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**Produced Water: The Next “Title” Wave of
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Produced Water: The Next “Title” Wave of Litigation

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A. INTRODUCTION

The fight over produced water has potential to be the next major area of contention in the oil patch. This is primarily because it is a new and unforeseen source of revenue for operators and landowners alike. You cannot drill and complete an oil and gas well without water—lots of it. And, you cannot produce oil and gas without also producing water. In the oil and gas industry, water treatment and recycling improves, fresh water grows increasingly scarce, and regulation of fresh water increases. Therefore, until either a legal resolution is achieved or the ability to monetize produced water disappears (unlikely) more and more disputes are certain to arise.

Like many issues in the oil patch, disputes arise not because of anyone’s bad acts, but because of the law of unintended consequences. Imagine being there the first time our predecessors decided “1/2 of the usual 1/8” was the best way to describe an oil and gas reservation. Imagine trying to explain to an operator in the early 2000s that in a few short years they would be drilling horizontal wells with 3 mile laterals. Now explain to that same operator that one of their most costly liabilities—produced water—would soon produce in excess of \$1 million in revenue per well. No doubt, if we could see disputes in the future, we would draft deeds and leases differently today.

What was once considered a liability has now become an asset; the question is whose asset is it? This paper sets out to provide a general overview of how one of oil and gas’s biggest liabilities has quickly become—and I argue will continue to become—one of its greatest assets. Throughout this paper we will examine: (1) what is produced water; (2) legislation surrounding produced water (specifically HB 2767 and HB 3246); (3) the present litigation landscape; and (4) the impending constitutional fight.

B. RAGS TO RICHES—WHAT IS PRODUCED WATER AND WHO ACTUALLY OWNS IT?

Generally speaking, produced water is water that comes out of the well with the crude oil during crude oil production. This produced water can include water existing in the shale formation, as well as water injected into the wellbore during production that is now flowing back up the wellbore. But is the produced water existing naturally within the shale formation properly considered groundwater? As on the Texas Water Code, the answer appears to be “yes.” Specifically, the Texas Water Code further defines groundwater as “water percolating below the surface of the earth.”¹ And, it is well established in Texas that groundwater is part of the surface estate, owned by the surface owner as a vested property right.² Nevertheless, up until a few years ago, the fight over produced water was not over who “wanted” to take it, but rather over who “had” to take it.

¹ *Id.* at § 36.001(5).

² Tex. Water Code § 36.002(a) (“The legislature recognizes that a landowner owns the groundwater below the surface of the landowner’s land as real property.”).

This is because produced water contains soluble and non-soluble oil/organics, suspended solids, dissolved solids, and various chemicals used in the production process. The ratio of produced water to oil varies from well to well and over the life of the well. Generally, this ratio is more than 3 parts of water per 1 part of oil, and in some parts of the world can exceed a ratio of 20 to 1. Quantifying and defining produced water can be difficult because both flowrate and composition change over the life of the well. It is currently estimated that the United States generates some 20 to 25 billion barrels of produced water each year. And, now that a market has been established, regulations are increasing, and availability of freshwater is decreasing, it is easy to see how a liability has now become an asset.

Traditionally, produced water was treated as a waste byproduct obligating operators to dispose of it in accordance with applicable disposal requirements. In 2013, the industry standard practice of obligating operators to dispose of produced water (typically by injecting the Produced Water into a disposal well) was codified by HB 2767.³ More recently, in 2019, HB 3246 added language which purportedly transferred not only liability, but ownership of the produced water to the operator.⁴

But between 2013 and 2019 there were significant shifting economic opportunities with respect to produced water. By 2019, water haulers had already begun monetizing produced water by either dedicating it to companies who treat and sell recycled water, or treating and selling the recycled water themselves. Operators quickly followed suit. By treating and monetizing produced water, a question arose—who is entitled to the proceeds of sale from the produced water? Operators and surface owners both raised their hands. Operators argue that historical practices and the newly enacted HB 3246 support their claims. Surface owners argue correlative rights and their ownership rights in groundwater support their claims.

i. Correlative Rights and the Implied Rights Protecting the Surface Estate

While common knowledge for most oil and gas attorneys, some ink must be devoted to an examination of the implied doctrines limiting the mineral estates dominance.⁵ Texas recognizes the in-place ownership of minerals. Prior to severance, an owner (fee simple) enjoys proprietary rights and constitutional protections for all resources located within their borders. As in other states, Texas allows the surface and mineral interests to be severed. Traditionally, upon severance, the mineral estate possesses the hydrocarbons in place, while the surface estate retains all groundwater. Nevertheless, these divisions are always subject to the express terms of the conveying instrument. After severance, the mineral interest owner possesses the dominant interest over the surface estate. Nevertheless, the mineral estate's dominance is limited by four important implied doctrines: the accommodation doctrine, the reasonable and non-negligent use of the surface, use as opposed to ownership, and use of the surface must benefit the mineral estate. For

³ See Texas Nat. Res. Code § 122.002 (assigning liability for produced water disposal on operators).

⁴ *Id.*

⁵ For a more thorough examination of correlative rights the authors recommend Peter E. Hosey & Jesse S. Lotay, *Quench My Thirst: Water Rights in the Context of Water Treatment Technologies*, 42 Oil, Gas & Energy Res. Law Sec. Report 21 (State Bar of Texas, Fall 2017); and also Charles P. Hosey, *Yours, Mine, Our Water: Where Correlative Rights End and Taking Begins Following Texas House Bill 3246*, 6 Oil & Gas, Nat. Resources & Energy J. 477 (2021).

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