 60 percent of all onshore recoverable gas in the United States. Primer, *supra* note 1, at 1.

5. See, e.g., Sarah Hoyer & Steve Hargreaves, *'Fracking' yields fuel, fear in Northeast*, CNN (Sept. 3, 2010, 7:06 AM), <http://www.cnn.com/2010/US/09/02/fracking/index.html>.

6. LA. REV. STAT. ANN. § 30:961–63 (2010).

7. Regulations on the use of surface water in hydraulic fracturing have altered the rights of riparian ownership, and local governments have utilized the Obligation of Neighborhood to minimize the noise created by drilling activity. See generally Laura Springer, *Waterproofing the New Fracking Regulation: The Necessity of Defining Riparian Rights in Louisiana's Water Law*, 72 LA. L. REV. 225 (2011).

policymakers have followed their federal government counterparts in rethinking the tax incentives bestowed upon oil and gas companies.⁸ Louisiana has used tax subsidies to incentivize oil and gas companies to use alternative exploration methods and to promote new discovery.⁹ Subsidies exist for reuse of the noxious “produced water” that is a waste byproduct of drilling a well,¹⁰ utilizing “tertiary recovery” methods that involve pumping carbon dioxide into a well to stimulate “heavy” crude oil,¹¹ and on wells that use horizontal drilling.¹²

Critics have also targeted Louisiana’s system of *ad valorem* taxation, or property taxation, for oil and gas wells as a form of subsidy.¹³ In response, the Louisiana Tax Commission began considering proposals to change its own guidelines for determining the fair market value of oil and gas properties.¹⁴ If the Louisiana Tax Commission’s proposed valuation methods were adopted, the property tax burden for modern wells would increase over 100 percent in most cases, resulting in tens of millions of dollars of additional revenue to parishes with high drilling activity. The oil and gas industry opposes the methods, claiming they are inconsistent with Louisiana law and state public policy favoring efficient development of the state’s natural resources.¹⁵ In light of this recent controversy, this Comment demonstrates that Louisiana’s constitution and civilian property regime coalesce to render all but certain equipment in the well exempt from *ad valorem* taxation.

Part I of this Comment provides the background of the legal and technical concepts necessary for consideration of this issue. The legal subsection first provides a summary of Louisiana’s *ad*

8. See Carl Hulse, *Democrats See Strategy to End Big Oil Tax Breaks*, N.Y. TIMES, May 8, 2011, available at <http://www.nytimes.com/2011/05/09/us/politics/09congress.html>.

9. One statute declares the legislature’s intent “to encourage new discovery wells in the oil and gas sector, a mainstay of Louisiana’s historic economic base, which has been in decline for the last decade.” LA. REV. STAT. ANN. § 47:648.1 (2010).

10. LA. REV. STAT. ANN. § 47:633.5 (2010); see also Karen Turni Bazile, *Change In Taxing Of Inactive Wells Sought Oil, Gas Industry To Ask La. For Relief*, NEW ORLEANS TIMES PICAYUNE, Mar. 5, 2005, Metro Section.

11. LA. REV. STAT. ANN. § 47:633.4 (2010).

12. LA. REV. STAT. ANN. § 47:633(7)(iii)(aa) (2010).

13. See *infra* Part I.A.

14. See LOUISIANA TAX COMMISSION, *Request for Submission of Fiscal Impact*, Aug. 5, 2011 (adopted), available at <http://www.latax.state.la.us/> (under “Important Downloads”) (Requesting that oil and gas industry submit estimates to be considered at a future hearing).

15. LA. REV. STAT. ANN. § 30:1 (2010).

valorem taxation scheme. The technical subsection then summarizes how a modern oil or gas well is constructed, as well as briefly describes directional drilling and hydraulic fracturing. Part II considers the extent to which an oil or gas well can be subject to *ad valorem* taxation in light of Louisiana Civil Code articles on property. Part III demonstrates how the inconsistencies between Louisiana property law and the current system of *ad valorem* taxation cause difficulties in the administration and enforcement of property taxes on wells. Finally, Part IV demonstrates that the approach used to estimate the fair market value of wells is the heart of the problem, and that a more favorable alternative exists.

I. BACKGROUND

Ad valorem taxation in Louisiana is administered according to Louisiana's constitution and Revised Statutes. *Ad valorem* taxation of oil and gas wells is largely based on how the wells are constructed, which affects both the value of the wells and their various classifications under Louisiana's property law. To understand the issues surrounding taxation of oil and gas wells, it is necessary to have a basic understanding of Louisiana's *ad valorem* taxation scheme and the typical process of oil and gas well construction.

A. Louisiana's Ad Valorem Taxation¹⁶

An *ad valorem* tax, or property tax, is any tax that is based on the value of property owned by the taxpayer.¹⁷ All property in Louisiana is presumed to be subject to *ad valorem* taxation, unless specifically exempted by the Constitution.¹⁸ Article VII, section 18 of the Louisiana Constitution states that all property subject to taxation "shall be listed [on the parish tax rolls] at assessed valuation, which . . . shall be a percentage of its fair market value."¹⁹ Fair market value is defined by Louisiana statute as "the price for property which would be agreed upon between a willing and informed buyer and a willing and informed seller under usual and ordinary circumstances"²⁰

16. See generally LA. CONST. art. VII, § 18.

17. PATRICK H. MARTIN & BRUCE M. KRAMER, WILLIAMS & MEYERS, MANUAL OF OIL AND GAS TERMS (14th ed. 2009) ("Ad Valorem Tax") [hereinafter "MARTIN & KRAMER, TERMS"].

18. LA. CONST. art. VII, § 21 ("[T]he following property and no other shall be exempt from ad valorem taxation . . .").

19. LA. CONST. art. VII, § 18(A).

20. LA. REV. STAT. ANN. § 47:2321 (2010).

Louisiana parish and municipal governments levy *ad valorem* taxes annually. A parish official, called a Tax Assessor, is charged with administering the annual levy on property in his parish,²¹ which involves periodically appraising the value of that property and calculating the amount of *ad valorem* taxes that are owed for each property.²² To make these calculations, each assessor must comply with various provisions found in Louisiana's constitution and Revised Statutes, along with additional guidelines promulgated by the Louisiana Tax Commission. Louisiana law sanctions the use of three approaches to determine the fair market value of a property for *ad valorem* taxation: the market approach, the income approach, and the cost approach.²³

Under the market approach, the value of a property is determined by examining the prices paid for similar properties in actual market transactions.²⁴ This approach is the most preferred among professional appraisers,²⁵ but is not very effective when appraising specialized properties or ones for which there are few sales to compare.²⁶

Under the income approach, the property's value is defined as the amount of capital investment that would be justified by its net income.²⁷ This approach is used for valuing investment property by

21. LA. REV. STAT. ANN. § 47:2127(A) (2010).

22. LA. CONST. art. VII, § 18(D). An exception is that public service properties in Louisiana are valued and assessed by the Louisiana Tax Commission, a statewide body. *Id.*

23. LA. REV. STAT. ANN. § 47:2323 (2010).

24. LA. REV. STAT. ANN. § 47:2323(C)(1) (2010). The market approach is more commonly known in professional appraisal practice as the "sales comparison approach." Under this approach, an appraiser produces an indication of the property's value by comparing similar properties, while making adjustments based on differences with the property, to produce a range of potential values. THE APPRAISAL INST., THE APPRAISAL OF REAL ESTATE 63 (12th ed. 2001) [hereinafter "APPRAISAL INST., REAL ESTATE"].

25. Professional appraisers determine and report a property's value in accordance with the Uniform Standards of Professional Appraisal Practice (USPAP). See APPRAISAL STANDARDS FOUNDATION, UNIFORM STANDARDS OF PROFESSIONAL APPRAISAL PRACTICE (2012–2013 ed.), available at www.uspap.org. The appraisal guidelines followed by Louisiana Tax Assessors parallel the methods used under USPAP. To the extent that they conflict, a professional appraiser is bound to follow state law.

26. APPRAISAL INST., REAL ESTATE, *supra* note 25, at 63.

27. LA. REV. STAT. ANN. § 47:2323(C)(2) (2010). This approach is referred to as the "income capitalization approach" in standard appraisal practice. It is used to value a property as an investment, typically by dividing annual net income by the "capitalization rate" that is similar to similar investment properties in the market. An alternative income capitalization approach is to calculate the "Net Present Value" of the property which equal to the sum of the

determining the price an investor would pay for the property's net income to achieve market returns.

Under the cost approach, the assessor estimates the cost to replace or reproduce²⁸ the property new, subtracts the amount of depreciation,²⁹ and then adds the market value of the land.³⁰ The cost approach is most effective in appraising special-purpose properties that are not frequently exchanged in the market.³¹

The Louisiana Constitution ensures uniformity in *ad valorem* taxation by requiring fair market value to be "determined in accordance with criteria which shall be established by law and which shall apply uniformly throughout the state."³² In accordance with this provision, uniform guidelines and procedures are set by the Louisiana Tax Commission³³ for valuing various classes of property, one of which is oil and gas wells. The regulations established by the Louisiana Tax Commission determine how the local Tax Assessor determines the fair market value of oil and gas wells within his parish and the assessor is responsible for collecting the data necessary to appraise those wells.³⁴

future net income created by the property, discounted for future inflation. APPRAISAL INST., REAL ESTATE, *supra* note 25, at 64.

28. Reproduction cost and replacement cost are two different bases used to determine cost. Reproduction cost is the estimated cost to construct an exact replica of the property with the same materials, construction standards, and obsolescence. Replacement cost is the estimated cost to construct a property with the same utility, but with contemporary materials and standards. APPRAISAL INST., REAL ESTATE, *supra* note 25, at 357. For example, if one was nostalgic enough to model their home after that of Louisiana's first Governor, William Claiborne, a replacement might include central air conditioning and indoor plumbing; a reproduction would not.

29. Depreciation is the loss of property value from any cause, such as deterioration from age, functional obsolescence or defect in design, or external factors that render the property obsolete. APPRAISAL INST., REAL ESTATE, *supra* note 25, at 364. Depreciation is calculated in different ways in both real estate appraisal and in tax accounting. Depreciation in appraisal indicates how much less a willing and informed buyer would pay for the property than the cost of replacing it. Depreciation in tax accounting is called "book depreciation" and is estimated using a depreciation schedule set by the Internal Revenue Service rather than market-derived. APPRAISAL INST., REAL ESTATE, *supra* note 25, at 365.

30. LA. REV. STAT. ANN. § 47:2323(C)(3) (2010).

31. APPRAISAL INST., REAL ESTATE, *supra* note 23, at 354. When used in tandem with one or both of the other generally accepted approaches, the cost approach usually sets the upper limit of the value range.

32. LA. CONST. art. VII, § 18(D).

33. LA. REV. STAT. ANN. § 47:2323 (2010).

34. LA. REV. STAT. ANN. § 47:1958 (2010).

The Louisiana Tax Commission requires assessors to use the cost approach to value oil and gas wells.³⁵ Because the accuracy of the cost approach depends on the accuracy of the cost estimates used by the appraiser, the Louisiana Tax Commission directs assessors using this approach to use cost indexes found in appraisal industry data references.³⁶ The assessor will consult tables that have preset values representing the cost per foot of drilling a new oil or gas well, which varies depending on the well's producing depth, and then multiply the associated cost-new per foot by the number of feet in the well's producing depth.³⁷

The assessor then reduces this value, which theoretically represents the cost-new of the taxable portion of the well, based on the age of the well to account for wear and tear or physical depreciation.³⁸ Depreciation, like cost-new, is determined using a table of preset value losses based on the age of a well.³⁹ The value of a well is reduced on this basis from 4 percent in its first year to 20 percent in its seventeenth year and in every year thereafter.⁴⁰ The Guidelines also allow adjustments for economic obsolescence in cases of marginal or non-producing wells.⁴¹

Once the appropriate obsolescence and depreciation reductions have been applied, the remaining number represents the fair market value of the taxable parts of the well, and the property taxes owed on that well will be a certain percentage of this value.

The Louisiana Constitution exempts oil and gas from all forms of taxation, except severance taxes.⁴² However, the Louisiana

35. See LA. ADMIN. CODE tit. 61, pt. 5, § 301 (2010) ("Cost Approach: In the absence of an active market, yielding comparable and reliable data, which can be used in determining market value, use of the cost approach as provided herein is the best approach.").

36. LA. ADMIN. CODE tit. 61, pt. 5, § 303(A)(1) (2010). The Tax Commission requires the use of the Residential Cost Handbook and Marshall Valuation Service, published by Marshall and Swift. *Id.*

37. LA. ADMIN. CODE tit. 61, pt. 5, § 907(A)(7)(1) (2010). The costs differ in the tables depending on if the well is for oil or gas, and where in the state or territorial waters the well is drilled. *Id.* The Guidelines do not address which table to consult for wells that produce both oil *and* gas.

38. LA. ADMIN. CODE tit. 61, pt. 5, § 907(A)(2) (2010); *see supra* note 29.

39. LA. ADMIN. CODE tit. 61, pt. 5, § 907(B)(2) (2010).

40. *Id.*

41. LA. ADMIN. CODE tit. 61, pt. 5, § 907(A)(6) (2010). The Guidelines define economic obsolescence as the loss of value due to factors external to the property, or independent of it, and do not relate to its age. LA. ADMIN. CODE tit. 61, pt. 5, § 301 (2010). This term is sometimes used interchangeably with "external obsolescence" because adverse market conditions, such as lack of demand for oil or gas, are considered external influences. APPRAISAL INST., REAL ESTATE, *supra* note 24, at 363.

42. LA. CONST. art. VII, § 4(B).

Revised Statutes provide that payment of severance taxes shall not affect the taxpayer's liability for "taxes levied upon their real estate and other corporeal property."⁴³ Taken together, these provisions imply a distinction between the minerals sought and the equipment used to seek and develop them. Because all property is presumed to be subject to *ad valorem* taxation unless otherwise exempt,⁴⁴ the corporeal property used to produce oil and gas is taxable; meanwhile the oil and gas leases or rights and the minerals themselves are not.

Because only certain components of oil and gas wells are likely taxable under Louisiana constitutional and statutory provisions related to *ad valorem* taxes, and the cost of construction is the baseline consideration in determining their fair market value, an understanding of how oil and gas wells are constructed through the drilling and completion process is necessary to understand their proper place within Louisiana's *ad valorem* taxation scheme.

B. Anatomy of a Modern Oil and Gas Well

Since the new millennium began, oil and gas wells in Louisiana and elsewhere have been increasingly drilled horizontally.⁴⁵ Because the reservoirs that contain oil or gas are usually stacked in horizontal layers,⁴⁶ a driller can increase the amount of oil or gas a well can recover by drilling horizontally to expose significantly more of the reservoir to the well bore surface.⁴⁷ Accordingly, it is important to understand the technologies and practices employed by the oil and gas industry

43. LA. REV. STAT. ANN. § 47:643 (2010).

44. LA. CONST. art. VII, § 21.

45. See Thomas C. Hayes, *BUSINESS TECHNOLOGY; Horizontal Drilling, or How to Revive Oilfields*, N.Y. TIMES, Jul. 4, 1990, available at <http://www.nytimes.com/1990/07/04/business/business-technology-horizontal-drilling-or-how-to-revive-oilfields.html>.

46. ENERGY INFO. ADMIN., U.S. DEP'T OF ENERGY, DRILLING SIDWAYS—A REVIEW OF HORIZONTAL WELL TECHNOLOGY AND ITS DOMESTIC APPLICATION 1 (1993), available at <ftp://ftp.eia.doe.gov/petroleum/tr0565.pdf> ["hereinafter DRILLING SIDWAYS"]. The Haynesville Shale covers an area of approximately 9,000 square miles with an average thickness of 200 feet to 300 feet. GROUND WATER PROT. COUNCIL & ALL CONSULTING, MODERN SHALE GAS DEVELOPMENT IN THE UNITED STATES: A PRIMER 20 (2009), available at <http://dnr.louisiana.gov/assets/docs/mineral/haynesvilleshale/ShaleGasPrimer2009.pdf>.

47. See DRILLING SIDWAYS, *supra* note 46, at 1.

today, in addition to understanding the anatomy of both modern and traditional wells.⁴⁸

The process of drilling a “horizontal well” begins by drilling vertically, in much the same way that a conventional well begins.⁴⁹ In modern times, most oil or gas wells are constructed through “rotary drilling,” which involves boring a hole through layers of rock and sand by continuous turning of a drill bit.⁵⁰ The bit is attached to a string of hollow pipe lengths collectively called a “drill stem.”⁵¹ As the hole gets deeper, more lengths of pipe are added at the top of the drill stem.⁵² During drilling, a heavy chemical compound, known in the industry as “drilling mud,” is circulated throughout the hole and back out again.⁵³ Circulating the mud lubricates and cools the bit in the hole, enables the driller to remove rock cuttings and debris from the hole without having to remove the bit, and prevents blowouts from high pressure strata that the drill bit passes through on the way to its target depth.⁵⁴

Once the well bore reaches a location just above the target formation, known as the “kickoff point,” the drill bit is gradually bent until the well bore is nearly parallel with the surface when it enters the reservoir.⁵⁵ When the drill bit enters the reservoir, it will continue laterally for whatever distance is deemed appropriate by the driller.⁵⁶

If subsurface tests indicate the target geological formation will produce sufficient quantities of oil or gas, the driller will

48. The methods by which petroleum is recovered from the earth are too numerous to summarize here. The descriptions of drilling methods *infra* are intended to provide the layperson with an understanding of oil or gas well construction that is sufficient to understand the application of pertinent legal concepts. For a more comprehensive view of oil or gas drilling, see generally PATRICK H. MARTIN & BRUCE M. KRAMER, *WILLIAMS & MEYERS, OIL AND GAS LAW* ch. 1 (2011) (providing “A Brief Introduction to Scientific and Engineering Background of Oil and Gas Law”) [hereinafter “MARTIN & KRAMER, OIL AND GAS LAW”].

49. *Id.*

50. *Id.* at § 103.

51. *Id.*

52. *Id.*

53. *Id.*

54. MARTIN & KRAMER, *OIL AND GAS LAW*, *supra* note 48, at § 103.

55. DRILLING SIDWAYS, *supra* note 46, at 2. Because the drill stem is not one pipe, but several small sections of pipe connected to each other, the drill stem can withstand even a ninety-degree change of direction as long as it is gradual enough. *Id.*

56. The lateral sections of a horizontal well often extend as far as 4000 feet or farther once inside a reservoir. MARTIN & KRAMER, *OIL AND GAS LAW*, *supra* note 48, at § 103.

commence with “completion” of the well.⁵⁷ The drill stem that tethered the drill bit to the machinery on the surface will be replaced with a new, heavier set of pipe called “casing.”⁵⁸ The casing allows the oil or gas to flow from the subterranean reservoir to the surface without escaping into other strata or contaminating drinking water aquifers. In order to prevent the hole from caving in, the driller will “set” the casing by filling the spaces between the casing and the wall of the hole with cement.⁵⁹ Once the cement is dry and the casing is set firmly in place, the driller will “perforate” the well by shooting holes through the cement and casing in multiple locations along the lateral portion to allow oil and gas trapped in the reservoir to flow into the well and up to the surface.⁶⁰

Another technology that, like horizontal drilling, has dramatically increased during the twenty-first century energy renaissance is hydraulic fracturing.⁶¹ Hydraulic fracturing takes place following perforation.⁶² The process begins by pumping large volumes of “fracking fluid” into the formation through the perforations.⁶³ When the pressure exceeds the strength of the rock in the formation, the rock is “fractured” into smaller crevasses as the fluid penetrates the formation.⁶⁴ Once the fractures are created, a “propping agent”⁶⁵ is pumped into the reservoir to prop the fractures open.⁶⁶ Once the operator stops pumping fluid into the reservoir, the formation’s natural geologic pressure will cause the fluid to flow back up the well bore and to the surface.⁶⁷ If the well is a successful discovery, the “flowback” will be immediately followed by oil and gas escaping the higher subsurface pressure. The proppant permanently remains in the fractures and keeps them

57. *Id.*

58. MARTIN & KRAMER, TERMS, *supra* note 17 (“Casing”).

59. *Id.*

60. *Id.*

61. Leonard Coburn, *The North American Oil and Gas Renaissance and its Implications: 2012 Forum on Global Energy, Economy and Security*, THE ASPEN INST.: ENERGY AND ENVIRONMENT PROGRAM (2012), available at http://www.aspeninstitute.org/sites/default/files/content/docs/pubs/2012GlobalForumRepFINALPDF_0.pdf.

62. MARTIN & KRAMER, TERMS, *supra* note 17 (“Hydraulic Fracturing”).

63. *Hydraulic Fracturing Background Information*, U.S. ENVTL PROTECTION AGENCY, http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/wells_hydrowhat.cfm (last visited Nov. 12, 2011). Fracking fluid is usually water mixed with a proprietary blend of chemicals. *Id.*

64. *Id.*

65. Propping agents are made with a blend of chemicals and sand. *Id.*

66. *Id.*

67. *Id.*

from collapsing, thus increasing the permeability of the reservoir and allowing more oil or gas to escape into the well bore.⁶⁸

The proper method of assessing oil and gas wells for purposes of *ad valorem* taxation hinges on two critical considerations. The first is identifying what parts, if any, of an oil or gas well are subject to *ad valorem* taxes in Louisiana. Second, to the extent that oil and gas wells are taxable, what is the best approach to ascertaining the fair market value of the taxable portion?

II. CAN THE “HOLE” THING BE TAXED?

Because only certain property is subject to taxation in Louisiana, a primary consideration is the extent to which a completed oil or gas well can even be subject to *ad valorem* taxation.⁶⁹ As Louisiana’s laws governing *ad valorem* taxation operate in tandem with Louisiana property law, an understanding of provisions from the Louisiana Civil Code articles on property and how the courts have applied them is essential.

A. Principles of Louisiana Property Law

All property in Louisiana is presumed to be subject to *ad valorem* taxation, unless specifically exempted by the Constitution.⁷⁰ One class of property that is exempt from *ad valorem* taxation is “[a]ll incorporeal moveables of any kind or nature whatsoever.”⁷¹ The term “incorporeal moveable” is defined in accordance with the Louisiana Civil Code of 1870, as amended.⁷²

68. *Hydraulic Fracturing Background Information*, *supra* note 63.

69. *See generally* note 18, *supra*.

70. LA. CONST. art. VII, § 21 (“[T]he following property and no other shall be exempt from ad valorem taxation: . . .”).

71. LA. CONST. art. VII, § 21(C)(18). Louisiana’s Revised Statutes contain an exemption with identical language, except that it pertains to “all intangible and incorporeal property of any kind” rather than “all incorporeal moveables of any kind.” LA. REV. STAT. ANN. § 47:1709 (2010). The Louisiana Constitution, unlike the United States Constitution, serves to limit the otherwise plenary power of the state, (*Hainkel v. Henry*, 313 So. 2d 577, 579 (La. 1975)) and the language “the following property and no other shall be exempt” is a direct limitation on the legislature’s ability to grant tax exemptions. *Id.* As a result, Revised Statutes section 47:1709 is likely unconstitutional in that it portends to give a broader property tax exemption than the legislature is authorized to give by the Louisiana Constitution. The validity of this statute has apparently only been considered once where it was ruled unconstitutional by the Louisiana First Circuit Court of Appeal. *Kansas City Southern Railway Co. v. Louisiana Tax Comm’n*, 676 So. 2d 812, 823 (La. App. 1 Cir. 1996).

72. LA. CONST. art. VII, § 21(C)(18). Louisiana property law and Louisiana state and local taxation are closely interrelated. Judges and elected officials

Louisiana's constitution also exempts oil and gas from any form of taxation other than severance taxes and prohibits adding additional taxable value to land as a result of oil or gas production.⁷³

The unique construction that is an oil or gas well exists at the marriage of both of the exceptions to the general rule that all property is subject to *ad valorem* tax. The oil or gas well is constructed with consent to use the land of another by virtue of a mineral lease or mineral servitude—both incorporeal immovables which cannot be taxed. A property's classification under the Louisiana Civil Code's Division of Things determines which *ad valorem* tax statute, if any, will govern.⁷⁴ Whether a property is subject to *ad valorem* taxation depends on whether it is classified as corporeal or incorporeal, and alternatively whether it is classified as moveable or immovable.⁷⁵

*1. Division of Things*⁷⁶

The Louisiana Civil Code contains numerous classifications for property. Property can be public, private, or common; moveable or immovable; corporeal or incorporeal;⁷⁷ or consumable or nonconsumable.⁷⁸ Though all forms of property in Louisiana have a classification within each of these taxa, the two that are determinative to how an oil or gas well is defined are movability and corporeality.

All property is classified as corporeal or incorporeal. Corporeal property is anything that has "a body, whether animate or inanimate, and can be felt or touched."⁷⁹ By contrast, "[i]ncorporeals are things that have no body, but are comprehended by the understanding, such as the rights of inheritance, servitudes,

applying Louisiana state and local tax laws are bound to do so in a manner that is consistent with the provisions of the Louisiana Civil Code.

73. LA. CONST. art. VII, § 4(B). Though this exemption is found in a separate section than the exemptions listed in Article 7, § 21, it is well-settled that this provision sufficiently exempts oil and gas from *ad valorem* taxation. See *Meyers v. Flournoy*, 25 So. 2d 601 (La. 1946).

74. See generally LA. CIV. CODE ANN. bk. 2, tit. 1, ch. 1 (2012) ("Division of Things").

75. See LA. CIV. CODE ANN. art. 448 (2011); See LA. CONST. art. VII, § 21(C) (exempting public things from *ad valorem* taxation). Though not directly relevant to oil and gas wells, *ad valorem* taxation of property may also depend on the classification of a thing as common, public, or private.

76. See *supra* note 74.

77. LA. CIV. CODE ANN. art. 448 (2011).

78. LA. CIV. CODE ANN. art. 535 (2011).

79. LA. CIV. CODE ANN. art. 461 (2011).

obligations, and right of intellectual property.”⁸⁰ In common parlance, corporeals are “things” and incorporeals are certain rights in those “things.” Therefore, in an oil or gas well, the cement, casing, water, sand, pumps, and other well equipment are corporeals; the “mineral rights,” such as the lease or servitude permitting the well’s construction, are incorporeal.⁸¹

Property is also classified as either movable or immovable. All things in Louisiana are presumed to be movable, unless classified otherwise by statute or the Civil Code.⁸² Some things are always classified as immovable, including tracts of land with their “component parts,”⁸³ buildings, and standing timber.⁸⁴ While the law clearly identifies the things that are always immovable, the classification of things that can be either moveable or immovable, such as “other constructions permanently attached to the ground,”⁸⁵ is far more challenging. This determination is nonetheless essential to determining who holds the real rights in things that become attached to or united with immovables.

These classifications also have a profound effect on who will have the duty to pay taxes levied on property, especially property which is attached to or combined with other property, as in the case of oil and gas wells. Because the duty to pay property taxes is “correlative and incidental” to the real right of ownership,⁸⁶ the duty remains attached to the property and is transferred along with ownership.⁸⁷ When things become united with other property,

80. *Id.*

81. LA. MIN. CODE art. 18 (2009).

82. LA. CIV. CODE ANN. art. 475 (2011).

83. LA. CIV. CODE ANN. art. 462 (2011).

84. LA. CIV. CODE ANN. art. 464 (2011).

85. *See* LA. CIV. CODE ANN. art. 491, cmt. b (2011). It seems counterintuitive that anything “permanently attached to the ground” could ever be considered “moveable.” However, because all things are presumed to be moveable unless the law states otherwise, LA. CIV. CODE ANN. art. 475 (2011), this conclusion necessarily follows from reading Article 463 (“Buildings, other constructions permanently attached to the ground, standing timber, and unharvested crops or ungathered fruits of trees, are component parts of a tract of land [and thus immovables] when they belong to the owner of the ground.”) *in pari materia* with Article 464 (“Buildings and standing timber are separate immovables when they belong to a person other than the owner of the ground.”). This leads to the stunning conclusion that a water tower, for example, may be classified as moveable under Louisiana law.

86. *See* LA. CIV. CODE ANN. art. 1763 (2011).

87. LA. CIV. CODE ANN. art. 1764 (2011). The owner’s liability for real obligations incident to property ownership are not personally binding, so the owner’s ultimate liability for nonperformance of his obligation to pay property taxes is the forfeiture or abandonment of his real rights in the property. This

determining who owns the property can become difficult and will depend on the degree of incorporation between the separate things, whether the things are moveable or immovable, and the circumstances under which they were united.⁸⁸ The principles that govern this analysis are contained in the Louisiana Civil articles on “accession.”

2. *Accession*⁸⁹

Accession is a civil law principle whereby the owner of a thing acquires the ownership of everything that is united with it.⁹⁰ The laws of accession thus determine who owns the respective things once they are united, and also dictate which remedies are available to the owners and former owners.

In Louisiana, the default rule is that ownership of a thing “includes by accession the ownership of everything that it produces or is united with it, either naturally or artificially.”⁹¹ Natural accession occurs when forces of nature increase the mass of a thing, such as when riverfront property increases in amount due to the buildup of sediment gradually deposited by the river. Artificial accession occurs when human beings cause the mass of a thing to increase by integrating or attaching other things to it. A classic example of artificial accession of an immovable occurs when capital improvement is made to an existing building.

Separate articles govern the accession of moveables and accession of immovables. Which articles will apply depends on the classification of the “principal thing”⁹² to which other things are attached. Where an oil and gas well is constructed on the land of

news should be a welcome relief to a person who has unknowingly acquired property via artificial accession of his immovables.

88. *See infra* Part II.A.2.

89. *See generally* LA. CIV. CODE ANN. bk. 2, tit. 2, ch. 1 & 2 (“General Principles [of Ownership]” and “Right of Accession,” respectively).

90. *See generally* Anne Kilian Moore, *Artificial Accession to Immovables*, 55 TUL. L. REV. 168 (1980).

91. LA. CIV. CODE ANN. art. 482 (2011).

92. LA. CIV. CODE ANN. art. 508 (2011). Though this term is only used in the Civil Code articles on accession of moveables, it is used in this Comment to refer also to immovables to which things are attached, such as land or buildings.

another,⁹³ the principal thing is the land itself, and therefore the articles on artificial accession of immovables will apply.⁹⁴

The ownership of things united with immovables is governed either by Louisiana Civil Code article 493 or 493.1. Under Article 493, buildings, plantings, and other constructions permanently attached to the ground belong to the person who made them, if they were made with the consent of the owner of the land.⁹⁵ Improvements made without consent belong to the landowner.⁹⁶

Under Article 493.1, however, if a thing becomes so incorporated into an immovable that it becomes a “component part”⁹⁷ of that immovable, it categorically belongs to the owner of the immovable, even if made with his consent.⁹⁸ Because the rights of the owners and former owners of these things differ from the things to which Article 493 applies, knowing whether something has become a “component part” is essential to determining who owns it.

Article 493.1 specifically refers to Articles 465 and 466 to define “component parts.” Unfortunately, these articles provide little in the way of clarity.⁹⁹ The challenge is particularly acute when the principle thing is land, as in the case of oil and gas wells, because the extensive provisions of Article 466 do not apply to land,¹⁰⁰ and Article 463 does not apply to improvements made by people other than the owner of the ground.

93. As a matter of industry practice, the company constructing and operating the well rarely acquires ownership of the land outright. This Comment’s analysis on accession will only address the normative arrangement where the person constructing the well does not own the land.

94. The well itself is arguably an “other construction permanently attached to the ground,” which is a moveable when it does not belong to the owner of the land. LA. CIV. CODE ANN. art. 493 (2011). Equipment that is installed into the well would therefore be governed by the laws of accession of moveables. See note 89, *supra*. However, other constructions permanently attached to the ground are treated the same way as immovables for the purposes of accession. A consideration of the articles governing accession of immovables is therefore sufficient for the purposes of this Comment.

95. LA. CIV. CODE ANN. art. 493 (2011).

96. *Id.*

97. LA. CIV. CODE ANN. art. 465, 466 (2011) (defining terms).

98. LA. CIV. CODE ANN art. 493.1 (2011).

99. For an analysis of these articles that is both illustrative and incisive, see Symeon Symeonides, *Faculty Symposium: Property: Error of Law and Error of Fact in Acquisitive Prescription*, 47 LA. L. REV. 429, 451 (1986) (stating that “this entire area of the Civil Code resembles a pile of ‘cans of worms’”).

100. Component Parts Of A Building Or Other Construction

Things that are attached to a building and that, according to prevailing usages, serve to complete a building of the same general type, without regard to its specific use, are its component parts. Component parts of

As a result, the only guidance from the Civil Code is the declaration in Article 465 that “[t]hings incorporated into a tract of land . . . so as to become an integral part of it, such as building materials, are its component parts.”¹⁰¹ Other than the building materials example, this article is little more than a truism: the “component part” of a thing is anything that is an “integral part” of the thing. Equally unhelpful is the revelation that an “integral part” is identified as having some undefined level of incorporation with the thing. As one recent commentator noted,¹⁰² judicial classification of things as either integral parts or as other constructions appears to be incidental, not deliberate or consistent. Other constructions permanently attached to the ground have been found by courts to include “wood pilings,¹⁰³ . . . underground pipelines,¹⁰⁴ permanent billboards,¹⁰⁵ and underground drainage systems.”¹⁰⁶ In contrast, integral parts of the land have been found to include “fill dirt,¹⁰⁷ septic systems,¹⁰⁸ and driveways.”¹⁰⁹ These cases make determinations without providing any rationale or hope of a transferrable analytical framework.

To further illustrate the trouble with applying these principles, consider the apposite example of a swimming pool constructed in a homeowner’s backyard.¹¹⁰ If the homeowner constructs the

this kind may include doors, shutters, gutters, and cabinetry, as well as plumbing, heating, cooling, electrical, and similar systems.

Things that are attached to a construction other than a building and that serve its principal use are its component parts.

Other things are component parts of a building or other construction if they are attached to such a degree that they cannot be removed without substantial damage to themselves or to the building or other construction.

LA. CIV. CODE ANN. art. 466 (2011).

101. LA. CIV. CODE ANN. art. 465 (2011).

102. Brad R. Resweber, *Opening the Can of Worms and Putting Them Back In: An Analysis of New Louisiana Civil Code Article 2695*, 67 LA. L. REV. 571 (2007).

103. *Anderson v. Tenneco Oil Co.*, 826 So. 2d 1143, 1148 (La. App. 4 Cir.), *writ denied*, 828 So. 2d 585 (La. 2002).

104. *Guzzetta v. Tex. Pipe Line Co.*, 485 So. 2d 508, 510–11 (La. 1986).

105. *Chastant v. Headrick Outdoor, Inc.*, 876 F. Supp. 105, 110 (W.D. La. 1995), *aff’d*, 81 F.3d 31 (5th Cir. 1996); *Beacham v. Hardy Outdoor Adver., Inc.*, 520 So. 2d 1086, 1088 (La. App. 3 Cir. 1987).

106. *Spiker v. City of Baton Rouge*, 804 So. 2d 659, 665. (La. App. 1 Cir. 2001), *writ denied*, 814 So. 2d 564 (La. 2002).

107. *Annina v. Eschette*, 814 So. 2d 13, 15 (La. App. 1 Cir. 2001), *writ denied*, 811 So. 2d 880 (La. 2002).

108. *Id.*

109. *Id.*

110. *See Resweber, supra* note 102.

swimming pool, the analysis is simple: he automatically owns it. There is no need to determine whether this is because it is an integral part of the land or because it is a component part of the land by virtue of being an “other construction permanently attached to the ground.”¹¹¹ However, if the homeowner gives another person the rights to use his backyard to build a swimming pool for their own use and enjoyment, the question becomes unavoidable: is the pool “so incorporated” into the land as to be an integral part of it such that it therefore belongs to the homeowner, or is it merely an “other construction” that has been permanently attached to the ground with the homeowner’s consent such that it therefore belongs to the person who built it? An oil or gas well can be readily substituted with the swimming pool in this example—both are holes dug on the land of another, made by a person as an incident to his right to use the land for a limited purpose.

Thus, in light of Louisiana’s Civil Code articles on property, an oil and gas well could be considered immovable as an integral part of the land to which it is attached, therefore belonging to the owner of the land to which it is attached, or it could be considered moveable as an “other construction” permanently attached to the ground with consent of the landowner, therefore belonging to the company that constructed the well. Moreover, only certain parts of the well may have become “integral,” whereas others remain distinguishable and therefore merely component parts of the well, which would be an “other construction permanently attached to the ground.”

Because the Civil Code does not offer definitive answers to these questions, past jurisprudential application of these concepts to oil and gas wells may be useful in resolving the present controversy.

B. Jurisprudential Insight

Louisiana jurisprudence considering the extent to which oil and gas wells are subject to *ad valorem* taxation is very limited and has therefore not reached the level of consistent application sufficient to hold substantial weight in Louisiana courts.¹¹² However, past

111. This assumes that the land belongs to the homeowner who constructed the swimming pool. *See* LA. CIV. CODE ANN. art. 463 (2011).

112. Louisiana does not adhere to the doctrine of *stare decisis*, as judicial decisions are not a primary source of law. *See* LA. CIV. CODE ANN. art. 1 (2011). Only when a series of decisions form a “constant stream of uniform and homogenous rulings having the same reasoning,” will it rise to the level of *jurisprudence constante* and operate with “considerable persuasive authority.”

decisions contemplating these issues are nonetheless informative, if not persuasive, as the two courts that considered the issue each gleaned similar interpretations of the law governing *ad valorem* taxation of oil and gas wells.¹¹³

The first case to directly address *ad valorem* taxation of oil and gas wells is *Meyers v. Flournoy*.¹¹⁴ The plaintiff in *Meyers* filed suit against the Caddo Parish sheriff for return of *ad valorem* taxes paid in protest¹¹⁵ on three producing gas wells, arguing the taxes violated the constitutional prohibition of any tax on oil or gas leases or rights, except the state severance tax.¹¹⁶ The property assessments on the wells listed the “gathering lines, separators, derricks, pumps, boiler station and oil tanks used in the operation of the wells and also on the gas wells themselves.”¹¹⁷ The sheriff argued that the assessments only included “the hole in the ground . . . and any tubing or casing or other items of property inserted in, or fixed in, the hole below the surface of the ground. . . .”¹¹⁸

The Louisiana Supreme Court rejected the plaintiff’s argument that the *ad valorem* taxes assessed on his property violated the constitutional prohibition against taxation on oil and gas leases and rights.¹¹⁹ The court reasoned that if the framers of the Louisiana Constitution of 1921 intended the tax prohibition to extend to the “corporeal movable property that the lessee owns and uses in the exercise of his right to explore for and produce oil or gas under his lease,”¹²⁰ they could have easily added language to that effect in the provision.¹²¹ The court believed that such an exemption, which

James L. Dennis, *Interpretation and Application of the Civil Code and the Evaluation of Judicial Precedent*, 54 LA. L.REV. 1, 15 (1993).

113. See A. N. YIANNPOULOS, LOUISIANA CIVIL LAW SYSTEM § 35, p. 53 (1977).

114. 25 So. 2d 601 (La. 1948). The constitutional provision being interpreted was Article 10, section 21 of the Louisiana Constitution of 1921, which was reenacted without substantial or material change as Article 7, section 4(B) of the Louisiana Constitution of 1974.

115. The tax protest suit was filed in accordance with Act number 23 of the Second Extraordinary Session of 1935, which exists today in similar form in the Louisiana Revised Statutes. See LA. REV. STAT. ANN. § 47:2134 (2010).

116. *Meyers*, 25 So. 2d at 602; see LA. CONST. art 10, § 21 (1921).

117. *Meyers*, 25 So. 2d at 602.

118. *Id.* (first omission in original).

119. *Id.* at 603. The court also rejected the sheriff’s argument that oil and gas leases and rights were not exempt merely because the severance tax provision prohibiting further taxes was found in a separate provision, rather than in the list contained in the *ad valorem* exemption provision. *Id.*; see *supra* note 42.

120. *Meyers*, 25 So. 2d at 603–04 (emphasis added).

121. *Id.* at 604.

would extend to millions of dollars of taxable property, would not have been omitted by the drafters simply as an oversight.¹²²

The court concluded by noting that the Caddo Parish Sheriff had not assessed taxes on the plaintiff's leases or rights.¹²³ Instead, the sheriff followed the Louisiana Tax Commission's guidelines for *ad valorem* taxation of oil and gas wells and levied taxes on "the piping, tubing, gathering lines, derricks, pumps and other equipment used by plaintiff in operating his gas wells."¹²⁴ Conspicuously absent from this description of the assessed property is any mention of the holes or the "gas wells themselves."¹²⁵

Contrasting the court's early description of the assessments with the descriptions later in the opinion, it is doubtful whether it considered the well bores or the "wells themselves"¹²⁶ as separable parts of the land or as belonging to the plaintiff as lessee of the minerals. It is unclear whether the court even considered those questions. Nonetheless, the court's holding is clear—the constitutional prohibition on levying *ad valorem* taxes on oil and gas does not extend to the corporeal moveable equipment used to explore for and develop oil and gas.¹²⁷

The only other case to directly address the limits of the oil and gas *ad valorem* tax exemption is *Silurian Oil Co. v. Fuselier*.¹²⁸ In *Silurian*, a mineral lessee filed suit to annul the "tax sale of an oil well" that resulted from nonpayment of *ad valorem* taxes.¹²⁹ The defendant, who purchased the property at a tax sale auction by the Sheriff, claimed he believed he was buying "only the equipment at the wellsite . . . [not] the well itself or the lease or any of the mineral interests."¹³⁰ The Louisiana Third Circuit Court of Appeal quickly confirmed the purchaser's belief, holding that "[t]he only thing which could have been sold at the tax sale was the movable equipment. Neither the well itself, nor the lease, nor any of the mineral interests could have been sold because this type of

122. *Id.*

123. *Id.*

124. *Id.*

125. *See supra* note 117.

126. *Id.*

127. *Meyers v. Flournoy*, 25 So. 2d 601, 604 (La. 1948).

128. 230 So. 2d 121 (La. App. 3 Cir. 1969).

129. *Id.* at 122. The tax sale deed described the property conveyed as 'OIL & GAS WELL AND OIL & GAS LAND EQUIPMENT' situated on the plaintiff's leasehold. *Id.*

130. *Id.*

property is exempt from *ad valorem* taxation.¹³¹ The court did not reference *Meyers v. Flournoy* in its opinion.¹³²

Silurian clearly indicated the court's belief that "the well itself" was *not* taxable.¹³³ In contrast, the assessment affirmed by the *Meyers* court purported to include "the well itself,"¹³⁴ though the *Meyers* court cryptically left this language out of its holding.¹³⁵ In fact, *Meyers v. Flournoy* is arguably more illuminating for what the court presupposes rather than states directly. However, what is clear from the opinions in *Meyers* and *Silurian* is that the well equipment is considered to be corporeal moveable property not included in the constitutional exemption for oil and gas and is therefore subject to *ad valorem* taxation. By negative implication, everything else comprising what the courts called the "well itself" is exempt from taxation.

III. *AD VALOREM* TAX ADMINISTRATION—PRACTICAL CONSIDERATIONS

The implication of *Meyers* and *Silurian*—that the taxable property in an oil and gas well consists only of the corporeal moveable equipment in the bore—is lent further support when Louisiana's constitutional tax provisions are reconciled with Louisiana property law. The obligation to pay property taxes is a real obligation and can only be borne by the owner of the taxable property.¹³⁶ Thus, property taxes may only be assessed on those parts of an oil or gas well owned by someone and not otherwise exempted. *Ad valorem* taxes may not be levied on the actual oil and gas below the surface, nor can property taxes be levied on the mineral lease or the servitude held by the owner of the mineral

131. *Id.* The court also noted that the advertisements giving notice of the tax sale of the wells was in the form provided for in tax sales of immovables, but the deed contained conflicting language that clearly referenced statutes governing tax sales of movables. *Id.* This suggests that the sheriff himself was unclear about what if anything was being conveyed at the tax sale.

132. *Id.* It is a mystery why the court omitted any reference to the only other Louisiana case to address *ad valorem* taxation of oil and gas wells, particularly a Louisiana Supreme Court opinion rendered only twenty years before. Presumably the court was aware of *Meyers* at the time of the *Silurian* opinion, because two of the *Silurian* judges including the opinion's author cited to *Meyers* in another opinion seven years earlier. See *Lewis v. State*, 145 So. 2d 353 (1962), *rev'd*, 156 So. 2d 431 (1963).

133. *Silurian*, 230 So. 2d at 122.

134. 25 So. 2d 601, 601 (La. 1948).

135. *Id.* at 603. See *supra* note 132.

136. See LA. CIV. CODE art. 1764 (2011).

rights.¹³⁷ What remains to be taxed is the corporeal moveable property found in the well. However, when the current method of appraising Louisiana oil and gas wells is considered, it becomes clear that value is placed on far more than the corporeal moveable property in the well.

A. The Conflict Between Appraisal Procedure and Louisiana Property Law

Louisiana Tax Assessors currently appraise oil and gas wells using the cost approach. The use of the cost approach to attribute a value to the taxable portion of an oil or gas well is imperfect, but at least is more appropriate than the market and income approaches. The market approach is not useful for valuing the wells because there are no comparable sales of a fully constructed oil or gas well that do not include a conveyance of the right to use that well to extract oil or gas.

The income approach would likely render the most accurate portrayal of the “fair market value” of an oil or gas well if the well could be considered together with the appurtenant mineral rights or leases. However, Louisiana’s constitutional limitations on oil and gas taxation prevent such consideration, and the well must be considered as if no mineral lease or servitude existed. On one hand, a well that cannot produce and market the substances below would not produce any income, and would therefore have no value.¹³⁸ Even if income could be fairly attributed to the physical structure rather than solely to the lease or mineral rights, calculating the taxable value of a well based on its productivity would result in levying a form of severance tax. The only real difference between the Louisiana severance tax and *ad valorem* taxes levied based on the value of a well’s capitalized income is that the *ad valorem* tax would be paid by the owner of the well itself, whereas severance taxes are paid by everyone with a right to royalty or working interest income in a well in proportion to their share of the revenues.¹³⁹

The cost approach is therefore the only remaining method of ascertaining value that is sanctioned under Louisiana law,¹⁴⁰ can be

137. LA. CONST. art. 7, § 4(B).

138. If the net present value (NPV) of such a well was calculated, the value would be negative because it would include costs incurred by the owner to fulfill his obligation to the landowner to restore the land to the condition it was in before the well was drilled. *See* LA. CIV. CODE ANN. art. 493 (2011); *supra* note 27 (discussing net present value).

139. LA. REV. STAT. ANN. § 47:632 (2010).

140. LA. REV. STAT. ANN. § 47:2323 (2010).

calculated based on sufficiently available data, and does not inadvertently run afoul of Louisiana's constitution. However, the use of the cost approach to ascertain the value of an oil or gas well could still be highly flawed in its application, specifically if it includes costs that are not attributable to taxable property. Attributing 100 percent of the costs to drill and complete a well, especially one where enhanced recovery techniques like hydraulic fracturing are used, would clearly be such a case.

The flaws in attributing all of the drilling costs to the taxable property are most glaring when one considers that hydraulic fracturing alone may represent up to half of the overall cost of drilling a modern well.¹⁴¹ The costs associated with this process should not be considered because they are not attributable to property that can be taxable. The fracturing itself does not materially affect the physical structure of the well or add to it in any way, so it can hardly be considered part of "constructing" a well. The water, chemicals, and sand that make up the fracking fluid are abandoned by the well operator when they are used. Much of this fluid flows back out of the well after the frac is complete, at which point it is waste product that the operator will dispose of or recycle for use in another well.¹⁴² In either case, the fluid has been abandoned, which occurs when physical possession is given up with the intent to relinquish ownership of it.¹⁴³ Whatever "flowback" fluid that does return to the operator's possession will be disposed of as waste, which would also amount to abandonment. Once abandoned, no one would own the fracking fluid, and therefore no one would incur the real obligation to pay property taxes on it.

The remaining fluid that does not flow back remains in the reservoir, especially the sand which is designed to remain in the reservoir to act as a "proppant" to keep it intact.¹⁴⁴ When the fluid flows into the reservoir and never returns, it has arguably become an "integral part" of the land.¹⁴⁵ Though this term is hard to define with any certainty, the fluid that consists of water and sand—both things that already exist naturally under the ground—likely fits even the loosest definition of integral part of the land. Considering that the integral parts of the land belong to the owner of the land even without his consent or knowledge, taxes levied on costs of

141. Erich Schwartzel, *Study: Fracking Priciest for Wells*, PITTSBURGH POST-GAZETTE, Aug. 31, 2011, at A9.

142. *Primer*, *supra* note 1, at 56–58.

143. *Id.*

144. *Id.*

145. LA. CIV. CODE art. 465 (2011).

fracturing would be owed by the landowner, as ownership of the land would necessarily include ownership of the fluid that has become an integral part of the land itself.¹⁴⁶

Likewise the inclusion of “intangible drilling costs”¹⁴⁷ in the appraisal under the cost approach, either inadvertently or intentionally, would be repugnant to Louisiana’s Constitution. In essence, these costs are those that are incurred in drilling an oil or gas well but cannot be directly attributed to any tangible or corporeal part of the well.¹⁴⁸

The conclusion that oil and gas wells are only partially taxable is further buttressed by a practical consideration—enforcing the taxes levied on a well.¹⁴⁹

B. The Scope of Enforcement

The penalty for failure to timely pay *ad valorem* taxes depends on whether the subject property is moveable or immovable. If *ad valorem* taxes on immovable property are not paid by the May following their due date, the parish tax collector¹⁵⁰ must sell the property at public auction.¹⁵¹ The property is sold subject to the tax debtor’s right to regain ownership by paying the taxes and penalties associated with the property within three years of the date of the sale.¹⁵² If not redeemed, the purchaser of the tax sale title has the right to take full ownership by instituting a quiet title action against the debtor.¹⁵³

146. See LA. CIV. CODE art. 490 (2011).

147. Also known as “IDCs.” See MARTIN & KRAMER, TERMS, *supra* note 17 (“Intangible Drilling and Development Costs”); see also *infra* note 180.

148. This logically follows from the intuitive understanding that, in essence, a well is nothing more than a carefully reinforced hole in the ground. The hole itself cannot be taxable, because it is not a “thing.” In fact, it is better described as “an absence of things” deliberately placed below the surface of the earth. See MARTIN & KRAMER, TERMS, *supra* note 17 (defining “Well,” in part, as “an orifice in the ground”). In Louisiana, only “things” can be considered property, and therefore subject to taxes on property. *Cf.* LA. CIV. CODE bk. 2, tit. 1 (“Things”).

149. An action to annul a tax sale of a well for nonpayment of *ad valorem* taxes demonstrates the difficulties that arise in such a situation. *Silurian Oil Co. v. Fuselier*, 230 So. 2d 121 (La. App. 3 Cir. 1969).

150. The sheriff acts as the tax collector for all parishes except Orleans, which elects a tax collector that is distinct from the sheriff. LA. REV. STAT. ANN. § 47:2051 (2010).

151. LA. CONST. art. 7, § 25(A). The tax collector must send the taxpayer notice reasonably calculated to apprise him of a pending tax sale. *Mennonite Bd. of Missions v. Adams*, 462 U.S. 791 (1983).

152. LA. CONST. art. 7, § 25(B)(1).

153. LA. REV. STAT. ANN. § 47:2266 (2010).

The process of collecting *ad valorem* taxes is different for moveable property.¹⁵⁴ To satisfy outstanding tax obligations on moveable property, a tax collector may seize and sell any moveable property of the delinquent taxpayer; this sale is final without right of redemption.¹⁵⁵ If the tax collector cannot find moveable property of the debtor, he may levy on incorporeal rights if necessary.¹⁵⁶

The procedure governing tax sales of moveable property differs from the one for tax sales of immovables. If the moveable equipment in a well is not of sufficient value to satisfy the tax burden at auction, the tax collector may satisfy the debt by seizing other moveables, presumably well equipment in other wells within the parish. If the moveable components of a well are seizable, this remedy has substantial practical significance. Seizure of other moveables belonging to the debtor in the parish would prevent an operator from “orphaning”¹⁵⁷ unproductive or dry wells by simply not paying the taxes, while continuing to pay taxes on the productive wells that are worth the investment.¹⁵⁸ Even if there are no other wells or moveables that are seizable in the parish, a tax collector’s authority to seize incorporeal property would allow him to seize money,¹⁵⁹ though the mineral rights and lease would still likely be protected from seizure.¹⁶⁰

Whether an oil or gas well is assessed as a moveable or as an immovable, the tax burden can clearly only be derived from those parts of the well that are subject to tax. Since failure to pay *ad valorem* taxes results in the seizure of the property corresponding to the taxes, the seizure of property for nonpayment of taxes could only extend to property that was taxable in the first place. Thus,

154. LA. CONST. art. 7, § 25(E).

155. *Id.*

156. *Id.*

157. An orphaned well is one that has not been plugged and officially labeled abandoned in accordance with DNR procedures, but for which there is no operator legally responsible. MARTIN & KRAMER, TERMS, *supra* note 17, (defining “Orphan Well”).

158. This would be the financially rational decision if meeting statutory obligations of plugging the well, among other things, would cost more than the salvage value of the well itself.

159. Money in a bank account is properly considered incorporeal movable property. *See* Succession of Miller, 405 So. 2d 812, 818 (La. 1981) (on rehearing); *cf.* LA. CIV. CODE ANN. art. 473 (2011).

160. The constitutional provisions exempting minerals and leases from taxation and allowing seizure of incorporeals as a last resort to enforcing *ad valorem* taxes on moveables apparently conflict. However, the more specific oil and gas exemption would likely prevail over the tax sale provisions if the two ever came into conflict. *See* Meyers v. Flournoy, 25 So. 2d 601 (La. 1948).

nonpayment of taxes of an oil or gas well could not result in the seizure of the minerals, a mineral servitude, or a mineral lease.

As the *Silurian* case aptly demonstrates, a tax lien on an oil or gas well merely conveys ownership of the moveable parts of the well, subject to the tax debtor's right to redeem ownership within the peremptive period.¹⁶¹ Assuming the peremptive period passes and the lienholder successfully acquires full ownership through a valid quiet title judgment, the lienholder's only practical option is to remove the equipment from the well bore. Because the lien does not encumber the minerals, mineral lease, or mineral servitude, the lienholder (now the equipment owner) acquires ownership of the equipment without acquiring the right to keep that equipment on the land.

The oil and gas well's existence within the land is only tolerated because the landowner has given an operator the right to use the land for that purpose or because a mineral owner possesses that right as a matter of law, by virtue of a mineral servitude in his favor. Since the person acquiring ownership of the well equipment does not have a contractual or legal right to use the land of another,¹⁶² the presence of the corporeal equipment on the land of another is noxious and the landowner may lawfully demand that the materials be removed to ensure peaceful and undisturbed possession of his land.¹⁶³

A comparison of the oil or gas well to a predial servitude is useful to demonstrate the consequences of this to the tax lienholder. If *ad valorem* taxes were levied on a road that existed by virtue of a right of way predial servitude, the effects would be similar to the effects of *ad valorem* taxes on an oil or gas well. If the taxes were on the road only, with no possibility of encumbering the dominant estate to which the road provides access, then a tax lien on that road would not entitle the lienholder to much, if anything. First, the road itself is not the servitude; it is merely corporeal evidence of the incorporeal right of access. If the lien could not encumber the dominant estate itself, then the lien could also not encumber the predial servitude, because the predial servitude cannot be owned separately from the dominant estate it benefits.¹⁶⁴

A person who seized and took ownership of the road without the servitude would own the road without the right to use the

161. See *Silurian Oil Co. v. Fuselier*, 230 So. 2d 121 (La. App. 3 Cir. 1969).

162. Assuming this acquiring person is not also the mineral servitude holder or landowner.

163. LA. CIV. CODE ANN. art. 493 (2011).

164. LA. CIV. CODE ANN. art. 650 (2011).

servient estate. In effect, his road would be on another person's property. The new owner of the road would be required to remove the road itself, which would include the raw materials and infrastructure used to construct the road. While the road itself may have some value, and the cost approach to ascertaining that value would appropriately include labor and other intangible costs of building the road, the value yielded by the cost approach would not adequately portray the value of what was being taxed. An essential part of the road's value is its utility—facilitating access to a dominant estate by allowing one to drive across a servient estate—which would not practically be conveyed along with the road via lien foreclosure. The road would have very little utility to a person acquiring ownership of it by quieting a tax title because he would not have the right to use the road, or even to access the dominant estate, and he would be required to remove the road at his own expense.

The practical consequences are the same for the holder of a tax lien on an oil and gas well. The minerals themselves are analogous to the landlocked parcel example. Because the minerals are inaccessible without crossing the land above, the well is a means of passage that allows the owner of the mineral rights a right of access via the land above.¹⁶⁵ If the minerals below are the dominant estate and the land above is the servient estate, the well itself is analogous to the road that facilitates access; the well itself is not the servitude, but is the corporeal evidence of the right of use that exists by virtue of the incorporeal servitude.¹⁶⁶ Because the lien would not encumber the minerals themselves, it would also not encumber the servitude that allows access to those minerals. A person acquiring ownership of the well by quieting a tax title would acquire the same rights as a person acquiring the road. He would own the corporeal property that is evidence of the servitude, but would have to remove that property at his own expense because he does not have a servitude that gives him the right to use the land by encumbering it with the corporeals.

Thus, the appropriate value of the well for *ad valorem* tax purposes would be the value of the materials comprising it, but not the cost of replacing the well as new because property being taxed does not include the right to keep the well on the land of another or to access the minerals below.

165. See LA. REV. STAT. ANN. § 31:23 (2009).

166. See LA. CIV. CODE ANN. art. 649 (2011).

IV. THE SEARCH FOR FAIR MARKET VALUE

A. Overstating Value Using the Cost Approach

Louisiana Tax Assessors currently appraise oil and gas wells by estimating the cost of constructing them. However, since many of the costs associated with drilling an oil and gas well are not attributable to the corporeal moveable property left in the completed structure, use of the cost approach overstates such value. A return to the predial servitude road analogy is again useful for illustration of the analytical challenge to enforcement of the *ad valorem* taxes.

A road would likely be composed of raw materials, such as dirt, clay, and mixtures of gravel and water in the form of cement. These materials would arguably be integral parts of the land, at least to the extent they became indistinguishable from the land itself, which would mean that they belong to the owner of the servient estate, not the servitude holder. In that case, the tax levy on those materials would be appropriately chargeable to the landowner rather than the servitude holder.

An oil or gas well presents the same scenario. The concrete, mud, water, and sand used in drilling the well would likely become integral parts of the land and belong to the landowner, rather than to the holder of a mineral servitude or the person who constructed the well. If one accepts the definition of an integral part of the land as a thing that no longer has an identity that is distinct from the land itself, then these parts of the well or the road could not even be assessed separately because they could not be seized or even identified. The appropriate allocation of tax liability for those materials would be to add to the overall value of the land into which they have become incorporated. The net effect of this would be to increase the overall property tax burden of the landowner, who may not have even consented to the construction of the well in the first place if he acquired the land already encumbered by a mineral servitude.

Given the absurd and inequitable results that logically follow from allocating to the landowner the “costs” of the well construction that are now attributable to property that belongs to him, a more desirable appraisal approach would be to only reflect the value of the seizable portions of the well, which would neither be integral parts of the land nor belong to the landowner. The approach to value that would reflect the fair market value of materials that could be seized and removed, but could not be left in

place on the land of another, is known as the salvage value approach.¹⁶⁷

B. Salvage Value—An Alternative Approach to Determining Fair Market Value

Because the sale of the taxable part of an oil or gas well requires the purchaser to remove the equipment from the well bore, the fair market value of that equipment would be the appropriate measure of the fair market value of the well itself for *ad valorem* tax purposes, because the equipment is the only part of the well that may legally be taxed. Determining the value of property by calculating how much its equipment and materials would be worth if they were separated is fundamentally identical to another approach to value accepted by appraisers but not mentioned under Louisiana law—the salvage value approach.

Use of the salvage value approach would ensure that the taxes do not violate Louisiana's constitution prohibiting the taxation of oil and gas leases and rights, would avoid attributing value to the landowner's property as a result of accession, and would ensure that the owners of oil or gas wells pay the full amount of taxes owed on the property in the well that is subject to taxation.

Itemizing the cost of the materials that are attributable to one particular well is arguably a difficult undertaking, especially for companies that purchase drilling materials in bulk to leverage economies of scale. However difficult it may be in theory for an operator to itemize the costs attributable to the corporeal moveables in each particular well, requiring them to furnish the Tax Assessors with this information would not be an additional burden or administrative expense because this information is already compiled to comply with state and federal regulations.

In Louisiana, oil and gas wells are usually drilled in a "unit," which is an area of land or minerals where the owners of the minerals share in the costs and revenues of drilling or mining exploration.¹⁶⁸ If an operator cannot get 100 percent of the owners to agree to "pool" their interests, the Louisiana Commission of Conservation may force the pooling of minerals by creating a "compulsory unit"¹⁶⁹ if necessary to prevent waste or to avoid

167. Salvage value is defined as "[t]he price expected for a whole property or part of a property that is removed from the premises usually for use elsewhere." THE APPRAISAL INST., THE DICTIONARY OF REAL ESTATE APPRAISAL (4th ed. 2001).

168. LA. MIN. CODE art. 213(6) (2009).

169. *Id.*

drilling unnecessary wells.¹⁷⁰ In a compulsory unit, the party intending to drill the well must give notice of his intent to drill and allow the other owners the opportunity to participate in the risk and reward the well.¹⁷¹ By law, this notice must contain an “Authorization For Expenditure,”¹⁷² which includes “an estimate of the cost of drilling, testing, completing, and equipping the unit well.”¹⁷³

Regardless of whether these owners choose to participate by contributing their pro rata share of the costs, they are nonetheless entitled to further accounting after the well has begun production. The operator has 90 days from the completion of a well to furnish the unleased owners in the unit with an initial report detailing the costs incurred in drilling, completing, and equipping the unit well.¹⁷⁴ Additionally, the unleased owners in the compulsory unit have no obligation to pay any more than the fair market value of the “costs for *materials furnished or used* in the drilling the oil or gas well.”¹⁷⁵

Units routinely have multiple lessees or owners participating in drilling a well, especially when competition for acreage in a particular area is fierce. Thus, Louisiana statutes relating to the formation and governance of drilling units repeatedly place upon the operator the duty to provide third parties with accountings of good faith estimates and actual costs associated with drilling. Given the frequency with which operators are required by law to furnish itemized statements of cost in drilling wells, it hardly seems burdensome to require the operators to furnish the local parish Tax Assessor with a copy of the initial report on every well drilled in his parish.

In addition to filing initial reports to unleased mineral owners in a unit, companies meticulously track and report this data to the Internal Revenue Service. The Internal Revenue Code allows taxpayers to deduct ordinary and necessary business expenses from their income in the year they were incurred.¹⁷⁶ However, taxpayers may not deduct as expenses the cost or value of capital improvements, or “permanent improvements or betterments.”¹⁷⁷

170. LA. REV. STAT. ANN. § 30:10(A)(i) (2009). Oil and gas exploration in Louisiana is regulated by the Department of Conservation and its Commissioner. *See generally* LA. REV. STAT. ANN. § 30:1 et seq. (2009).

171. *Id.*

172. MARTIN & KRAMER, *TERMS*, *supra* note 17, at 28 (defining “AFE”).

173. LA. REV. STAT. ANN. § 30:10(A)(i)(aa) (2009).

174. LA. REV. STAT. ANN. § 30:103.1(A)(1) (2009).

175. LA. REV. STAT. ANN. § 30:111 (2009)(emphasis added).

176. I.R.C. § 162 (2010).

177. I.R.C. § 263 (2010).

The Internal Revenue Code allows taxpayers to either expense or capitalize certain costs associated with oil and gas drilling that are not translated into tangible personal property.¹⁷⁸ These costs are known as “Intangible Drilling/Development Costs.”¹⁷⁹

The Treasury Regulations that provide for this option state that Intangible Drilling/Development Costs only include expenditures “for those drilling and developing items which in themselves do not have a salvage value . . . [L]abor, fuel, repairs, hauling, supplies, etc., are not considered as having a salvage value, even though used in connection with the installation of physical property which has a salvage value.”¹⁸⁰ These costs are deducted by the taxpayer’s income in the year they are incurred.¹⁸¹ In contrast, capital improvements, which represent the tangible equipment downhole, may not be deducted; the value of these improvements is gradually amortized as they depreciate.¹⁸²

Though federal income tax law and Louisiana property tax law are different legal regimes, the allowance of a federal income tax deduction for Intangible Drilling/Development Costs in the year they are incurred is relevant to how Louisiana taxes oil and gas wells. Because operators delineate between tangible drilling costs—which correspond to corporeal property with a salvage value—and intangible drilling costs—those not associated with any corporeal property—for federal income tax purposes, reliable data about the taxable portions of those oil and gas wells can be made readily available to the parish assessors by the operators. The additional administrative burden on the operator, if any, would amount to merely forwarding to the local Tax Assessor the same data they are already reporting to both unit participants and the Internal Revenue Service.

178. Treas. Reg. § 1.612-4(a) (as amended in 1965).

179. *Id.*

180. *Id.* The regulations also state that these costs are considered intangible when they are incurred in connection with the following activities (for example):

- (1) In the drilling, shooting, and cleaning of wells,
- (2) In such clearing of ground, draining, road making, surveying, and geological works as are necessary in preparation for the drilling of wells, and
- (3) In the construction of such derricks, tanks, pipelines, and other physical structures as are necessary for the drilling of wells and the preparation of wells for the production of oil or gas.

Id.

181. *Id.*

182. See I.R.C. § 263 (2010).

CONCLUSION

As this Comment has demonstrated, the current system of valuation of oil and gas wells in Louisiana is inconsistent with the constitutional and statutory guidelines set forth for assessing these properties for *ad valorem* taxes. Specifically, the use of the cost approach to determine value in its current form results in the over-allocation of value, so that the taxable components of wells are either overvalued or value is attributed to well components that are not taxable under Louisiana law. The more appropriate valuation method would be to determine the salvage value of the pieces of well equipment that remain separable, identifiable moveables. This approach is not only more faithful to the legal guidelines set forth by Louisiana law, it is also the most administratively simple because it determines value from data that is already collected and used by the operators of Louisiana oil and gas wells.

*Andrew M. Heacock**

* J.D./C.L. 2014, Paul M. Hebert Law Center, Louisiana State University. The author would like to thank Mark Heacock, who inspired his passion for oil and gas law and whose patience and support made this work possible.