

**PLEASE GIVE US ONE MORE OIL BOOM—
I PROMISE NOT TO SCREW IT UP THIS TIME:
THE BROKEN PROMISE OF CASINGHEAD
GAS FLARING IN THE EAGLE FORD SHALE**

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The Eagle Ford shale¹ has provided an economic boon to South Texas, adding approximately \$61 billion of economic output and creating over 116,500 jobs for the counties overlaying or neighboring the Eagle Ford shale.² The Eagle Ford shale is the source rock for the storied East Texas Field and also for the Austin Chalk formation,³ but it was only in 2008 that Petrohawk discovered the viability of producing directly from the Eagle Ford shale using horizontal drilling and multi-stage hydraulic fracturing techniques.⁴

Since completion of the initial Petrohawk well in 2008, activity in the Eagle Ford shale has exploded: only 26 drilling permits were issued in 2008, but 4,146 were issued in 2013.⁵ Oil production has increased from a paltry 352 barrels per day in 2008 to 677,407 barrels per day as of November 2013.⁶ The estimated amount of recoverable oil from the Eagle Ford shale is impressive, with estimates ranging from as low as 3 billion barrels⁷ to as high as 10 billion barrels.⁸ Due in significant part to the prolific oil production from the Eagle Ford shale, the rate of growth in Texas crude oil production now outpaces that of the North Dakota's Bakken shale formation.⁹ In September 2013, Texas produced 2.7 billion

1. The Eagle Ford Shale takes its name from the town of Eagle Ford, Texas, approximately six miles west of Dallas, where the shale outcrops at the surface as clay soil. The wells in the deeper part of the play produce a dry gas, but moving northeastward out of Commission District 1 and up dip, the wells produce more liquids. The core counties include an area that stretches from north of Gonzales County west-southwest to Webb County at the Texas–Mexico border. It is roughly 50 miles wide and 400 miles long, with an average thickness of 250 feet, and lies between the Austin Chalk and the Buda Lime at a depth of approximately 4,000 to 14,000 feet. After several field consolidations, the Railroad Commission of Texas (RRC) now classifies the Eagle Ford Shale as involving 21 active fields located within RRC Districts 1 through 6, covering 24 counties. *See Eagle Ford Information*, TEX. R.R. COMM'N, <http://www.rrc.state.tx.us/eagleford/> (last updated Apr. 25, 2014). For a map depicting the Eagle Ford Shale's location and the counties it traverses, see U.S. ENERGY INFO. ADMIN., EAGLE FORD SHALE PLAY, WESTERN GULF BASIN, SOUTH TEXAS (2010), *available at* http://www.eia.gov/oil_gas/rpd/shaleusa9.pdf.

2. For a detailed analysis of the economic impact of the Eagle Ford Shale production, see THOMAS TUNSTALL ET AL., CTR. FOR CMTY. & BUS. RESEARCH AT THE UNIV. OF TEX. AT SAN ANTONIO'S INST. FOR ECON. DEV., ECONOMIC IMPACT OF THE EAGLE FORD SHALE 10 (2013).

3. *See* TEX. R.R. COMM'N, *supra* note 1.

4. *See id.* This first well flowed at a rate of 7.6 million cubic feet of gas per day from a 3,200-foot lateral with 10 frac stages.

5. TEX. R.R. COMM'N, TEXAS EAGLE FORD SHALE DRILLING PERMITS ISSUED 2008 THROUGH FEBRUARY 2013, (2014), *available at* <http://www.rrc.state.tx.us/eagleford/EagleFordDrillingPermitsIssued.pdf>.

6. *See* TUNSTALL ET AL., *supra* note 2, at 64.

7. U.S. ENERGY INFO. ADMIN., REVIEW OF EMERGING RESOURCES: U.S. SHALE GAS AND SHALE OIL PLAYS 5 (2011), *available at* <http://www.eia.gov/analysis/studies/usshalegas/pdf/usshaleplays.pdf>.

8. U.S. GEOLOGICAL SURVEY, FACT SHEET: ASSESSMENT OF UNDISCOVERED OIL AND GAS RESOURCES IN CONVENTIONAL AND CONTINUOUS PETROLEUM SYSTEMS IN THE UPPER CRUSTACEOUS EAGLE FORD GROUP, U.S. GULF COAST REGION, 2011 (2012), *available at* <http://pubs.usgs.gov/fs/2012/3003/FS12-3003.pdf>; *see also* David Fessler, *Cline Shale: The Newest, Hottest Shale Oil Play*, INVESTMENT U (May 15, 2013), <http://www.investmentu.com/2013/May/the-newest-hottest-shale-oil-play.html>.

9. David Sheppard, *Texas Oil Output Surges, Growth Now Outpacing North Dakota*, REUTERS (June 27, 2013), <http://www.reuters.com/article/2013/06/27/eia-texas-idUSL2N0F31ES20130627>.

barrels of oil per day, a 30% increase in crude oil production from September 2012.¹⁰ Crude oil from the Eagle Ford shale is lighter than heavier imported crude oil, and some refiners along the Texas Gulf Coast have significantly reduced their usage of foreign crude oil in favor of crude oil from the Eagle Ford shale, given its transportation cost advantage.¹¹ Commissioner Porter has stated publicly that the Eagle Ford shale has the potential to be the single most important economic development in Texas' history.¹²

What is more, the Eagle Ford shale's significance has impacted the national scene. U.S. oil production, due in large part to production from the Eagle Ford shale, has made the United States the fastest growing energy producer in the world.¹³ Analysts are now projecting that North America will be energy independent with respect to oil and a net exporter of natural gas by the year 2020.¹⁴ If these forecasts are realized, as now seems probable, the United States will experience a paradigm shift in terms of its dependency on foreign oil.

Yet, as impressive as this transformation has been, the question that needs to be asked *now* is whether we are wisely using our natural resources in the Eagle Ford . . . or wasting them. The title to this Article originated with a bumper sticker that was commonly seen throughout the state of Texas in 1984.¹⁵ By 1984, Texas domestic oil production was in

10. See Simone Sebastian, *New Data Show 'Meteoric' Rise of Texas Oil*, FUELFIX (Dec. 3, 2013), <http://fuelfix.com/laredo/2013/12/03/new-data-show-meteoric-rise-of-texas-oil/>.

11. Compare TUNSTALL ET AL., *supra* note 2 (detailing this switching), with Jennifer A. Diouhy, *Oil Glut Stirs Debate over U.S. Crude Exports*, FUELFIX (Jan. 5, 2014), <http://fuelfix.com/blog/2014/01/05/us-oil-glut-stirs-up-political-dilemma> (stating that many U.S. refineries, particularly along the Gulf Coast, were designed to process heavier supplies from Venezuela, Saudi Arabia, and Canada, and while some have adapted to handle more of the light, sweet domestic product, bigger changes are unlikely soon), and Emily Pickrell, *ConocoPhillips CEO Calls for Removing Crude Oil Export Ban*, FUELFIX (Nov. 19, 2013), <http://fuelfix.com/blog/2013/11/19/conocophillips-ceo-calls-for-removing-crude-oil-export-ban/?cmpid=eefl> (quoting CEO Ryan Lance as stating that refineries are tooled up for sour crudes, with only so much capacity for light sweet crudes and that "either you are going to shut down production, or you get wide differentials to try to incentivize capital investment in more facilities. The world needs the crude and there are places where we could export that crude into existing refineries.").

12. David Porter, *Eagle Ford Is Opportunity, Responsibility*, CORPUS CHRISTI CALLER-TIMES (Apr. 10, 2011), <http://www.caller.com/news/2011/apr/10/eagle-ford-is-opportunity-responsibility/>.

13. See Wenqian Zhu, *U.S. Oil Boom Helps Thwart OPEC*, CNN MONEY (June 19, 2013), <http://money.cnn.com/2013/06/19/news/economy/us-oil-price-opec/index.html>.

14. EDWARD L. MORSE, CITI GPS, *ENERGY 2020: NORTH AMERICA OR MIDDLE EAST?* (2012), http://csis.org/files/attachments/120411_gsf_MORSE_ENERGY_2020_North_America_the_New_Middle_East.pdf.

15. Long-time members of the oil patch will remember the above phrase that appeared on bumper stickers throughout Texas and Oklahoma in the early 1980s during the depths of a depression in the domestic oil industry. See, e.g., Patrick Graves, *An Energy Renaissance: New Production Upends Assumptions About Oil and Gas*, FISCAL NOTES, TEX. COMPTROLLER OF PUB. ACCOUNTS (Mar. 25, 2013), <http://www.window.state.tx.us/comptrol/fnotes/fn13Q1/energy.php> (referencing the old bumper sticker slogan and concluding that "today, after decades of declining production, it seems as if those tongue-in-cheek prayers may have been answered"). Others have also concluded that these prayers have been answered. See Nick Jimenez, *What We*

decline, but the industry remembered the boom years of the 1970s and of earlier periods.¹⁶ The state was littered with marginal stripper wells that produced only a few barrels of oil,¹⁷ and prospects for additional Texas oil production were bleak.¹⁸ The 1984 slogan affirmed that the industry had learned from its prior misdeeds and was committed to not “screwing-up” another oil boom if providence offered the state of Texas another chance. That was thirty years ago, but the seared memory of that remorseful 1984 promise bears remembering.

Unfortunately, the early record of the Eagle Ford shale is one of physical waste of the state’s natural resources.¹⁹ The Railroad Commission of Texas (RRC) is cheerleading the expansive growth of the industry, but has not adequately demanded sound conservation practices.²⁰ It is time for the RRC and the courts to require that operators employ sound conservation practices in the Eagle Ford shale. To that end, this Article discusses the most visible and objectively verifiable form of waste in the Eagle Ford shale: the outright flaring of commercially usable and profitable natural gas that could (and this Article argues *should*) be efficiently produced.

In the oil-rich portions of the Eagle Ford shale, the formation produces enormous amounts of casinghead gas along with the liquid-rich crude oil.²¹ But, pipeline construction has not kept pace with the number of wells that are being completed.²² With oil at over \$100 per barrel, operators are choosing to bring crude oil to market as quickly as possible. But, what is to be done with the large amounts of associated gas in the

Prayed For, One More Oil Boom, CORPUS CHRISTI CALLER-TIMES (Sept. 18, 2011), <http://www.caller.com/news/2011/sep/18/what-we-prayed-for-one-more-oil-boom/> (“[T]he good Lord seems to have answered that prayer with the Eagle Ford Shale formation.”). This Article does not challenge whether this prayer has been answered, but it does argue that the return promise “to not to screw it up” has not been kept.

16. See Luke Mullins, *America’s 4 Nastiest Regional Housing Busts*, US NEWS (June 19, 2009), <http://money.usnews.com/money/blogs/the-home-front/2009/06/19/americas-4-nastiest-regional-housing-busts-2> (using the 1984 oil bust to illustrate the decline in Texas’ real estate prices).

17. Jacqueline Weaver, *The Tragedy of the Commons from Spindletop to Enron*, 24 J. LAND RESOURCES & ENVTL L. 187, 187–91 (2004).

18. See Jimenez, *supra* note 15 (suggesting that Texas “blew” it by engaging in wasteful practices during the first boom).

19. See *id.*

20. See *id.* (“Yes, drill, baby, drill, but do it responsibly, keep it clean and do it with the humility that comes from realizing we’re getting a second chance from Providence. We expect regulators to regulate rather than be promoters of the industries they oversee.”).

21. See HOWARD WEIL, INC., EAGLE FORD OPERATOR INDEX 15 (2011), available at <http://www.howardweil.com/docs/Reports/OtherReports/EagleFord14-33Link.pdf> (indicating that EOG anticipates that its drilling in the oil window of the Eagle Ford shale would nevertheless produce approximately 12 percent gas and another 11 percent natural gas liquids).

22. Anna Driver & Bruce Nichols, *Shale Oil Boom Sends Waste Gas Burn-off Soaring*, REUTERS (June 25, 2011), <http://www.reuters.com/article/2011/07/25/us-shale-flaring-idUSTRE76O4SU20110725> (explaining that the reason for flaring of natural gas is that “[t]hey are drilling so many wells down there [in the Eagle Ford shale], and the infrastructure just hasn’t kept up, so you don’t have any real choice.”).

absence of pipeline connections? Unfortunately, we now know the answer—the natural gas is being flared so that valuable crude oil can be quickly brought to market.²³

At first, not much flaring was done, but the number of flaring permits issued annually has been steadily increasing. The RRC issued 107 flaring permits for the Eagle Ford shale in 2008,²⁴ 158 in 2009,²⁵ 306 in 2010,²⁶ 651 in 2011,²⁷ 1,963 in 2012,²⁸ and 3,012 in 2013.²⁹ South Texas looks as it did in the 1940s, with natural gas being burned directly into the atmosphere for extended lengths of time, thus ensuring that this natural gas provides no commercial benefit. Statewide, the RRC reported that Texas flared or vented over 47.7 billion cubic feet (bcf) of casinghead gas in 2012.³⁰ According to the RRC's historic information, this is the largest volume of gas flared in the state since 1972.³¹ Based on the amount of flaring in the Eagle Ford and the Bakken, the United States has now become one of the top flaring countries in the world.³²

Recently, a letter from financial investors representing over \$500 billion of assets under management was sent to twenty-one oil producers, demanding that the industry curtail its flaring practices; a press release regarding the letter stated that “[e]xcessive flaring is not only environmentally damaging but also a waste of a valuable resource.”³³ But, investor agitation has not stopped the upward trend in operator flaring of natural gas in the Eagle Ford shale. As a result, there has been open speculation that regulatory action is likely to be forthcoming,³⁴ but so far

23. *Id.*

24. TEX. R.R. COMM'N, EAGLE FORD SHALE TASK FORCE REPORT 80 (2013).

25. *Id.*

26. *Id.*

27. *Id.*

28. See *Flaring Regulation: Frequently Asked Questions*, TEX. R.R. COMM'N, <http://www.rrc.state.tx.us/about/faqs/flaringfaq.php> (last visited Apr. 29, 2014).

29. *Id.*

30. See TEX. R.R. COMM'N, ANNUAL SUMMARY OF NATURAL GAS PRODUCTION FOR 2012 (2012), available at <http://www.rrc.state.tx.us/data/production/monthlygas/2012/AnnualSummary2012.pdf>.

31. See *Natural Gas Production and Well Counts (1935–2011): History of Texas Initial Crude Oil, Annual Production and Producing Wells*, TEX. R.R. COMM'N, <http://www.rrc.state.tx.us/data/production/gaswellcounts.php> (last visited Apr. 29, 2014) (noting that Texas flared or vented 60.1 bcf of gas in 1972).

32. Stephen Lacy, *Shale Energy Boom Puts America in the Top Ten Gas Flaring Countries, Boosting Global Warming Pollution*, CLIMATEPROGRESS (May 3, 2012), <http://thinkprogress.org/climate/2012/05/03/476400/shale-energy-boom-puts-america-in-the-top-ten-gas-flaring-countries-boosting-global-warming-pollution/>.

33. Press Release, CERES, Major Investors Warn Energy Companies of Business Risks in Flaring Gas at Shale Oil Wells (Mar. 29, 2012), available at <http://www.ceres.org/press/press-releases/major-investors-warn-energy-companies-of-business-risks-in-flaring-gas-at-shale-oil-wells-1>.

34. See Ken Silverstein, *The Other F-Word of Shale Drilling*, FORBES (Sept. 27, 2012), <http://www.forbes.com/sites/kensilverstein/2012/09/27/the-other-f-word-of-shale-drilling/> (“If you think fracking is a deal-breaker, then you have not thought much about ‘flaring.’ Both controversies could undo the shale gas industry, although the burning off of natural gas found

no serious regulatory curtailment of this wasteful industry practice has taken place.

Commissioner Porter provided some indication that the RRC had concerns about this issue when he announced that a flaring initiative was being studied.³⁵ But in Texas, sound conservation is often a political question, and nothing is more political than regulatory actions that could inhibit the immediate production of crude oil. Commissioner Smitherman, who indicated that he was not consulted prior to Commissioner Porter's announcement of this flaring initiative, voiced his criticism, expressing concern that a flaring initiative could impact the pace of crude oil production.³⁶ In addition, Commissioner Smitherman has been outspoken in his belief that new regulation, particularly new federal regulation by the Environmental Protection Agency (EPA), needs to be held back to allow Texas to capture the economic benefits of the Eagle Ford shale.³⁷ Thus, at the time of this writing, the RRC has not

alongside oil discoveries is something that oil drillers and green groups alike would prefer to minimize. But how?").

35. In a press released dated May 23, 2012, Commissioner Porter stated that the RRC would commence a new "Flaring Initiative" to accomplish the following goals:

- Ensuring operators fully comply with current Commission flaring and venting rules;
- Amending Commission flaring and venting rules to comport with the increased production of the shale plays across the state . . . ;
- Reviewing flaring technologies to encourage the use of efficient, environmentally protective and energy-saving flares;
- Working in partnership with all other state regulatory entities to streamline air emission rules, monitoring and reporting;
- Working in partnership with Texas electrical energy regulators to identify opportunities for using excess gas as a strategic source of power generation, especially with the threat of weather-induced power curtailment; and
- Studying a pilot program to use gas as a source of power for on-lease operations in lieu of flaring the gas.

Press Release, David Porter, Comm'r, Tex. R.R. Comm'n (May 23, 2012), *available at* <https://www.rrc.state.tx.us/commissioners/porter/press/052312.php>.

36. See Kate Galbraith, *Bickering Erupts Among Texas Oil Regulators*, TEX. TRIBUNE (Mar. 26, 2013), <http://www.texastribune.org/2013/03/26/bickering-erupts-among-texas-oil-regulators/>. Ms. Galbraith wrote that at the open hearing confrontation,

Smitherman, a former prosecutor, proceeded for about 25 minutes to ask Porter about specific items—maps, recommendations, analysis—in the report. Porter did not have the report with him, and someone went to retrieve a copy from his office. Smitherman spent several minutes on a provision in the report that quoted Porter as having directed the RRC staff "to apply a higher level of scrutiny to applications for flaring and venting operations." (Flaring, which refers to the burning of natural gas that can't be otherwise used, is a concern in the Eagle Ford and elsewhere in Texas, because of air emissions and also the waste of gas.) "Is this a new requirement that you have unilaterally put in place?" Smitherman asked Porter. "No," Porter responded. "This was something that was discussed with staff." Smitherman said that he'd like to get a report from the commission's legal staff on whether oil and gas operators will now be subjected to a higher level of scrutiny because of Porter's report.

Id.

37. See Press Release, Barry T. Smitherman, Chairman, Tex. R.R. Comm'n, Railroad Commission Chairman Smitherman Testifies Today in Washington, D.C.: "EPA's Anti-Fossil Initiatives Threaten to Limit Domestic, Affordable Energy" (March 19, 2013), *available at* <http://www.rrc.state.tx.us/commissioners/smitherman/press/031913.php> ("The key to keeping our

clearly indicated what action, if any, it intends to take regarding the exponential growth in flaring in the Eagle Ford shale.

Flaring in the Eagle Ford shale should not continue uninhibited. To address this practice, this Article proceeds in the following manner. Section I sets forth the regulatory amendments to the RRC statewide rules that should be adopted to prevent the flaring of commercially profitable casinghead gas. Natural gas is an important state resource that should be affirmatively conserved and efficiently produced, whether the natural gas is produced from a gas well or an oil well.³⁸ Section II discusses the private causes of action that may be brought by lessors, adjacent landowners, operators of adjacent tracts, and surface owners against operators who are flaring casinghead gas, even if they are in compliance with RRC Rules. Section III addresses the legal issues that arise when operators stop flaring natural gas and instead shut in their oil wells until gas pipeline connections can be made. Although it promotes sound conservation practices, this alternative creates a host of legal issues for lessees, in addition to delaying the marketing of crude oil. Final comments about the way forward are set forth in Section IV. The goal of this Article is straightforward. We are witnessing today a waste of valuable and profitable natural gas with seeming impunity. The waste is undeniable, and it needs to be curtailed.

I. REGULATION OF FLARING: CURRENT PRACTICE AND PROPOSED “NO-FLARE” ORDERS

Flaring has a long and storied history in Texas. An early statute required gas wells to be shut in unless the gas could be put to some productive use.³⁹ However, this prohibition against flaring did not apply to oil wells, so operators since the earliest days of crude oil production could, and did, strip casinghead gas of its liquid gasoline content and then vent the residue gas into the air.⁴⁰ In 1931, the Texas legislature bolstered the RRC’s authority to regulate flaring from gas wells, but that legislation

nation’s natural gas momentum going is to limit interference from EPA.”).

38. This Article focuses solely on the regulatory authority to protect against waste. The needless burning of natural gas potentially creates environmental issues, including issues with greenhouse gas emissions. The Environmental Protection Agency has exempted flaring from oil wells from its emissions scrutiny. *See* Oil and Natural Gas Sector: New Source Performance Standards and National Emission Standards for Hazardous Air Pollutants Reviews, 77 Fed. Reg. 49,490 (Aug. 16, 2012) (to be codified at 40 C.F.R. pts. 60, 63). The wisdom of that decision is worthy of scholarly comment, but the merits of the EPA’s decision are beyond the scope of this Article.

39. *See* Act of Mar. 29, 1899, 26th Leg. R.S., ch. 49, § 368, 69.

40. *See* JACQUELINE WEAVER, UNITIZATION OF OIL AND GAS FIELDS IN TEXAS n. 150 (1986); *see also* Maurice Cheek, *Legal History of Conservation of Gas in Texas*, in LEGAL HISTORY OF CONSERVATION OF OIL IN TEXAS: A SYMPOSIUM 269, 270 (Am. Bar Ass’n, Section of Mineral Law ed., 1938).

excepted oil wells from its scope.⁴¹ Under the authority of these pronouncements, in 1934, the RRC asserted that the wells in the Agua Dulce field were gas wells and issued a “no-flare” order in the field.⁴² Operators objected to this regulatory “no-flare” order, claiming that the affected wells were oil wells and that the RRC had no authority to prevent flaring from an oil well,⁴³ but the RRC’s “no-flare” order was upheld in subsequent litigation.⁴⁴ The Texas Supreme Court noted that the RRC had made a factual finding that the affected wells were gas wells and that this finding was entitled to substantial deference.⁴⁵ In 1935, the Texas legislature strengthened the RRC’s authority to prevent waste, establish prorationing, and protect the correlative rights of owners with respect to gas wells, but again the legislation was silent with respect to the flaring of natural gas from an oil well.⁴⁶

At this time, from the lessee’s perspective, crude oil was valuable but casinghead gas was not.⁴⁷ In the 1930s, the rate of production of casinghead gas could not be controlled, so it was relatively unattractive for pipeline companies to handle.⁴⁸ In the early days of the oil industry in this state, casinghead gas was regarded as a useless byproduct of oil production rather than a valuable resource, so it was often simply burned or “flared.”⁴⁹ The waste of casinghead gas was staggering in the 1930s and 1940s. According to many accounts, motorists could drive for hours at night in parts of Texas and never turn on their automobile lights because the casinghead gas flares illuminated the countryside.⁵⁰ Newspapers could be read at night by the light of these flares.⁵¹ From the air, West Texas was said to look as if campfires of all the armies in the history of the world were burning below.⁵² One writer has estimated that over 900 bcf of casinghead gas was being flared each year,⁵³ but the official records of the RRC appear to place the amount flared in excess of 100 bcf per year.⁵⁴ The waste was obvious for all to see, but little was being done.⁵⁵

41. See Act of Aug. 12, 1931, 42nd Leg., 1st C.S., ch. 26, §§ 2, 46, 49, 1931 Tex. Gen. Laws 49.

42. See WEAVER, *supra* note 40.

43. See *Clymore Prod. Co. v. Thompson*, 11 F. Supp. 791 (W.D. Tex. 1935), 13 F. Supp. 469 (W.D. Tex. 1936).

44. See *id.*

45. See *R.R. Comm’n v. Shell Oil Co.*, 206 S.W.2d 235 (Tex. 1949).

46. See Act of Apr. 30, 1935, 44th Leg., R.S., ch. 120, 1935 Tex. Gen. Laws 318–327, reprinted in TEX. NAT. RES. CODE ANN. §§ 86.001–.225 (WEST 2013).

47. See DAVID F. PRINDLE, *PETROLEUM POLITICS AND THE TEXAS RAILROAD COMMISSION* 11 (1981).

48. *Id.* at 57.

49. See *Exxon Corp. v. Middleton*, 517 S.W.2d 349, 352 (Tex. Civ. App.—Houston [14th Dist.] 1978), *rev’d in part*, 613 S.W.2d 240 (Tex. 1981); see also Robert E. Hardwicke, *Evolution of Casinghead Gas Law*, 8 TEX. L. REV. 1, 2 (1929).

50. See *Middleton*, 517 S.W.2d at 352; see also PRINDLE, *supra* note 47, at 57.

51. PRINDLE, *supra* note 47, at 57.

52. *Id.*

53. See *id.* at 58.

54. See TEX. R.R. COMM’N, *supra* note 31 (estimating that Texas flared or vented 108 bcf of

In 1947, however, William Murray was appointed to the RRC,⁵⁶ and he helped to institute a bold new chapter in the RRC's efforts to prevent waste of the state's natural resources. On March 17, 1947, the RRC issued "no-flare" orders for oil wells in the Seeligson field. This action shut in 615 oil wells in that field, shocking the oil and gas industry.⁵⁷ The next year, on November 22, 1948, the RRC issued "no-flare" orders for oil wells located in sixteen additional oil fields.⁵⁸ And, on March 25, 1953, the RRC issued "no-flare" orders for oil wells located in the Sprayberry field.⁵⁹ The Texas legislature had never given the RRC explicit authority to prohibit the flaring of casinghead gas from an oil well.⁶⁰ So, predictably, litigation ensued from operators of oil wells who experienced financial hardship as a result of these "no-flare" orders.⁶¹ Notwithstanding the lack of any express legislative endorsement, the Texas Supreme Court upheld the RRC's "no-flare" orders in the Seeligson field, concluding that the RRC was vested with the inherent authority to make fair and reasonable rules to prevent physical waste and that its "no-flare" orders on oil wells fell within this broad authority.⁶² Subsequent cases repeated the same conclusion, and as a result the RRC's "no-flare" orders for the Heyser field,⁶³ the Flour Bluff field,⁶⁴ and the Sprayberry field⁶⁵ were all systematically upheld. The RRC's victories were so absolute that operators in the other fourteen oil fields that had been shut down by "no-flare" orders did not seek further litigation, and

gas in 1946, the year before the "no-flare" order was issued in the Seeligson field).

55. See PRINDLE, *supra* note 47, at 58.

56. See WEAVER, *supra* note 40, at 143.

57. See PRINDLE, *supra* note 47, at 66.

58. James Nugent, *The History, Purpose, and Organization of the Railroad Commission Rules and Regulations*, in OIL & GAS: TEXAS RAILROAD COMMISSION RULES & REGULATIONS A-28 (State Bar of Tex. ed., 1982).

59. See Nelson Jones, *The Spraberry Decision*, 32 TEX. L. REV. 730 (1954); see also WEAVER, *supra* note 40, at 146.

60. For an excellent and detailed analysis of the legislative authorizations given to the RRC and the RRC's efforts to exercise its authority to prevent the flaring of natural gas, see WEAVER, *supra* note 40, chs. 4-5.

61. See WEAVER, *supra* note 40, at nn. 6, 24 & 29.

62. See R.R. Comm'n v. Shell Oil Co., 206 S.W.2d 235 (Tex. 1949).

63. See R.R. Comm'n v. Sterling Oil & Ref. Co., 218 S.W.2d 415 (Tex. 1949).

64. See R.R. Comm'n v. Flour Bluff Oil Corp., 219 S.W.2d 506 (Tex. Civ. App.—Austin 1949, writ ref'd).

65. See R.R. Comm'n v. Rowan Oil Co., 259 S.W.2d 173 (Tex. 1953) (finding valid an order prohibiting the flaring of natural gas in the Spraberry field). Factually, in this earlier era, the operator could make the argument that a "no-flare" order could result in the reservoir not producing efficiently for oil and thus result in the permanent loss of oil, but these arguments were to no avail. The Texas Supreme Court indicated that the RRC exceeded its authority in shutting in non-flaring wells as a means to protect correlative rights, but suggested that the RRC could achieve this same end of preserving the correlative rights of all operators by reducing the production allowables for the non-flaring wells. See *id.* at 177. The RRC followed through on this suggestion and reduced all well allowables for non-flaring wells until the shut in wells could be connected to gas pipelines. See, e.g., WEAVER, *supra* note 40, at 147 (1986); Jones, *supra* note 59, at 738.

operators in twenty-six other oil fields were subject to show-cause hearings in late 1948; in all of these instances, it appears that operators of oil wells accepted that the RRC's "no-flare" orders were unassailable.⁶⁶

With the benefit of hindsight, the RRC's "no-flare" campaign for oil wells, starting with the Seeligson field in 1947, promoted the public good by significantly reducing the flaring of casinghead gas from 58 percent of production in 1946 to 30 percent of production by 1950.⁶⁷ These bold conservation efforts are credited with preserving the long-term viability of these conventional formations.⁶⁸ In each of these "no-flare" orders, the RRC issued its orders for fields that were located close to existing pipelines, and in a short time the natural gas could be produced in accordance with sound conservation measures and be put to commercial use.⁶⁹

Flaring represents a classic tragedy of the commons. Due to concerns such as the fear of drainage, the desire to quickly produce crude oil, and the low price for natural gas, operators acting in their own self-interest sought to produce crude oil as quickly as possible even though the collective results of such actions threatened the viability of the common reservoir. The "no-flare" orders maintained a level playing field among all operators, forcing everyone in the industry to employ conservation strategies to beneficially use casinghead gas or reinject it. Though initially the RRC had to force conservation on a reluctant industry, the industry began to realize and appreciate the virtues of this across-the-board effort in the following decades.⁷⁰

The RRC today is presented with essentially the same flaring fact pattern as in 1947, but now in the context of unconventional shale formations. Like the flaring problem in the conventional oil fields of the past, flaring in the unconventional Eagle Ford shale formation is occurring even though the Eagle Ford shale is located close to existing pipelines and even though gas pipeline construction is proceeding.⁷¹ Just as in that prior era, operators in the Eagle Ford shale are choosing to flare commercially valuable natural gas until pipelines are connected in the haste to produce crude oil.⁷² Presented with the same basic flaring problem as in the past, the RRC should remember its "no-flare" campaign because it provides important guidance for how the RRC

66. See WEAVER, *supra* note 40, at 146.

67. *Id.* at 148.

68. See JOHN R. STOCKTON ET AL., *ECONOMICS OF NATURAL GAS IN TEXAS* 235 (1952).

69. See WEAVER, *supra* note 40, at 148.

70. See PRINDLE, *supra* note 47, at 67–68.

71. See Paula Dittrick, *Unconventional Oil & Gas: Industry Expects Rapid Gains in Eagle Ford Shale Output*, 109 OIL & GAS J. 40 (2011) (stating that pipeline construction is proceeding).

72. See Driver & Nichols, *supra* note 22.

should address the present-day flaring in the Eagle Ford shale. It is time for the RRC to take bold steps, as it did in the past, by instituting “no-flare” orders in the Eagle Ford shale. Doing so would serve to instill a level playing field among operators and ensure that they use efficient production methods that comport with sound conservation principles. The flaring crack-down that occurred in conventional oil formations starting in 1947 saved those formations from premature wasteful depletion. The RRC’s “no-flare” orders preserved the oil and gas in place until adequate pipeline connections could be made and allowed the fields to be efficiently and nonwastefully developed. The flaring that is occurring in the Eagle Ford presents the same basic issue that existed with conventional formations in 1947, and the RRC should provide the same response.

The RRC’s current statewide flaring rules do not fulfill the RRC’s mission to protect against physical waste. In 1978, Rule 32 (which governs the flaring and venting of gas)⁷³ was added to the Texas Administrative Code.⁷⁴ Under Rule 32, operators may flare gas “for a period not to exceed 10 producing days after initial completion” of a well.⁷⁵ The flared gas must be measured, reported to the RRC, and “charged against lease allowable production,” but no permission is needed for this initial 10-day period.⁷⁶ If an operator wants to flare gas after this initial 10-day period, the RRC staff is authorized to grant a flaring exception for additional time upon a showing that such an exception is “necessary.”⁷⁷ These staff-approved flaring exceptions can extend up to a maximum of 180 days.⁷⁸ Prior to 1990, Rule 32 provided that “a necessity” for flaring gas beyond the initial 10-day period included (but was not limited to) situations involving (i) “cleaning a well of sand or acid or both following stimulation treatment of a well” and (ii) “repairing or modifying a gas-gathering system.”⁷⁹ Rule 32 remained unchanged in relevant part from 1978 until 1990, at which time the RRC proposed amending Rule 32.⁸⁰ The RRC explained that the proposed 1990 amendment was intended to expressly include casinghead gas within the scope of Rule 32.⁸¹ But, the proposed amendment did more than recognize casinghead gas; it provided that “a necessity” for flaring casinghead gas existed any time that an oil well was

73. 16 TEX. ADMIN. CODE § 3.32 (2013). Rule 32 states that gas releases resulting from routine oil and gas operations are necessary for the efficient drilling of oil and gas wells; *see also id.* §§ 3.32(d)(1)(F)–(G), (f).

74. *See* 3 Tex. Reg. 1937 (June 6, 1978).

75. 16 TEX. ADMIN. CODE § 3.32(f)(1)(A).

76. *Id.* §§ 3.32(f)(1), 3.27.

77. *See id.* § 3.32(f)(2).

78. *Id.* § 3.32(h)(2).

79. *See* 3 Tex. Reg. 1937 (June 6, 1978).

80. *See* 15 Tex. Reg. 1679 (Mar. 27, 1990).

81. *Id.*

capable of producing crude oil in paying quantities and there was no immediately available pipeline or other marketing facility for the natural gas.⁸² Pipelines were not immediately available throughout the Seeligson field in 1947, and yet in that context the RRC shut down crude oil production until pipeline connections were made available.⁸³ Surprisingly, the administrative record for the 1990 amendment to Rule 32 provides no evidence that the RRC considered its own historical efforts to use “no-flare” orders to promote conservation goals.⁸⁴ This omission is troubling because the 1990 amendment’s definition of “a necessity”⁸⁵ is inconsistent with the RRC’s defense of “no-flare” orders during the late 1940s and early 1950s.⁸⁶ Further, public comments submitted to the RRC did not discuss these conservation concerns.⁸⁷ Notwithstanding the lack of any discussion along the lines indicated above, the regulatory change was adopted later that same year,⁸⁸ and this aspect of Rule 32 has remained unchanged ever since.⁸⁹

Thus, as currently constructed, Rule 32(f)(2)(D) states that the flaring of casinghead gas is “a necessity” if there is no immediately available outlet for produced natural gas.⁹⁰ The Rule requires no weighing of the relative benefit of producing the crude oil more quickly versus the economic loss caused by the flaring of the natural gas, nor does it require any factual showing that crude oil would ultimately be lost if it were not produced immediately. Instead, the only evidence required to prove “a necessity” to flare natural gas from an oil well for up to 180 days is that a gas pipeline connection or other marketing facility is not readily available.⁹¹ Once an operator is able to show that no pipeline connection is immediately available, “a necessity” exists within the meaning of Rule 32 for flaring, without any further explanation as to why crude oil production should not be temporarily delayed to avoid the flaring of natural gas.

82. *Id.*

83. *See* WEAVER, *supra* note 40, at 142–43.

84. A copy of the administrative file was obtained under an open records request and is available with the author.

85. *See* 16 TEX. ADMIN. CODE 3.32(f)(2)(D).

86. *See* R.R. Comm’n v. Shell Oil Co., 206 S.W.2d 235 (Tex. 1947); R.R. Comm’n v. Rowan Oil Co., 259 S.W.2d 173 (Tex. 1953); R.R. Comm’n v. Sterling Oil & Ref. Co., 218 S.W.2d 415 (Tex. 1949); R.R. Comm’n v. Flour Bluff Oil Corp., 219 S.W.2d 506 (Tex. Civ. App.—Austin 1949, writ ref’d).

87. *Supra* note 84.

88. 15 Tex. Reg. 5804 (Oct. 2, 1990).

89. Although this explicit “necessity” has remained unchanged since 1990, Rule 32 was repealed and replaced with a new Rule 32 in 1996. *See* 21 Tex. Reg. 11367–70 (Nov. 22, 1996) (repealing 16 TEX. ADMIN. CODE § 3.32 and adopting new § 3.32). The “necessity” for flaring casinghead gas whenever gas pipeline connections are not immediately available is now located in Rule 32(f)(2)(D). *See* 16 TEX. ADMIN. CODE § 3.32(f)(2)(D).

90. 16 TEX. ADMIN. CODE § 3.32(f)(2)(D).

91. *See id.*

What is more, Rule 32 allows the RRC to provide a flaring exception after this 180-day period as part of an administrative hearing and via the issuance of a final order signed by the RRC.⁹² The documentation required for the grant of a flaring exception after this 180-day period includes a cost-benefit analysis, a map showing the nearest pipeline capable of accepting gas, and an estimate of gas reserves.⁹³ The RRC has provided numerous exceptions for flaring in the Eagle Ford shale, and the number of exceptions granted is growing.⁹⁴ The majority of permit requests are for flaring casinghead gas after an oil well's initial completion.⁹⁵ In addition, in at least one instance, the RRC approved a flaring exception for an indefinite period of time without requiring the operator to seek any further reauthorization for continuous flaring.⁹⁶

An application for a flaring exception does not need to contain a statement that correlative rights are at risk or that the operator is in danger of suffering either drainage or the permanent loss of oil. Instead, the operator need only show that crude oil production would be delayed (not lost, but *delayed*) if the requested flaring exception were not granted.⁹⁷ Flaring exceptions are requested and granted even though gas pipeline connections are within three miles of the new well and connections are expected to be completed within a matter of a few months.⁹⁸ Flaring exceptions are also routinely requested and granted for

92. *Id.* § 3.32(h)(4).

93. See TEX. R.R. COMM'N, STATEWIDE RULE 32 DATA SHEET (2012), available at <http://www.rrc.state.tx.us/forms/forms/og/pdf/swr32datasht.pdf>.

94. See *Oil and Gas Proposals for Decision and Orders*, TEX. R.R. COMM'N (Jan. 28, 2014), <http://www.rrc.state.tx.us/meetings/ogpdf/ogpor32/r32indx.php>.

95. See TEX. R.R. COMM'N, *supra* note 24, at 80.

96. See, e.g., Tex. R.R. Comm'n, *Order Approving Application of Marathon Oil EF LLC for a Permanent Exception to Statewide Rule 32 for the Flores Unit, Well No. 1H Eagleville (Eagle Ford-1) Field, Atascosa County, Texas*, Docket No. 01-276540 (July 17, 2012).

97. See, e.g., Tex. R.R. Comm'n, *Application of Hess Corporation for an Exception to State Rule 32 for the Cenizo Ranch Lease, Well No. A-1H, in the Eagleville (Eagle Ford-1) Field, Dimmit County Texas*, Docket No. 01-0278440 (Nov. 15, 2012) (granting a flaring exception where the application noted that the well had already been flared 180 days and requested to flare for another two months (from September 25, 2012 to November 15, 2012) at which time gas pipeline connections could be made, despite no statement or finding of any loss of oil or gas or drainage if the flaring permit was granted); see also Tex. R.R. Comm'n, *Application of Murphy Exploration & Prod. Co. for an Exception to Statewide Rule 32 for the Walnut Lease, Well Nos. 1H & 2H in the Eagleville (Eagle Ford-1) Field, Atascosa County, Texas*, Docket No. 01-0278867 (Dec. 14, 2012) (stating that Eagle Ford-1 Field lacks existing oil and gas infrastructure for new gas production due to the "explosive, rapid rate of drilling by Murphy and numerous operators" and that flaring until July 31, 2013 provides sufficient time to complete well hook up to the Tom Central Facility; the examiners recommended an exception be granted and the RRC so ordered).

98. See Tex. R.R. Comm'n, *Application of EOG Resources, Inc. for an Exception to Statewide Rule 32 for the Donnell Lowe Pasture Unit, Eagleville (Eagle Ford-1) Field, McMullen County, Texas*, Docket No. 01-0279308 (Dec. 6, 2012) (granting a flaring exception from December 1, 2012 to March 31, 2012 when gas pipelines were expected to be completed to EOG's gas gathering lines located 2.7 miles away); see also Tex. R.R. Comm'n, *Application of EOG Resources for an Exception to Statewide Rule 32 for the Gordon Trust Lease, Eagleville (Eagle Ford-1) Field, Atascosa County, Texas*, Docket No. 01-0279222 (Dec. 6, 2012) (granting a

flaring profitable casinghead gas even when the operator only needs a few months to remove excessive H₂S from the gas.⁹⁹ The routine issuance of flaring permits as a means to avoid any delay in crude oil production highlights the oxymoronic reality of the existing Rule 32 exception practice. Within the construct of Rule 32, flaring commercially profitable casinghead gas is viewed as “not wasting” whereas conserving the natural resource and deferring crude oil production until pipeline connections are made is defined as “waste.”¹⁰⁰ It is ironic to suggest, as current Rule 32 does, that burning a valuable natural resource directly into the atmosphere is “nonwasteful” whereas waiting until the crude oil and natural gas could be efficiently and commercially produced is “wasteful.” Rule 32 turns reality upside-down.

The RRC is allowing a valuable resource to be wasted without taking steps to limit the practice. The RRC should remove Rule 32(f)(2)(D)’s basis for a flaring exception and should adopt in its place a provision that affirmatively states that the flaring of casinghead gas from an oil well represents “waste” except where the operator could prove that the ultimate recovery of crude oil would be diminished if the well were shut-in pending gas pipeline connections,¹⁰¹ or where the operator could

flaring exception when gathering pipelines were 1.5 miles away and the well could be connected within four months).

99. See, e.g., Tex. R.R. Comm’n, *Application of Talisman Energy USA Income for an Exception to Statewide Rule 32 for the Powers Lease, Well Nos. L1H L3H, and L5H in the Eagleville (Eagle Ford-1) Field, McMullen County, Texas*, Docket No. 01-0281356 (Apr. 11, 2013) (granting a temporary flaring of casinghead gas from April 27, 2013 to June 30, 2013, by which time operational issues should then be sorted out, even though the casinghead gas had already been flared for 180 days prior to this request); see also Tex. R.R. Comm’n, *Application of EOG Resources Inc. for an Exception to Statewide Rule 32 for the H.E. Unit Facility, Eagleville (Eagle Ford-1) Field, Atascosa County, Texas*, Docket No. 01-0281025 (Mar. 28, 2013) (granting a flaring exception from March 18, 2013 through June 30, 2014 to flare sour casinghead gas until the operator could sort out how to clean it sufficiently even though a sour gas gathering pipeline was available 4.5 miles away).

100. The paradigm of the current Rule 32 is diametrically opposed to the previous position of the RRC on this issue. See *supra* text accompanying notes 49–59. It is also inconsistent with the statements found in opinions of the Texas courts of the time. See *infra* note 104.

101. This potential basis for allowing a flaring exception is based on the statement of facts and basis for the Texas Supreme Court’s holding in *Railroad Commission v. Sterling Oil & Refining Co.*, 218 S.W.2d 415 (Tex. 1949). In the course of its opinion, the Texas Supreme Court quoted the below testimony from then Railroad Commissioner Thompson, who testified as follows with respect to the “no-flare” order in the Heyser field:

Q. Colonel, there has been some testimony here about edge wells and the probability that some of them would be affected by closing in of a field. I will ask you whether or not the Commission is open to receive applications for special treatment in any particular wells?

A. That is standard operating procedure with us. We leave each order open at the bottom, ‘this docket is kept open for further and additional orders in this cause’ and upon application by any party showing his well would be irreparably injured, the Commission has always granted relief and has exempted such well from the shut-down, perhaps erring on the side of being too liberal. I cannot recall of any instance where we have failed to give relief where the showing was made that closing the well in would permanently injure the well or the property.

Q. And in such an event, you would entertain such an application, would you not?

demonstrate that it would suffer significant drainage from neighboring tracts if it were not allowed to produce crude oil prior to the availability of gas pipelines.¹⁰² Said differently, the flaring of natural gas should be allowed only after proof is given that a “no-flare” policy would itself result in physical waste or would represent a potential loss of one’s opportunity to obtain a fair share of the oil and gas in place.

Importantly, the mere delay in crude oil production should not be considered “wasteful” for purposes of Rule 32(f)(2). The RRC did not think that flaring casinghead gas from oil wells located in conventional oil formations made sense in 1947,¹⁰³ and the logic of that prior decision should be equally controlling with respect to the practice of flaring casinghead gas from oil wells located in today’s unconventional shale formations. The rule change proposed in this Article would elevate casinghead gas to the status of a valuable natural resource that must be produced in accordance with sound conservation practices, rather than a byproduct that need only be conserved if there is an immediately available gas pipeline connection.¹⁰⁴

If the RRC were to amend Rule 32 and grant fewer flaring exceptions to operators of oil wells in the Eagle Ford shale, the oil would still be in place and therefore would not ultimately be lost. Further, given the low permeability of the Eagle Ford shale formation,¹⁰⁵ the historic issues of

A. Not only entertain it, but grant it and be on the side of caution, rather than too tight. Our whole fault all along is being too liberal in our administration.

Id. at 427. The Texas Supreme Court, based on this testimony, stated that “[i]t clearly appears from this record that the Commission is trying to carry out the mandate of the Legislature and prevent the waste of a very valuable and important natural resource, and in doing so that it will not willfully act in a tyrannical or arbitrary manner.” *See id.* at 421. If a “no-flare” order would cause a well to become unprofitable by incentivizing a lessee to not produce, the resulting waste could provide a basis for an exception to the order. *See Exxon Corp. v. R.R. Comm’n*, 517 S.W.2d 497, 501–02 (Tex. 1978) (affirming the RRC’s grant of a Rule 37 exception to prevent waste where failure to grant the exception would make drilling unprofitable).

102. This potential basis for a Rule 32 flaring exception is based on the concern that a “no-flare” order must be circumscribed so that it does not result in an unconstitutional taking of property. In *Railroad Commission v. Shell Oil Co.*, 206 S.W.2d 235 (Tex. 1947), the RRC attempted to shut in all oil wells (not simply the flaring wells) in the Spraberry field until pipeline connections could be made to the wells that were unconnected. The RRC attempted to shut in all wells (even non-wasteful wells) in order to protect the correlative rights of the owners who were not connected to gas pipelines. The court struck down this shut-down order with respect to the non-flaring wells, but the Texas Supreme Court indicated that the RRC could achieve the same end if it simply reduced the allowables for the non-flaring wells. *See Shell Oil Co.*, 206 S.W.2d at 235. The RRC responded by reducing the allowables of the non-flaring wells to minimize the drainage that these wells could cause with respect to the wells that were shut in as a result of the “no-flare” order. *See Jones, supra* note 59, at 738. Given this historic use of “no-flare” orders to protect the correlative rights of operators, the RRC arguably should be sympathetic to allowing flaring of natural gas for oil wells where the facts demonstrate that a “no-flare” order would expose the operator to substantial drainage from adjacent tracts if pooling or some other means of protecting the operator’s ability to capture a fair and reasonable share of the oil and gas in place is unavailable.

103. *See PRINDLE, supra* note 47, at 66.

104. *See* 15 Tex. Reg. 1679 (Mar. 27, 1990).

105. *See* MARATHON OIL, EAGLE FORD: OIL AND NATURAL GAS FACT BOOK 4, *available*

conventional formations—the risk of substantial drainage from neighboring tracts and the risk of not allowing the formation to produce at its maximum efficient recovery rate¹⁰⁶—would appear to be largely inapposite with unconventional shale formations.¹⁰⁷ Thus, the flaring of casinghead gas in the context of the Eagle Ford shale provides an even easier factual case for the RRC to issue “no-flare” orders than the situation it confronted with the Seeligson field in 1947.¹⁰⁸ In public statements, Commissioner Porter has stated that “[w]e must develop this [Eagle Ford] shale responsibly, finding the proper way to exploit these resources while ensuring environmental protection.”¹⁰⁹ Now is the time for the RRC to modernize statewide Rule 32 and demand that operators use sound conservation-minded operating practices to efficiently produce the state’s natural resources. The existing flaring exception practice built upon Rule 32(f)(2)(D) is outdated and does not further the state’s interest in preventing waste. Pipelines are being built, and the RRC should require operators that cannot prove diminished recovery or drainage to temporarily delay crude oil production until their wells in the Eagle Ford shale are connected to those gas pipelines.

II. PRIVATE CAUSES OF ACTION FOR FLARING GAS

Whether or not the RRC acts to prevent wasteful flaring practices, any party damaged by the lessee’s activities may be able bring a private cause of action.¹¹⁰ Even if the operator proceeds to flare natural gas under the color of regulatory approval, the RRC’s permitting process does not foreclose the rights of private parties to seek redress against operators who breach their contractual duties under the lease or who commit a tort

at http://www.marathonoil.com/content/documents/news/eagle_ford_fact_book_final.pdf (last visited Apr. 30, 2014); HALLIBURTON, U.S. SHALE GAS: AN UNCONVENTIONAL RESOURCE, UNCONVENTIONAL CHALLENGES 2 (2008), http://www.halliburton.com/public/solutions/contents/Shale/related_docs/H063771.pdf.

106. For a recent case indicating that the lack of drainage is a significant and legally relevant fact that distinguishes the current formations from the case law that developed in the context of conventional formations, see *Browning Oil Co. v. Luecke*, 38 S.W.3d 625, 645 (Tex. App.—Austin 2000, pet. denied) (holding that the rule of capture, which applies with vertical wells, would not be applied to a horizontal well in part because “the geophysical characteristics of the formation inhibit the natural drainage underlying the rule of capture”).

107. See Benjamin Holliday, *New Oil and Old Laws: Problems in Allocation of Production to Owners of Non-Participating Royalty Interests in the Era of Horizontal Drilling*, 44 ST. MARY’S L.J. 771, 815–16 (2013) (making this point and positing that drainage is much reduced in unconventional shale formations); see also HALLIBURTON, *supra* note 105.

108. The RRC dealt with the concern that the pipeline-connected tracts would have an unfair advantage to produce more than their fair share of oil and gas if the adjacent landowners were not allowed to flare by reducing the production allowables for the nonflaring tracts until the neighboring tracts got connected to pipelines and had the opportunity to produce their fair share of oil and gas. See WEAVER, *supra* note 40, at 147.

109. See Porter, *supra* note 12.

110. TEX. NAT. RES. CODE ANN. § 85.321 (WEST 2006).

that harms the correlative rights of affected parties.¹¹¹ The RRC has no jurisdiction over private causes of action, nor does it have authority to determine whether a particular operator has committed a tort against another party.¹¹² A recent Texas case, *FPL Farming Ltd. v. Environmental Processing Systems*, has reiterated the principle that “a permit is not a get out of tort free card.”¹¹³ Thus, even though the operator may flare gas with the RRC’s approval, Texas case law makes clear that this regulatory approval does not shield the operator from private causes of action based on tort law or on the contractual obligations (expressed or implied) that the operator owes to its lessor.¹¹⁴ When, as with flaring, the standard for granting regulatory approval is particularly lax, the RRC is allowing a practice that may in turn subject operators to suits by lessors. By tightening the standard for flaring exceptions, the RRC could reduce the number of operators facing lawsuits by lessors.

In Texas, unless a lease specifically states otherwise, casinghead gas is considered a “component part” or “constituent element” of oil.¹¹⁵ As such, royalty on casinghead gas (if not specifically designated otherwise) is payable under the royalty clause for oil, which typically pays royalty on oil that is produced and saved.¹¹⁶ Older leases provided a separate royalty

111. See *Gregg v. Delhi-Taylor Oil Corp.*, 344 S.W.2d 411 (Tex. 1961); *Phillips Petrol. Co. v. Am. Trading & Prod. Co.*, 361 S.W.2d 942 (Tex. Civ. App.—El Paso 1962, writ ref’d n.r.e.).

112. 2 ERNEST SMITH AND JACQUELINE WEAVER, *TEXAS LAW OF OIL AND GAS* § 8.3[F][1], at 8-61 (2013).

113. See *FPL Farming Ltd. v. Env’tl Processing Sys., L.C.*, 351 S.W.3d 306 (Tex. 2011).

114. See *R.R. Comm’n v. Manziel*, 361 S.W.2d 560 (Tex. 1962) (holding open the possibility for private cause of actions against lessors who engage in actions approved by the RRC). A private dispute involving causes of action that cannot be resolved by the RRC is inherently judicial in nature and, therefore, represents an exception to the doctrine of primary jurisdiction. See *Gregg*, 344 S.W.2d at 415. The courts have held that actions in trespass, negligence, negligence per se, nuisance, negligent and intentional infliction of emotional distress, and strict liability are all judicial questions that are not within the authority of the RRC to resolve or determine. See *In re Apache Corp.*, 61 S.W.3d 432, 436 (Tex. App.—Amarillo 2001, no pet.). In *Foree v. Crown Central Petroleum Corp.*, 431 S.W.2d 312, 316 (Tex. 1968), the Texas Supreme Court left unresolved whether the RRC’s incidental findings are entitled to deference in subsequent private litigation of a judicial claim. However, in the context of flaring permits issued under Rule 32, the RRC’s administrative files typically provide no incidental factual findings of the exigencies necessary to flare natural gas other than the immediate unavailability of a pipeline connection. Thus, because the RRC typically has not made any finding of facts other than the fact that a pipeline does not exist, the RRC’s issuance of a flaring permit does not address the controlling questions of fact that are relevant for determining whether a common law tort or a breach of an implied covenant has occurred due to the flaring of commercially profitable natural gas. Therefore, these questions should be decided in a de novo review of the facts as indicated in *Gregg* and *Apache*.

115. See EARL A. BROWN, *THE LAW OF OIL AND GAS LEASES* § 6.07 (Matthew Bender ed., 2nd ed. 2013). For an early discussion of the development of Texas law on casinghead gas as a constituent part of oil, see Hardwicke, *supra* note 49, at 17–40.

116. See *Gulf Prod. Co. v. Taylor*, 28 S.W.2d 914, 919 (Tex. Civ. App.—Eastland 1930, writ dismissed w.o.j.) (“It is the oil saved and gauged that becomes the basis for the payment of royalties and contracts with reference to the product, and for all practical purposes that concerns the parties in interest, the amount saved may be regarded as the amount produced.”); *Livingston Oil Corp. v. Waggoner*, 273 S.W. 903 (Tex. Civ. App.—Amarillo 1925, writ ref’d); *Connellee v.*

rate for casinghead gas, but those clauses typically paid a royalty only for casinghead gas that was saved and utilized.¹¹⁷ Modern leases now explicitly deal with casinghead gas and typically provide that royalty is paid for gas, including casinghead gas, that is produced and utilized, saved, or sold.¹¹⁸ Regardless of the variant, courts have long recognized that the explicit terms of the typical oil and gas lease provide for royalty on casinghead gas only if the gas is put to productive use.¹¹⁹ However, even where explicit language exists in the oil and gas lease that royalty is payable only on casinghead gas that is put to productive use, the courts nevertheless have imposed an implied covenant on the lessee to act in a non-wasteful manner in its administration of the leasehold estate.¹²⁰ Thus, flaring casinghead gas that should have been saved or utilized represents a breach of an implied covenant under the lease if such flaring was unreasonable under the circumstances.¹²¹

Flaring from an oil well has not been specifically enumerated as “waste” by the Texas legislature,¹²² but the Texas Supreme Court has held that the enumerated list of examples of waste set forth in the statute is not exclusive and has made strong statements indicating that flaring casinghead gas is wasteful.¹²³ In addition, Texas case law makes clear that

Magnolia Petrol. Co., 279 S.W. 597 (Tex. Civ. App.—Eastland 1925), *rev'd*, 11 S.W.2d 158 (Tex. Comm. App. 1928); Lone Star Gas Co. v. Harris, 19 S.W.2d 178 (Tex. Civ. App.—Eastland 1929, writ *ref'd*); Gilbreath v. States Oil Corp., 4 F.2d 232 (5th Cir. 1925); Hutchings v. Chevron U.S.A., Inc., 862 S.W.2d 752 (Tex. App.—El Paso 1993, writ denied).

117. 1 SMITH & WEAVER, *supra* note 112, § 4.6(G), at 4-109.0.

118. See 3-6 WILLIAMS & MEYERS, OIL AND GAS LAW § 643.3 (2013).

119. See *Taylor*, 28 S.W.2d at 917 (“[W]e judicially know that, up to about the date of the lease, or a little later, casinghead gas was a by-product of oil wells, which was more often than not permitted to go to waste. In the lease care was taken to provide that the lessee was under no duty to save and utilize it, and that only in case it elected to do so was it to be charged a royalty thereon.”).

120. See OWEN ANDERSON, JOHN DZIENKOWSKI, JOHN LOWE, DAVID PIERCE & ERNEST SMITH, HEMMINGWAY ON OIL AND GAS LAW AND TAXATION § 8.5(A), at 432–34 (4th ed. 2004) [hereinafter ANDERSON ET AL.]; 1 SMITH & WEAVER, *supra* note 112, § 5.4[C][2], at 5-57 to 5-58. The application of this duty to develop the leasehold estate under the reasonable and prudent operator standard is discussed more fully in Section II.A.1, *infra*.

121. See 1 SMITH & WEAVER, *supra* note 112, § 5.4[C][2], at 5-57 to 5-58.

122. See TEX. NAT. RES. CODE ANN. §§ 85.045–.046, 86 (WEST 2013).

123. See *R.R. Comm'n v. Sterling Oil & Ref. Co.*, 218 S.W.2d 415, 421 (Tex. 1949) (“[If] this gas, which is an important natural resource, is to be conserved, some action is necessary to prevent its further unnecessary waste. It will be too late to speculate on what to do when the gas is exhausted through waste.”); see also *R.R. Comm'n v. Flour Bluff Oil Corp.*, 219 S.W.2d 506 (Tex. Civ. App.—Austin 1949, writ *ref'd*) (“It was never necessary for anyone to inform appellees of the obvious fact that natural sweet gas was a valuable and expendable natural resource, and that by flaring it they were wasting it. The above evidence as to hearings shows that the shut down order did not take, or at least should not have taken, appellees by surprise. They have always known that by flaring gas they were wasting it, and they have known for almost three years that the Commission intended to do something about it.”). The holding in *Armstrong v. Skelly Oil Co.*, 55 F.2d 1066 (5th Cir. 1932), is reconcilable with this statement. In *Armstrong*, the Fifth Circuit stated that there was no duty to put the natural gas to productive use, but in the course of this holding the court stated that the natural gas was “sour gas,” that the sour gas was not marketable without treatment that would add greatly to the expense of production, and that it was doubtful that any market in the near future would exist for sour gas

a lessee's argument that flaring is "customary" does not bar a jury from finding that the operator's actions were wasteful because the oil and gas industry's customary practice may in fact be considered negligent and wasteful.¹²⁴

However, as an affirmative defense to a prima facie case of waste, the lessee can establish that its actions were consistent with the reasonable and prudent operator standard.¹²⁵ This determination—whether the operator acted as a reasonable and prudent operator when it decided to flare commercially profitable natural gas—is the central question that would need to be resolved in a suit between an operator and its lessors, and so it is to this question that this Article now turns.

A. Lessors' Causes of Action

1. Breach of Implied Covenant to Administer the Leasehold Estate

Lessees are anxious to recover their operating costs and to maximize the rate of return on their investment. From a time-value-of-money perspective, it may well be financially advantageous to the lessee to immediately generate a revenue stream from crude oil even if this results in flaring commercially profitable natural gas. Horizontal wells in the Eagle Ford shale are expensive to drill, costing approximately \$6.5 million to \$12 million per well, and they generally provide the operator with an attractive three-year payback period.¹²⁶ However, although crude oil is extremely profitable at today's prices (WTI is more than \$100 per barrel¹²⁷), natural gas currently sells at a depressed price (approximately \$4.00 per mcf¹²⁸). Current natural gas prices provide a much lower net profitability to the operator, so many operators are willing to flare natural gas to quickly bring crude oil to market. Thus, operators solely focused on their own financial interest may decide to flare natural gas as a means of accelerating their crude oil production, in lieu of shutting in their oil well until gas pipeline connections are available.

However, the lessor's financial interest on this issue is arguably different than the lessee's. The lessor is entitled to a gross royalty and has

given the abundance of sweet gas in the vicinity. Based on these specific facts, the Fifth Circuit did not believe that the operator had breached any implied covenant duty to its lessor because the gas was not commercially profitable gas. The natural gas produced in the Eagle Ford shale is commercially profitable gas, and so the holding in *Armstrong* is distinguishable on grounds specifically indicated by the court to be critical to its holding.

124. *Brown v. Lundell*, 344 S.W.2d 863, 866 (Tex. 1961).

125. TEX. NAT. RES. CODE ANN. § 85.321 (WEST 2006).

126. See Jennifer Hiller, *Eagle Ford Crude Selling for Far Above Threshold*, FUEL FIX (Feb. 28, 2013), <http://fuelfix.com/blog/2013/02/28/eagle-ford-crude-selling-for-far-above-threshold/>.

127. See *Energy & Oil Prices*, BLOOMBERG MARKETS, <http://www.bloomberg.com/energy/> (last visited May 23, 2014).

128. See *id.*

no financial interest in the operator's net profitability. The lessor also has no financial investment in the operations, so its financial interest is generally served best by maximizing the total gross royalty that is paid over the life of the lease.¹²⁹ In *Natural Gas Pipeline Co. of America v. Pool*, the dissent articulated the following statement that was not controverted by the majority opinion:

[D]eferred marketing of oil or gas could actually benefit the lessors as long as there is no drainage to other wells, no oil or gas is lost by ceasing production, and production is delayed only until the earliest possible point at which conditions for production are favorable.¹³⁰

The trial court in the case had found evidence that the summer market for gas had sufficiently declined to necessitate shutting in a number of its gas wells for a month or more."¹³¹ In fact, the lessee in the case argued that its decision to shut in wells in summer months was reasonable as it served to promote the lessor's financial interest of maximizing the absolute amount of gross royalty that would be paid under the lease.¹³² Similarly, Oklahoma case law indicates that a lessee acts reasonably when it delays production in summer months in order to maximize production in later winter months when the price of natural gas would be higher.¹³³ These cases present an analogous precedent for demonstrating that the lessor's financial interest is to maximize gross royalty.

From this premise, it seems clear that flaring natural gas from oil wells in the Eagle Ford shale is generally contrary to the lessor's financial interests. Flaring reduces the gross royalty that would otherwise be payable to the lessor if the natural gas had been commercially produced and sold. Thus, deferring crude oil production for a temporary period, if doing so avoids the need to flare natural gas, is likely to be beneficial to the financial interest of the lessor because it results in a larger absolute gross royalty to the lessor.

At this point, one could argue that the lessor might prefer the immediate (albeit lower) royalty on crude oil production to waiting for a higher gross royalty on the commercial production of both crude oil and natural gas. The objector would contend that the time value of money

129. This is particularly the case from 2008 through 2012, where, due to Federal Reserve policy, interest rates have been kept at extremely low levels. In this period, the lessor's interest income that could have been earned from investing an "accelerated" royalty payment from crude oil sales is unlikely to be sufficient to compensate the lessor for the lessor's lost opportunity to be paid royalty on natural gas that could have been commercially produced but was instead flared.

130. *Natural Gas Pipeline Co. of Am. v. Pool*, 124 S.W.3d 188 (Tex. 2003).

131. *Natural Gas Pipeline Co. of Am. v. Pool*, 30 S.W.3d 618 (Tex. App.—Amarillo 2000), *rev'd on other grounds*, 124 S.W.3d 188 (Tex. 2003).

132. See Reply Brief for Petitioners, *Pool*, 124 S.W.3d 188 (2003) (No. 01-0057).

133. See *Pack v. Santa Fe Minerals*, 869 P.2d 323 (Okla. 1994).

benefit to the lessor of getting paid a royalty early outweighs the financial cost of losing gross royalty on the flared natural gas. In periods of high inflation and high interest rates, this argument may well prove to be factually accurate. However, the United States has been in a remarkably prolonged period of low interest rates and near zero inflation since 2008.¹³⁴ Bank CD rates have been less than 0.5%.¹³⁵ In these circumstances, the value of royalties on the crude oil may be less than the discounted present value of royalties that could be obtained by waiting to produce the gas (together with the crude oil) rather than flaring it. Ultimately, of course, this is a fact question for a jury to consider.

For the remainder of the discussion, it will be assumed that the lessor can proffer sufficient evidence to demonstrate that its financial interest would have been better served if the operator had chosen to operate the oil well in a manner that maximized the total gross royalty instead of accelerating crude oil production by flaring casinghead gas. The question then becomes what the reasonable and prudent operator's duties are in this factual context in which the financial interests of the lessor and lessee diverge.

Texas law in this regard has several guiding principles. First, the operator cannot consider solely its own financial interest, regardless of how reasonable that interest may be on a stand-alone basis. Instead of this operator-only inquiry, Texas law imposes on the reasonable and prudent operator the duty to act with "utmost good faith."¹³⁶ In applying this standard, case law makes clear that operators have an implied duty to "prudently manage and administer the leasehold estate,"¹³⁷ meaning they must use appropriate technology and due diligence.¹³⁸ When deciding how to prudently develop and manage the mineral estate, Texas law indicates that the "utmost good faith" standard is not a fiduciary standard in the traditional sense, but Texas law is also clear that the lessee cannot simply look to its own financial interests but must instead also consider the financial interest of the lessor when it decides how to administer the mineral estate.¹³⁹ Further, case law illuminates the resolution of this balancing-of-interest approach as follows.

First, a lessee acts as a reasonable and prudent operator when it flares

134. *Inflation United States—Consumer Price Index (CPI)*, GLOBAL-RATES.COM, <http://www.global-rates.com/economic-indicators/inflation/consumer-prices/cpi/united-states.aspx> (last visited May 14, 2014).

135. *See id.*

136. *See* Shell Oil Co. v. Stansbury, 410 S.W.2d 187 (Tex. 1966); Schlittler v. Smith, 101 S.W.2d 543, 545 (Tex. 1937).

137. Amoco Prod. Co. v. Alexander, 622 S.W.2d 563, 570 (Tex. 1981).

138. *See* 5 WILLIAMS & MEYERS, *supra* note 118, § 861.3; ANDERSON ET AL., *supra* note 120, § 8.5(a); EUGENE KUNTZ, A TREATISE ON THE LAW OF OIL AND GAS § 59.1 (1987 & Supp. 2009).

139. Mims v. Beall, 810 S.W.2d 876 (Tex. App.—Texarkana 1991, no writ).

natural gas and (1) deferring crude oil production until gas pipeline connections are available would cause the oil well to become unprofitable;¹⁴⁰ (2) delayed crude oil production would allow the tract to be drained by neighboring tracts;¹⁴¹ or (3) the natural gas could not be disposed of profitably even if gas pipeline connections were made. Thus, the operator is not required under Texas law to operate at a loss in order to maximize gross royalty to the lessor.¹⁴²

Second, if (1) delayed crude oil production would conserve natural gas and allow profitable¹⁴³ gas to be sold for commercial use,¹⁴⁴ and (2) deferring production would not cause the well to become unprofitable, then the better view is that the operator has an implied duty to manage the lease in a manner that minimizes waste.¹⁴⁵ One leading treatise states:

140. See, e.g., *Clifton v. Koontz*, 325 S.W.2d 684 (Tex. 1959).

141. In *Kirke v. Texas Co.*, 186 F.2d 643 (7th Cir. 1951), the Seventh Circuit held that flaring gas prior to the erection of an extraction plant was reasonable. The specific facts were that the defendant “could leave the oil and gas in the wild fugacious state under the land and thereby lose both to its competitors operating on adjacent land,” or the operator could flare the natural gas so that it could capture the far more valuable oil and in the interim build a gasoline extraction plant as soon as possible. See *Guth v. Tex. Co.*, 163 F.2d 893 (7th Cir. 1947), *cert. denied*, 332 U.S. 844 (1947) (flaring was reasonable in the scenario where tract was subject to drainage from wells on adjacent tracts and so deferring crude oil would reduce the amount of recoverable crude oil on the tract); see also *Chapman v. Tex. Co.*, 80 F. Supp. 15 (D. Ill. 1948) (finding that it was reasonable to flare casinghead gas until a gas extraction plant could be built). On these facts, the Seventh Circuit believed that the operator acted as a reasonable and prudent operator. However, the Seventh Circuit in *Kirke v. Texas Co.* did not address the situation where there was not the risk of drainage, and the Seventh Circuit specifically held open the prospect that the flaring of casinghead gas could represent negligent waste in appropriate factual situations where, for example, drainage is not a significant concern.

142. See *Armstrong v. Skelly Oil Co.*, 55 F.2d 1066 (5th Cir. 1932) (sour gas could not be disposed of at all); see also *Maddox v. Tex. Co.*, 150 F. Supp. 175 (E.D. Tex. 1957) (lessor not under a duty to separate out condensate when the wet gas was put to productive use).

143. Importantly, in determining whether the natural gas could be sold at a profit, only operating and marketing expenses are to be considered. See *Clifton*, 325 S.W.2d at 690; see also WILLIAMS & MEYERS, *supra* note 118, § 604.6(b). The cost of drilling and completing the horizontal well and any reworking operations are not considered. See *Pshigoda v. Texaco, Inc.*, 703 S.W.2d 416 (Tex. App.—Amarillo 1986, writ ref’d n.r.e.); see also *Garcia v. King*, 164 S.W.2d 509 (1942).

144. In this context, “profitable” production occurs when the natural gas can be sold for more than its marginal operating cost of production. See *Clifton*, 325 S.W.2d at 684; See also *Hutchison v. Tex-Lee Drilling & Dev. Co.*, No. 93V-056, 1997 Tex. App. LEXIS 5877 (Tex. App.—Austin 1997, writ denied) (stating that the following expenses are used in calculating production in paying quantities: “the landowner’s share of royalty; labor, marketing, and repair costs; depreciation on salvable equipment; overhead expenses attributable to the well; and taxes on the operator’s interest”). In this regard, the production paid over to the landowner’s royalty would seem to be excluded and all of the marginal operating costs are to be considered. Cases that hold that natural gas could be flared have had facts showing that crude oil would be lost if production were delayed or the natural gas could not be sold profitably. See *supra* authorities cited in notes 117–19. Now that natural gas is selling at approximately \$4.00 per mcf and markets are available for its commercial use, this would represent a significant relevant distinction to earlier cases that found flaring to have been reasonable.

145. See WILLIAMS & MEYERS, *supra* note 118, § 654 (“We are of the view that the operator’s duty, measured by the reasonably prudent operator standard, encompasses the extraction of liquid constituents from casinghead gas if it may reasonably be expected that the operator could engage in such operations *at a profit*.” (emphasis added)).

Flaring of the gas produced when a jurisdictional market was available therefore would, in our opinion, constitute a breach of duty owed the nonoperator. With the substantial governmental restrictions on flaring in recent years and the growing non-jurisdictional market for gas, the question is not likely to arise with any frequency.¹⁴⁶

Given this direct statement, the significant flaring of natural gas by operators in the Eagle Ford shale appears to have caught leading scholars by surprise.

Based on the parameters established by Texas case law, it appears that a lessor could bring a claim of negligent waste against an operator who flares natural gas from oil wells in the Eagle Ford shale. The Eagle Ford shale wells have been extremely profitable to drill.¹⁴⁷ Once the oil well is completed, well data will be available for expert witnesses to determine whether the well would be profitable overall even if shut in for a temporary period of time pending gas pipeline connections. This is certainly a fact question, but it is reasonable to believe that a jury could conclude that a prolific well in the Eagle Ford shale would be profitable overall even if it were shut in temporarily while waiting for a gas pipeline connection.¹⁴⁸ If these facts are established, a reasonable and prudent operator would not flare commercially profitable natural gas, but would instead seek to minimize this waste of natural resources.

The usual remedy for a breach of the lessee's implied covenant to prudently administer the leasehold estate is an action for damages for the lost royalty on the flared gas.¹⁴⁹ Pursuant to Statewide Rule 58, operators must report gas dispositions, including the volumes of gas flared, to the

146. WILLIAMS & MEYERS, *supra* note 118, § 654.

147. See TEX. R.R. COMM'N, *supra* note 24, at 63–74.

148. The lessor might be able to have the jury charge read as follows:

JURY CHARGE: The jury must decide whether the flaring of commercially profitable gas in order to accelerate production of crude oil represents an unreasonable waste of the mineral estate. In making this determination, the jury should understand that the lessee has a duty to act as a reasonable and prudent operator, and this standard requires that the operator act in "utmost good faith" and equally consider the financial interest of the lessor with that of its own financial interest. If the jury finds that the oil well would have been profitable overall to the lessee if it had been shut in and the financial interest of the lessor would have been better served by not flaring the natural gas, then the jury should find that the lessee failed to act as a reasonable and prudent operator when it chose to flare natural gas. If the jury believes that the temporary delay in the production of crude oil would have caused the well to be unprofitable to the lessee, or if the jury believes that the shut in of the oil well would have caused a loss in the ultimate recovery of crude oil that would have been detrimental to the financial interest of both the lessee and the lessor, or if the jury believes that natural gas could not be sold for an amount to recover the marginal operating cost of its production, then the jury should find that the lessee acted as a reasonable and prudent operator when it flared the natural gas.

149. W.T. Waggoner Estate v. Sigler Oil Co., 19 S.W.2d 27 (Tex. 1929).

RRC on their monthly production reports,¹⁵⁰ which must state the actual, metered volumes of casinghead gas at the lease level.¹⁵¹ With this information, lessors could calculate with specificity the royalty lost from the flared natural gas.

2. A Lessor's Signing of a Division Order Is Irrelevant

As a precondition to getting paid, lessees often have their lessors sign a division order.¹⁵² As a result of significant controversy over the legal implications of signing division orders, the Texas legislature clarified the legal consequences of a lessor's signing of a division order.¹⁵³ Under the division order statute, a lessee has a right to condition payment of royalty on a lessor's signing of a division order, but only if the division order contains the minimal provisions listed in the statute.¹⁵⁴ If lessors sign a standard division order, the general rule under § 91.402(g) is that the division order is binding for the time and to the extent that it has been acted on and made the basis of payments.¹⁵⁵ However, as an exception to this general rule, § 91.402(h) provides that a division order cannot contradict the lease, so division orders are therefore not binding with respect to claims that the lessee breached a duty (whether expressed or implied) imposed by reason of the lease.¹⁵⁶ Thus, even if a lessor signs a standard division order, the execution of that division order does not limit its ability to later claim that the lessee breached its implied covenant to reasonably administer the leasehold estate. However, even though the execution of a standard division order should not impact a lessor's ability to bring this cause of action at a later time, the claim must be brought within four years from the date upon which the lessee is alleged to have breached its duties under the lease in order to not be barred by the applicable statute of limitations.¹⁵⁷

Given that the lessor's execution of a standard division order does not reduce any of its rights under its lease agreement vis-à-vis its lessee, the lessor is actually in an advantageous position. The lessor can remain silent and receive royalty on crude oil production until gas pipeline connections are made and then bring suit against the lessee for breach of

150. 16 TEX. ADMIN. CODE § 3.58 (2013).

151. TEX. R.R. COMM'N, *supra* note 28.

152. *See id.*

153. For a helpful, detailed analysis of the division order statute, see Ernest E. Smith, *The New Division Order: Legal and Practical Problems*, 42 ROCKY MTN. MIN. L. INST. 19-1 (1996); see also Laura H. Burney, *The Interaction of the Division Order and the Lease Royalty Clause*, 28 ST. MARY'S L. J. 353 (1997).

154. TEX. NAT. RES. CODE ANN. § 91.402(c) (1993).

155. *Id.* § 91.402(g).

156. *See supra* authorities cited in note 153.

157. TEX. CIV. PRAC. & REM. CODE ANN. § 16.004 (WEST 2001); see also *Headington Oil Co. v. White*, 287 S.W.3d 204 (Tex. App.—Houston [14th Dist.] 2009, no pet.) (analyzing application of four year statute to unpaid royalties).

its implied covenant to diligently and efficiently manage the leasehold estate. The lessor's potential damages would be the lost royalty for the natural gas that was flared. Faced with this prospect, operators may seek to modify the standard division order to include language that states that the lessor affirmatively agrees to waive its rights to claim a breach of an implied covenant as a precondition to receiving royalty on crude oil production. When such modifications are made to a division order and those modified division orders are signed, their execution can result in a waiver of the lessor's rights under the lease agreement.¹⁵⁸ However, lessors can refuse to sign any modified division order that contains terms or conditions outside the standard terms and conditions set forth in the Texas division order statute.¹⁵⁹ In addition to refusing to sign a modified division order, lessors can bring suit to demand payment of their royalty on crude oil production, with interest. Thus, operators have very little leverage over knowledgeable lessors. The most prudent course for operators in this situation is to delay crude oil production until gas pipeline connections are available. Otherwise, accelerating crude oil production and flaring the casinghead gas exposes the operator to potential liability for the lost royalty on the flared gas.

*B. Adjacent Landowners' Claims: Negligent
Waste of Natural Gas Harms Correlative Rights*

Even if the lessee pays royalty to its lessors on flared casinghead gas, this does not eliminate the potential exposures arising from the lessee's flaring activities. Under Texas law, each landowner is considered to own the oil and gas in place that underly his land.¹⁶⁰ The drilling and production activities on one tract can drain oil and gas from other tracts, diminishing the oil and gas available for production by the adjacent landowners. Notwithstanding this drainage, the Rule of Capture was developed early on as a non-liability rule that protects lessees from drainage claims from adjacent tract owners,¹⁶¹ but this non-liability rule extends only to production operations that are lawful and non-wasteful.¹⁶² As one leading treatise has stated, "courts in other states have recognized a cause of action in neighboring landowners if an adjacent operator is

158. See *Judice v. Mewbourne Oil Co.*, 939 S.W.2d 133 (Tex. 1996); *Cabot Corp. v. Brown*, 754 S.W.2d 104 (Tex. 1987); *Exxon Corp. v. Middleton*, 613 S.W.2d 240 (Tex. 1981); *Heritage Res., Inc. v. Nationsbank*, 939 S.W.2d 118 (Tex. 1996); *Spellman v. Am. Universal Inv. Co.*, 687 S.W.2d 27 (Tex. App.—Corpus Christi 1984, error ref'd n.r.e.) (holding that landowners ratified lease amendments through execution of a "Rental Division Order with Ratification" and acceptance of rental payments).

159. TEX. NAT. RES. CODE ANN. § 91.402(e) (WEST 1993).

160. See *Stephens Cnty. v. Mid-Kansas Oil & Gas Co.*, 254 S.W. 290 (Tex. 1923).

161. See *Riley v. Riley*, 972 S.W.2d 149 (Tex. App.—Texarkana 1998, no pet.); *Ryan Consol. Petrol. Corp. v. Pickens*, 285 S.W.2d 201 (Tex. 1955).

162. 1 SMITH & WEAVER, *supra* note 112, § 1.1[B][1], at 1-5.

venting gas or flowing oil without any attempt to store or transport any of the well's production, and there is no reason to suppose that Texas courts would not do likewise."¹⁶³ Thus, if an operator flares commercially profitable casinghead gas drained from neighboring tracts, owners of mineral interests in those tracts have standing to bring an action against that operator on the grounds that such flaring represents an improper and unreasonable production practice that harms their correlative rights in the common reservoir.

In *Elliff v. Texon Drilling Co.*,¹⁶⁴ the Texas Supreme Court made clear that the non-liability protection afforded by the Rule of Capture for drainage did not protect an operator who drained neighboring tracts as a result of negligent and wasteful production.¹⁶⁵ In *Elliff*, the lessee's negligent drilling practices caused a well blow-out, which in turn caused drainage from neighboring tracts.¹⁶⁶ Further, the blow-out in *Elliff* resulted in all of the production being burned into the atmosphere.¹⁶⁷ The court held that the burning of all production represented negligence on the part of the operator, and the operator was thus liable to the owner of the adjacent tract for any damage resulting from the drainage arising from the negligent production.¹⁶⁸ The holding in *Elliff* is consistent with a line of Texas cases that hold that the Rule of Capture does not protect an operator against claims of drainage when the operator's unreasonable or negligent production results in the wasteful loss of oil or gas.¹⁶⁹ This result is also consistent with cases from other jurisdictions that have held that a lawfully drilled well that produces in an unlawful manner is not protected from liability by the Rule of Capture.¹⁷⁰

The flaring of commercially profitable natural gas results in waste. If a jury finds that a reasonable and prudent operator would not have flared, the adjacent landowners could seek damages for the value of gas drained from their tracts because such drainage and subsequent flaring of this gas

163. *Id.* at 1–6. For cases in other jurisdictions, see *Louisville Gas Co. v. Kentucky Heating Co.*, 77 S.W. 368 (Ky. 1903) and *Louisville Gas Co. v. Kentucky Heating Co.*, 111 S.W. 374 (Ky. 1909). These cases were favorably cited by the Texas Supreme Court in *Elliff v. Texon Drilling Co.*, 210 S.W.2d 558, 580 (Tex. 1948).

164. *Elliff*, 210 S.W.2d at 558.

165. *Id.* at 562.

166. *Id.* at 559.

167. *Id.*

168. *Id.* at 563; *Apache Corp. v. Moore*, 891 S.W.2d 671 (Tex. App.—Amarillo 1994, writ denied).

169. See *Comanche Duke Oil Co. v. Tex. Pac. Coal & Oil Co.*, 298 S.W. 554 (Tex. Comm'n App. 1927) (holding that excessive amounts of nitroglycerin caused damage to adjacent landowners); see also *Roskey v. Gulf Oil Corp.*, 387 S.W.2d 915 (Tex. Civ. App.—Houston 1965, writ ref'd n.r.e.); *Humble Oil & Ref. Co. v. Grucholski*, 376 S.W.2d 950 (Tex. Civ. App.—Waco 1964, writ ref'd n.r.e.); *Sinclair Oil & Gas Co. v. Gordon*, 319 S.W.2d 170 (Tex. Civ. App.—Austin 1958, writ ref'd n.r.e.); *Klostermann v. Hous. Geophysical Co.*, 315 S.W.2d 664 (Tex. Civ. App.—San Antonio 1958, writ ref'd).

170. See *Wronski v. Sun Oil Co.*, 279 N.W.2d 564 (Mich. Ct. App. 1979).

prevents these neighboring landowners from recovering their share of gas. Under this line of reasoning, the operator's flaring activities expose the operator to claims by royalty owners and working interest owners of adjacent tracts.

The Texas Supreme Court's support for this potential cause of action is bolstered by the reasoning that the court employed in *Coastal Oil & Gas Corp. v. Garza Energy Trust*.¹⁷¹ In this case, Coastal (the lessee) fractured the Vicks T formation after completing a validly spaced well.¹⁷² The jury found that the hydraulically induced fractures crossed lease lines and extended onto neighboring tracts.¹⁷³ In a divided opinion, the Texas Supreme Court held that the royalty owner of the neighboring tract had a non-possessory interest in the tract and thus could bring a cause of action only if it showed that an actionable trespass had occurred.¹⁷⁴ The Texas Supreme Court then stated that an actionable trespass did not exist on the facts of the case because the direct consequence of the hydraulic fracturing operation was to subject the neighboring tract to drainage that was legally protected from liability by the Rule of Capture.¹⁷⁵ In the course of its opinion, however, the Texas Supreme Court stated that the possibility for liability does exist in situations where the lessee's drainage resulted from conduct that was otherwise "illegal, malicious, reckless, or intended to harm another without commercial justification"; in those situations, the Rule of Capture would not protect the lessee from drainage claims.¹⁷⁶

Thus, reading the *Elliff* and *Coastal* decisions in combination, the Rule of Capture does not protect an operator from drainage claims by adjacent landowners and their lessees if hydraulic fracturing in the Eagle Ford shale results in drainage and the resulting drained production is then unreasonably wasted by flaring. Instead, *Elliff* and *Coastal* suggest that flaring might harm the correlative rights of the landowner and lessee of the adjacent tracts by destroying the gas without adequate commercial justification. As a result, an operator who flares commercially profitable casinghead gas may find itself obligated to pay royalty for the value of casinghead gas that has been drained from the neighboring tracts and then flared, both to its own lessor on the value of the flared gas, for the reasons discussed in Section II.A.1, *supra*, and to adjacent landowners.

171. 268 S.W.3d 1 (Tex. 2008).

172. *Id.* at 13.

173. *Id.* at 8.

174. *Id.* at 11.

175. *Id.* at 12–17.

176. *Id.* at 17.

C. Surface Owners' Tort Claims for Nuisance

If an operator's activities substantially interfere with the use and enjoyment of another's land, the affected neighboring landowner may have a claim based on nuisance.¹⁷⁷ Although aesthetic changes to land generally do not rise to the level of an actionable nuisance,¹⁷⁸ an operator's actions that cause physical harm to property or a person are actionable.¹⁷⁹ A permit granted by the RRC to perform the activity that creates the harm does not immunize the operator from claims arising in nuisance.¹⁸⁰ Thus, when a neighboring surface owner (who has not leased her mineral estate to the operator) is negatively impacted by the operator's actions, she can generally assert claims of nuisance since her tract is not required to reasonably accommodate the development activities of other tracts.¹⁸¹

Nuisance claims can also be based on reduced air quality since flaring large amounts of natural gas diminishes the air quality for all surface owners who live in and around the flared well. For example, the significant flaring of natural gas has impacted the overall air quality of the South Texas region and also of the city of San Antonio.¹⁸² This reduction in air quality lessens the ability of a neighboring surface owner to enjoy his estate. Surface owners who have suffered from respiratory disorders, developed trouble breathing, or incurred headaches as a result of the operator's ongoing and continuous flaring of natural gas in the vicinity might be able to make a claim in nuisance.¹⁸³

However, when the surface owner claiming nuisance owns the tract where the operator has the right to conduct oil and gas operations, the general rule is that the mineral estate is the dominant estate.¹⁸⁴ The mineral estate owner has an implied easement to use the surface and subsurface in any way reasonably necessary for exploring, drilling,

177. *Holubec v. Brandenberger*, 111 S.W.3d 32, 37 (Tex. 2003).

178. *See Rankin v. FPL Energy LLC*, 266 S.W.3d 506, 508 n.3 (Tex. App.—Eastland 2008, pet. denied).

179. *See Walton v. Phillips Petrol. Co.*, 65 S.W.3d 262, 270 (Tex. App.—El Paso 2001, pet. denied), *abrogated by In re Estate of Swanson*, 130 S.W.3d 144 (Tex. App.—El Paso 2003, no pet.).

180. *See FPL Farming v. Env'tl. Processing Sys.*, 351 S.W.3d 306, 310 (Tex. 2011).

181. *See Michael Goldman, A Survey of Typical Claims and Key Defenses Asserted in Recent Hydraulic Fracturing Litigation*, 37 ST. BAR OF TEX. SEC. OIL, GAS & ENERGY RESOURCES L. REP. 43, 57 (2013).

182. *See Dave Fehling, Fracking's Link to Smog Worries Some Texas Cities*, NPR, <http://stateimpact.npr.org/texas/2012/08/07/frackings-link-to-smog-worries-some-texas-cities/>.

183. *See Heinkel-Wolfe v. Williams Prod. Co.*, No. 2010-40355-362 (362nd Dist. Ct., Denton Cnty., Tex. filed Nov. 3, 2010) (claiming, among other things, that the operator's activities created air pollution that created respiratory ailments, headaches, and resulted in the plaintiff's difficulty in breathing); *see also Vestal v. Gulf Oil Corp.*, 235 S.W.2d 440, 441-42 (Tex. 1951).

184. *See e.g., Vest v. Exxon Corp.*, 752 F.2d 959 (5th Cir. 1985); *Stradley v. Magnolia Petrol. Co.*, 155 S.W.2d 649 (Tex. Civ. App.—Amarillo 1941, writ ref'd).

producing, transporting, and marketing oil and gas.¹⁸⁵ The operator, as the working interest owner of the mineral estate, is entitled to use such portions of the surface estate as is reasonably necessary to develop the mineral estate.¹⁸⁶ Nevertheless, the rights of its owner are not absolute even though the mineral estate is the dominant estate.¹⁸⁷ The operator must act in a non-negligent manner and use the surface estate reasonably.¹⁸⁸ Further, the mineral interest owner must reasonably accommodate any prior surface use.¹⁸⁹ Consequently, if the surface owner can demonstrate that a reasonable and prudent operator would not have engaged in a flaring practice and that flaring represented an unreasonable well-site practice considering all the facts and circumstances, the surface estate owner can bring claims based on nuisance against the operator.

An operator may have a valid defense if it executes a surface use agreement with the surface owner that explicitly allows flaring to be done for extended periods of time. Even though lessees under Texas common law may substantially interfere with the surface owner's use and enjoyment of the surface estate as long as the interference is reasonably necessary to develop the mineral estate,¹⁹⁰ operators, to avoid controversy, nevertheless will enter into surface use agreements that specify the activities that will be performed on the surface and a methodology for compensating the surface owner for damages caused by such use.¹⁹¹ Courts have generally upheld the validity of these agreements to the end that surface owners can be considered to have contractually relinquished their claims to object to an unreasonable or excessive use of the surface estate.¹⁹² Thus, if the surface owner who is harmed by gas flaring has signed a surface use agreement, the terms of that particular agreement would need to be carefully considered to determine whether the surface owner has relinquished any of her rights to bring a suit in nuisance.

D. Concluding Thoughts on Private Causes of Action

Texas courts have been careful to state that the standard of care

185. See 1 SMITH & WEAVER, *supra* note 112, § 2.1[B][1], at 2-14.

186. *Id.* at 2-15.

187. See *Texaco, Inc. v. Faris*, 413 S.W.2d 147, 149 (Tex. Civ. App.—El Paso 1967, writ ref'd n.r.e.).

188. *Faris*, 413 S.W.2d at 149; see *Brown v. Lundell*, 344 S.W.2d 863, 866 (Tex. 1961) (stating that the lessee has been granted “only so much of [the surface owner's] land as will be reasonably necessary to effectuate the purpose of the lease, and to be used in a non-negligent manner”).

189. See *Getty Oil Co. v. Jones*, 470 S.W.2d 618 (Tex. 1971).

190. See *Sun Oil Co. v. Whitaker*, 483 S.W.2d 808 (Tex. 1972).

191. SMITH & WEAVER, *supra* note 112, § 6.7, at 6.33.

192. See *Prairie Producing Co. v. Martens*, 705 S.W.2d 257 (Tex. App.—Texarkana 1986, writ ref'd n.r.e.); see also *Union Producing Co. v. Allen*, 297 S.W.2d 867 (Tex. App.—Beaumont 1957, no writ).

needed for reasonable diligence evolves with advances in technology.¹⁹³ Indeed, the Eagle Ford shale was not even shown to be viable until 2008, due in large part to the relatively new drilling and completion process of horizontal drilling and multi-stage hydraulic fracturing required for production.¹⁹⁴ In addition, the United States has placed renewed emphasis on cleaner fuels, and as a result the nation now recognizes that natural gas is critically important for the nation's long-term energy future.¹⁹⁵ The principles set forth in the decided cases, together with the fact that natural gas is an important natural resource in its own right and not merely a byproduct of crude oil production, should create significant concern for operators who flare large amounts of commercially marketable and profitable natural gas. In addition, these cases should motivate the RRC to tighten its criteria for granting exceptions so that regulatory approval better tracks the court's notions of the reasonably prudent operator standard.

III. OPERATORS THAT SHUT IN WELLS

Given the exposure created by the unreasonable flaring of commercially marketable and profitable natural gas, it is hoped that prudent operators would decide on their own to defer their crude oil production until gas pipeline connections are made available for their oil wells. However, if an operator were to shut in its oil well until gas pipeline connections were available for the casinghead gas, a variety of issues would arise for the lessee.

The typical oil and gas lease creates a fee simple determinable estate.¹⁹⁶ Under a typical oil and gas lease, the lease is extended into the secondary term by production.¹⁹⁷ Mere discovery and completion of a well that could be produced profitably is not sufficient to extend the lease past the primary term absent some other savings clause;¹⁹⁸ oil or gas must actually be produced or the lease automatically terminates on its own terms.¹⁹⁹ Further, under Texas law, production for purposes of this

193. See Holliday, *supra* note 107, at 815–16.

194. See *History of the Eagle Ford*, TEX. R.R. COMM'N, <http://www.rrc.state.tx.us/eagleford/> (last updated Apr. 25, 2014).

195. See SUSAN SAKMAR, ENERGY FOR THE 21ST CENTURY 1, 7 (2013).

196. See *W.T. Waggoner Estate v. Sigler Oil Co.*, 19 S.W.2d 27 (Tex. 1929).

197. See Ernest E. Smith & John S. Dzienkowski, *A Fifty-Year Perspective on World Petroleum Arrangements*, 24 TEX. INT'L L.J. 13 (1989).

198. See *Holchak v. Clark*, 284 S.W.2d 399 (Tex. Civ. App.—San Antonio 1955, writ ref'd); see also *Sellers v. Breidenback*, 300 S.W.2d 178 (Tex. Civ. App.—San Antonio 1957, writ ref'd). However, there are leases that do allow a lease to be extended past the primary term if a well is “capable” of production, but they are less common. See *Anadarko Petrol. v. Thompson*, 94 S.W.3d 550 (Tex. 2003); see also *Grinnell v. Munson*, 137 S.W.3d 706 (Tex. App.—San Antonio 2004, no pet.); see also *Chesapeake Exploration Ltd. P'ship v. Corine Inc.*, No. 10-06-00265-CV, 2007 WL 2447293 (Tex. App.—Waco Aug. 29, 2007, no pet.).

199. See *Stanolind Oil & Gas Co. v. Barnhill*, 107 S.W.2d 746 (Tex. Civ. App.—Amarillo

habendum clause means production “in paying quantities.”²⁰⁰ Thus, if an operator cannot produce from a well due to “no-flare” orders or because it voluntarily shut in the well, the common law has generally held that the lack of production causes the lease to expire.²⁰¹ The various savings mechanisms that avoid this result, and how each would potentially apply in the context of an oil well that is shut in pending gas pipeline connections, are discussed further below.

A. Force Majeure Issues

To ameliorate the risk of premature termination of the leasehold estate, most oil and gas leases today contain force majeure clauses.²⁰² If a lease contains a properly drafted force majeure clause (a clause that allows the lease to be extended during the force majeure event and relieves the lessee of its obligations during that timeframe), a “no-flare” order issued by the RRC should implicate this savings provision²⁰³ with the consequence that the lease would be extended during the period of the force majeure event. With this said, the contractual language in the force majeure clause should be carefully reviewed.²⁰⁴ Further, even if this savings clause were available, the lessee would need to recommence operations immediately once the well could be connected to a gas pipeline.²⁰⁵ What is more, if the RRC left open the possibility that the operator could obtain flaring exceptions and the operator chose not to seek authority to flare natural gas, then the force majeure clause might not be applicable.²⁰⁶

1937, writ ref'd) (holding that a gas well that was capable of production but shut in until a market was available did not have production in paying quantities at the end of the primary term and that the lease expired); *see also* *Watson v. Rochmill*, 155 S.W.2d 783, 784 (Tex. 1941); *Riley v. Meriwether*, 780 S.W.2d 919, 923 (Tex. App.—El Paso 1989, writ denied); *Ice Bros. v. Bannowsky*, 840 S.W.2d 57 (Tex. App.—El Paso 1992, no pet.).

200. *See Garcia v. King*, 164 S.W.2d 509, 511 (Tex. 1942); *see also Gulf Oil Corp. v. Reid*, 337 S.W.2d 267 (Tex. 1960) (flaring gas, without any other production, does not constitute production in paying quantities if the gas is not sold or used off the premises).

201. *See Haby v. Stanolind Oil & Gas Co.*, 228 F.2d 298 (5th Cir. 1955) (“no-flare” orders in the Sprberry field caused the lessee’s lease to expire due to the lack of production); *Jones*, *supra* note 59, at 731–739 (1954).

202. SMITH & WEAVER, *supra* note 112, § 4.5[E][1], at 4-63. Given that force majeure clauses are widespread, a cogent argument can be made that the most economical and least disruptive means for the industry to accomplish sound conservation would be for the RRC to adopt a “no-flare” order that would implicate this common savings clause.

203. *See Sun Operating Ltd. v. Holt*, 984 S.W.2d 277 (Tex. App.—Amarillo 1998, pet. denied). Because the force majeure event is not attributable to the operator’s own actions to any extent, competing authorities should be distinguishable. *See, e.g., Frost Nat’l Bank v. Matthews*, 713 S.W.2d 365 (Tex. App.—Texarkana 1986, writ ref’d n.r.e.) (holding that a shut-in order was not a force majeure because it was issued in response to the lessee’s violation of agency orders; thus the shut in was not solely outside the control of the lessee or of the lessee’s predecessor).

204. SMITH & WEAVER, *supra* note 112, § 4.5[E][2], at 4-65.

205. *See Vortt Exploration Co. v. EOG Res., Inc.*, No. C-41524, 2009 Tex. App. LEXIS 4113 (Tex. App.—Eastland May 29, 2009, no pet.).

206. *See Perlman v. Pioneer Ltd. P’ship*, 918 F.2d 1244 (5th Cir. 1990); *Atkinson Gas Co. v. Albrecht*, 878 S.W.2d 236 (Tex. App.—Corpus Christi 1994, writ denied).

For the remainder of the discussion, it will be assumed that either the RRC does not issue a “no-flare” order or that a properly crafted force majeure clause does not exist in the lease. In either of those events, the following additional potential savings mechanisms would need to be considered if an oil well were shut in pending gas pipeline connections.

B. Voluntary Shut In of Oil Wells to Prevent Waste

1. Shut-In Royalty Clause

Leases typically provide that shut-in royalties can be paid to keep an oil and gas lease in force when a well has been drilled but cannot be produced due to a lack of a market or due to the unavailability of a gas pipeline.²⁰⁷ A shut-in royalty clause modifies the habendum clause and provides that the shut-in royalty is a substitute for production.²⁰⁸ Accordingly, Texas courts have consistently held that a well must be capable of production in paying quantities when the well was shut in and the shut-in royalty was tendered.²⁰⁹ If the shut-in royalty clause in a particular lease applies only to gas wells and if the term “gas well” is not defined or is defined in terms of the RRC’s regulatory classification scheme, a well that is completed as an “oil well” would not be able to rely on the shut-in royalty clause as a means to save the lease.²¹⁰

In *Vernon v. Union Oil Co. of California*,²¹¹ the Fifth Circuit, applying Texas law, addressed whether a shut-in royalty could be tendered under a lease that allowed for shut-in royalties for “gas only” wells when the well was capable of producing both gas and liquid condensates.²¹² The Fifth Circuit concluded that a well constitutes a “gas well” to which the lease’s shut-in royalty clause would be available to save the lease if the well was capable of producing only a negligible quantity of condensate and it would not be reasonable to operate the well to produce the condensate alone.²¹³

In *Duke v. Sun Oil Co.*,²¹⁴ the lessee completed a well as a gas well but the lessor argued that the lessee could have drilled slightly further into the same formation to make the well produce both gas and liquids.²¹⁵ The Fifth Circuit remanded the case to determine whether a reasonable and

207. See ANDERSON ET AL., *supra* note 120, § 6.5, at 273.

208. *Id.*

209. See *Kidd v. Hoggett*, 331 S.W.2d 515 (Tex. Civ. App.—San Antonio 1959, writ ref’d n.r.e.).

210. *Id.*; see also ANDERSON ET AL., *supra* note 120, at 274 (stating that the terms of the shut-in royalty clause and the scope of wells to which it applies may limit its availability).

211. 270 F.2d 441 (5th Cir. 1959).

212. *Id.*

213. *Id.*

214. 320 F.2d 853 (5th Cir. 1963).

215. *Id.*

prudent operator would have completed the well at a different depth so that it could produce liquids in paying quantities and if so whether the shut-in royalty for “gas-only” wells would be able to save the lease.²¹⁶

As the above discussion demonstrates, most controversies over the type of well to which the shut-in royalty clause applies can be avoided if the clause applies to all wells “capable of producing gas.”²¹⁷ However, because casinghead gas has historically been viewed as a bothersome byproduct of crude oil production, the shut-in royalty clauses in older lease agreements did not envision that an oil well would be shut in pending gas pipeline connections. Thus, the shut-in royalty clause by its terms typically would not be applicable to save an oil well that is capable of producing crude oil in paying quantities but is shut in pending a gas pipeline connection. For the remainder of this Section, it is assumed that the force majeure clause is not implicated and that the particular lease does not have a properly drafted shut-in royalty clause.

2. Temporary Cessation of Production Doctrine

Often, a well must be temporarily shut in due to some mechanical or other operational difficulty. If these temporary stoppages cause the lease to expire, the legitimate expectations of the parties to the lease could be frustrated.²¹⁸ To alleviate this concern, courts have judicially created an implied exception to the termination of a lease arising from temporary cessations of production (sometimes referred to as the “TCOP” doctrine).²¹⁹ For a particular cessation of production to come within the TCOP doctrine, there must have been some initial production from the well before such production ceases.²²⁰ Thus, if a new oil well is shut in before it has actually produced in paying quantities, the TCOP doctrine would not apply since production in paying quantities had never commenced.²²¹ In contrast, if a well were shut in after it had produced in paying quantities, the TCOP doctrine could potentially apply.

Before proceeding, it is important to note that, under its current formulation, the TCOP doctrine does not appear to require a particular cause for the cessation of production. Importantly, an interruption due to a shut-down of a gas plant away from the well has been held to represent an adequate “cause” that would trigger application of the TCOP doctrine,²²² and consequently this authority represents a helpful precedent for the fact pattern posited in this Article. Early cases limited

216. *Id.*

217. *See* 1 SMITH & WEAVER, *supra* note 112, § 4.5[C][2], at 4-56.

218. *Midwest Oil Corp. v. Winsauer*, 323 S.W.2d 944, 946 (Tex. 1959).

219. *See* 1 SMITH & WEAVER, *supra* note 112, § 4.5[b][1], at 4-41.

220. *Gulf Oil Corp. v. Reid*, 337 S.W.2d 267 (Tex. 1960).

221. *Id.*

222. *Cobb v. Natural Gas Pipeline Co.*, 897 F.2d 1307 (5th Cir. 1990).

the application of the TCOP doctrine to situations in which a well ceased production due to some mechanical interruption,²²³ but the reason for a well's cessation appears to be irrelevant today. In *Ridge Oil Co. v. Guinn Investments, Inc.*,²²⁴ the Texas Supreme Court appears to have eliminated the "cause" requirement altogether by holding that the TCOP doctrine could apply even if the lessee had voluntarily shut in wells temporarily and the shut in was not related to an operational necessity.²²⁵

Although the Texas Supreme Court arguably has removed any specific "cause" requirement, current law does contain the following two requirements that must be satisfied before the TCOP doctrine is applicable: the cessation must be "temporary"²²⁶ and the operator must act with reasonable diligence to restore production.²²⁷ A lease can set forth an explicit period of time in which production must be restored,²²⁸ but if the lease does not contain an expressed time period for restoring production, the length of time that is considered "temporary" is determined after considering all of the relevant facts and circumstances.²²⁹ A shut-in period of two months is almost certainly "temporary,"²³⁰ but a shut in for two years is unlikely to be considered temporary.²³¹ Given the ambiguity of this "temporary" determination, the TCOP doctrine may not provide sufficient comfort to operators

223. *Watson v. Rochmill*, 155 S.W.2d 783 (Tex. 1941); see also Bruce Kramer, *The Temporary Cessation Doctrine: A Practical Response to an Ideological Dilemma*, 43 BAYLOR L. REV. 519 (1991).

224. 148 S.W.3d 143 (Tex. 2004).

225. *Id.*

226. A cessation of several months has been ruled to be temporary while a period of several years has not. See *Cobb*, 897 F.2d 1307. At some point past a few months, the cessation will no longer be considered temporary, but this time period has not been demarcated under current case law. See SMITH AND WEAVER, *supra* note 112, § 4.4[b][1], at 4-43 (2013). A cessation of six months has been held to not be temporary. See *Midwest Oil Corp. v. Winsauer*, 315 S.W.2d 608 (Tex. Civ. App.—Eastland 1958), *rev'd*, 323 S.W.2d 944 (Tex. 1959).

227. See *Red River Res., Inc. v. Wickford, Inc.*, 443 B.R. 74 (E.D. Tex. 2010).

228. See *Samano v. Sun Oil Co.*, 621 S.W.2d 580 (Tex. 1981); *Bachler v. Rosenthal*, 798 S.W.2d 646 (Tex. App.—Austin 1990, writ denied).

229. In *Clifton v. Koontz*, 325 S.W.2d 684, 690 (Tex. 1959), the Texas Supreme Court stated that there "can be no arbitrary period for determining the question of whether or not a lease has terminated for the additional reason that there are various causes for slowing up of production, or a temporary cessation of production, which the courts have held to be justifiable." For a survey of authorities from various jurisdictions on the length of time that could be considered "temporary" under the circumstances, see R. Neal Pierce et al., *The Quick and the Dead: Cessation of Production and Shut-Ins During the Secondary Term of an Oil and Gas Lease*, 88 N.D. L. REV. 727 (2012) and 3-6 WILLIAMS & MEYERS, *supra* note 118, § 604.4.

230. *Casey v. W. Oil & Gas, Inc.*, 611 S.W.2d 676, 678 (Tex. Civ. App.—Eastland 1980, writ ref'd n.r.e.).

231. *Cf. Giles v. McKanna*, 200 S.W.2d 709 (Tex. Civ. App.—Austin 1947, writ ref'd n.r.e.) (stating that a lengthy cessation of two years may not be temporary even if the cause of the cessation would have been sudden and expected), *with Gillespie v. Wagoner*, 190 N.E.2d 765 (Ill. 1963) (cessation of two years held to no longer be temporary), *and Wagner v. Smith*, 456 N.E.2d 523 (Ohio Ct. App. 1982) (delays of two years are generally not considered to be temporary). *But see Smith v. Duncan*, 595 N.E. 2d 645 (Ill. App. Ct. 1992) (holding that a two-year delay was temporary when circumstances of the cessation were beyond the lessee's control and reasonable efforts to restore production were made).

contemplating the voluntary shut in of an oil well for more than a couple of months, but the cases in this area indicate a willingness by the courts to consider the reason for the temporary cessation.²³² So, it is hoped that courts would seek to apply the TCOP doctrine liberally with respect to oil wells that are shut in because gas pipeline connections are unavailable.

3. Implied Covenant to Market Oil

The lessee has a competing implied covenant, namely the implied covenant to market crude oil as a reasonable and prudent operator would.²³³ This implied covenant imposes two duties on a lessee: a duty to market the crude oil in order to obtain the best available price and a duty to do so within a reasonable time.²³⁴

Whether an operator's delay in marketing crude oil is reasonable depends on the particular facts and circumstances.²³⁵ However, it is probably reasonable to delay marketing crude oil when the delay is necessary to prevent the unreasonable waste of casinghead gas. Each of the lessee's implied covenant duties relies on the same common standard: the reasonable and prudent operator standard.²³⁶ Thus, a delay in marketing crude oil, caused by the operator's decision to administer the leasehold estate in accordance with the reasonable and prudent operator standard, should be consistent with the duties created under the implied covenant to reasonably market crude oil.

In the Oklahoma case of *Sinclair Oil & Gas Co. v. Bishop*,²³⁷ the production of oil would have required the flaring of a large amount of casinghead gas.²³⁸ The lessee decided to pay shut-in royalties and not produce crude oil until a pipeline connection could be made to the well in order to prevent waste of the casinghead gas.²³⁹ The court found that the lessee had acted prudently in not producing crude oil from the well because doing so, as the lessors urged, would have resulted in a substantial waste of the casinghead gas.²⁴⁰ However, other wells in the same reservoir were being produced, also at a substantial loss of natural gas, and their production was draining the lessor's tract.²⁴¹ Even though

232. See *supra* authorities cited in note 231.

233. See *Amoco Prod. Co. v. First Baptist Church of Pyote*, 579 S.W.2d 280 (Tex. Civ. App.—El Paso 1979, writ ref'd n.r.e.), *opinion on motion for writ of error*, 611 S.W.2d 610 (Tex. 1980).

234. See *Cabot Corp. v. Brown*, 754 S.W.2d 104 (Tex. 1987); *Anadarko Petrol. Corp. v. Thompson*, 94 S.W.3d 550 (Tex. 2002), *opinion on motion for reh'g*, 94 S.W.3d 550 (Tex. 2003).

235. *Cabot Corp.*, 754 S.W.2d at 108.

236. *Id.* at 108.

237. 441 P.2d 436 (Okla. 1967).

238. *Id.* at 440.

239. *Id.* at 441.

240. *Id.* at 446.

241. *Id.* at 447.

the court found that the lessee had reasonably delayed production of crude oil pending gas pipeline connections, the court found the lessee was liable in damages to the lessor for failing to ask the Oklahoma regulatory agency to reduce the production allowables for neighboring wells to minimize the drainage of the leased premises.²⁴²

The Oklahoma Supreme Court's statement that the operator's delay in marketing crude oil was reasonable and accordingly did not violate the operator's implied covenant duty to market is a helpful synthesis of the law in a context that is analogous to the one faced by operators in the Eagle Ford shale. In *Sinclair*, the Oklahoma Supreme Court's reasoning supports the conclusion that a delay in marketing crude oil until gas pipeline connections are available constitutes "marketing within a reasonable time" because marketing crude oil any earlier would require an unreasonable waste of natural resources.²⁴³ If drainage were a significant concern for a particular tract in the Eagle Ford shale,²⁴⁴ as was the case in *Sinclair*, the operator could request the RRC to reduce the production allowables of neighboring wells. Failing to achieve that remedy, then and only then would the operator be left with no alternative to prevent drainage but to produce crude oil by flaring casinghead gas.

IV. CONCLUSION

The oil and gas industry prides itself on its ingenuity, dedication to safety, and diligence, and there is much to admire about the technological prowess of modern day horizontal drilling and multi-stage hydraulic fracturing completion techniques. As a result of these significant technological innovations, the oil and gas industry has found ways to unlock new sources of energy that were unimaginable as recently as a decade ago. This record of success is worthy of the nation's admiration. However, it is in this context that we find an enigmatic reality. Notwithstanding the remarkable technological advances that have made production in unconventional shale formations possible, the industry continues to flare commercially profitable casinghead gas. The RRC sent a message to the industry in 1947 that significant flaring of casinghead gas from oil wells would not be tolerated,²⁴⁵ but in 2014 we are again seeing the exponential growth in flaring of profitable casinghead gas so that

242. *See id.* at 447; *see also* Fransen v. Conoco, Inc., 64 F.3d 1481 (10th Cir. 1995) (citing *Bishop* for the stated proposition). *But see* Poafpybitty v. Skelly Oil Co., 517 P.2d 432 (Okla. 1973) (lessee was bound to seek best market available for casinghead gas and was allowed, under standards of reasonable care, to vent gas if such a market was unavailable).

243. *Sinclair*, 441 P.2d at 447.

244. Again, given the low permeability of the Eagle Ford shale formation, this risk would seem to be minimal in comparison to the risk posed in conventional formations. *See supra* authorities cited in note 107.

245. PRINDLE, *supra* note 47.

operators can bring crude oil to market. It is now time for the RRC to curtail flaring as it has in the past because casinghead gas is a valuable natural resource that should not be wasted. To further this end, this Article proposes that statewide Rule 32 be amended to allow the flaring of natural gas only after the operator establishes that a “no-flare” policy would itself result in physical waste or would represent a potential loss of one’s opportunity to obtain a fair share of the oil and gas in place.

If the RRC does not take action, operators who have regulatory approval could nevertheless be subject to significant legal claims. Lessors are harmed when their lessees flare casinghead gas because this practice destroys gas that should have provided royalty to the lessor. The correlative rights of adjacent landowners are harmed when casinghead gas from the common reservoir is drained from neighboring tracts and then flared. In addition, surface owners who live in the vicinity may suffer diminished air quality as a result of these flaring practices and have potential nuisance claims. These affected parties could bring litigation to force operators who flare casinghead gas to compensate them for the damages they have suffered, sending a message to the industry that operators could face significant claims of liability if they fail to adopt sound conservation practices in the Eagle Ford shale and instead flare casinghead gas.

In the end, sound public policy is promoted when the RRC’s rules and the prospect of private litigation work together to motivate operators to minimize physical waste of the state’s finite natural resources. The author hopes that this Article sets forth a clear path to achieve this end. Providence, coupled with the remarkable ingenuity of the oil and gas industry, has blessed the State of Texas with another chance at a significant oil boom. It is now time to stop screwing it up.