

Supreme Court of Texas

No. 23-0676

Cactus Water Services, LLC,
Petitioner,

v.

COG Operating, LLC,
Respondent

On Petition for Review from the
Court of Appeals for the Eighth District of Texas

Argued March 18, 2025

JUSTICE DEVINE delivered the opinion of the Court.

JUSTICE BUSBY filed a concurring opinion, in which Justice Lehrmann and Justice Sullivan joined.

Justice Young did not participate in the decision.

In the oilfields of West Texas, where the Permian Basin continues to yield vast quantities of hydrocarbons, another resource has quietly risen in legal and commercial significance: produced water. Long considered a burdensome and costly byproduct of oil-and-gas production, this briny mixture of drilling, fracking, and formation fluids has emerging beneficial-use applications if properly processed and treated.

Government regulators and industry players have historically treated produced water as oil-and-gas waste and placed the burden of proper handling and disposal on the mineral estate's oil-and-gas operator. But as its potential utility increases, so too does the question that now finds its way to this Court: who owns produced water under an oil-and-gas conveyance that does not expressly address the matter?

This first-of-its-kind dispute pits a mineral-estate lessee and operator of producing wells under oil-and-gas leases against a surface-estate lessee asserting a claim to the produced water collected at or near the wellhead. The hydrocarbon lessee contends that, under Texas law and long-standing industry practice, conveyance of the right to produce oil and gas—whether by deed or lease—necessarily includes the liquid-waste byproducts entrained with the hydrocarbons absent an express reservation or exception; accordingly, the surface owners' subsequent conveyances of produced water were legally ineffective. The produced-water lessee counters that once the hydrocarbons have been separated after production at the well, the remaining watery mixture, being neither oil nor gas, is surface-estate water owned by the landowner absent an express conveyance of water rights. In this declaratory-judgment action, the lower courts sided with the hydrocarbon lessee, as do we.

Produced water is an inherent and inescapable byproduct of oil-and-gas production. Hydrocarbons cannot be extracted without simultaneously generating liquid waste, and production cannot continue without disposing of this hazardous—sometimes toxic—solution. When the underlying hydrocarbon leases were executed, and for decades before, it was understood, expected, and contemplated that the well

operator was legally obligated to dispose of produced water, thereby consuming the value of entrained water molecules. The right to consume the value of property is generally a right of ownership, not use. A conveyance that presupposes the disposition of water molecules entrained with hydrocarbon production necessarily factors that disposition into the transaction along with the benefits and burdens of transferring disposal rights. Though the parties are free to strike a different deal, subsequent innovations do not change the parties' expectations or the deal that was struck.

Texas law has long recognized that the hydrocarbon producer's possession and control over the disposition of liquid-waste byproduct is necessarily incidental to, and therefore encompassed in, a conveyance of oil-and-gas rights.¹ The conveying parties, who are presumed to contract in reference to the law,² understood that disposal of liquid waste meant consumption of the capital value, if any, of constituent water.³ That being so, it would have been incumbent on the

¹ See *Brown v. Lundell*, 344 S.W.2d 863, 866-67 (Tex. 1961) ("It was necessarily incident to production operations here that the salt water be separated from the oil and that it be disposed of" and "[t]he right of the lessee in exploring for and producing oil and gas embraces only the doing of those things expressly granted or necessarily implied in the lease as necessarily incidental thereto. All property rights not [so] granted are reserved in the lessor.").

² See *XOG Operating, LLC v. Chesapeake Expl. Ltd. P'ship*, 554 S.W.3d 607, 612 (Tex. 2018) (noting that contracting parties "are presumed to know the law and to have stated their agreement in light of it").

³ See *Guffey v. Stroud*, 16 S.W.2d 527, 528 (Tex. [Comm'n Op.] 1929) (stating that "[t]he grant of the oil carried with it a grant of the . . . water . . . essential to the enjoyment of the actual grant of the oil" and employing a literary analogy describing such a grant as including the right to waste or

surface-estate owners to expressly reserve property rights in that incidentally produced liquid-waste byproduct if they intended to retain ownership. They did not. Courts cannot employ a backward-looking construction of the conveyances that is informed by new technologies offering the potential for recycling and reuse that were not within the parties' contemplation at the time of the conveyances. Because the court of appeals correctly concluded that the right to produced water was included in the conveyances to the hydrocarbon lessee,⁴ we affirm its judgment.

I

Between 2005 and 2014, COG Operating, LLC acquired four hydrocarbon leases from two surface owners covering approximately 37,000 acres in Reeves County, Texas. The leases grant COG the exclusive right to explore for, produce, and keep “oil and gas” or “oil, gas, and other hydrocarbons.”⁵ With some variances in phrasing, each lease

consume). We express no view regarding ownership of any nonhydrocarbon minerals included in liquid-waste byproduct, as no such substances are in dispute here.

⁴ 676 S.W.3d 733, 734-35 (Tex. App.—El Paso 2023).

⁵ The 2005 and 2010 Collier Leases state that the lessors “have GRANTED, DEMISED, LEASED and LET, and by these presents do GRANT, DEMISE, LEASE and LET exclusively unto the said Lessee, its successors and assigns, for the sole and only purpose of investigating, exploring, prospecting, drilling, mining and operating for oil and gas and other hydrocarbons, and of laying pipelines and of building tanks, power stations and structures thereon, to produce, save, take care of, store and treat products produced hereunder, and then transport those products from the [leased] land[.]” The lessors under these leases include several individuals in addition to the surface owner.

The 2010 Balmorhea Lease declares that the lessor “hereby grants, leases and lets exclusively unto Lessee for the purpose of investigating,

grants COG the right to conduct comprehensive oil-and-gas operations, including the construction of pipelines, tanks, and other essential infrastructure. The leases say nothing directly about oil-and-gas waste.⁶ With respect to “water,” three of the leases expressly prohibit any use of water except in extremely limited circumstances: either (1) “[n]o water from any source [on the premises] . . . for any purpose without written consent of Lessor” or (2) no water “on or under” the land except water from a COG-drilled water well used only on-lease but not “for water flooding, secondary recovery operations or camp operations.” The fourth lease is silent about water use.

COG’s operations on the leased property are concentrated in the Delaware Basin, a subregion of the Permian Basin. This geologic formation is characterized by dense shale and low permeability, necessitating the use of hydraulic fracturing—or “fracking”—as the principal method of production. Fracking involves injecting vast quantities of pressurized fluid, proppants,⁷ and chemicals into

exploring, prospecting, drilling and mining for and producing oil, gas, and other hydrocarbons, conducting exploration, geologic and geophysical surveys by seismographs, core test, gravity and magnetic methods, injecting gas, water and other fluids, and air into subsurface strata, laying pipe lines, building roads, tanks, power stations, telephone lines and other structures thereon, to produce, save, take care of, treat, transport and own said products, the [leased land].”

The 2014 Collier Lease states that the lessor “hereby exclusively grants, leases and lets unto Lessee for the purpose of investigating, exploring, prospecting, drilling and producing oil and gas, from the [leased land].”

⁶ See *infra* note 50.

⁷ *Coastal Oil & Gas Corp. v. Garza Energy Tr.*, 268 S.W.3d 1, 6-7 (Tex. 2008) (explaining that proppants, like sand, ceramic beads, or bauxite, “lodge

subterranean formations to fracture the rock and release trapped hydrocarbons for production through the wellbore. The most common type of fracturing fluid is water. A portion of the injected fluid returns to the surface as “flowback,”⁸ bringing with it a mixture of hydrocarbons, emulsified brine, and a complex mélange of substances that varies depending on the particular formation and the fracking fluid’s chemical composition.⁹ Here, those substances include a hazardous brew of potassium, strontium, barium, iron, carbon dioxide, hydrogen sulfide, and chloride.

At the surface, COG mechanically separates the oil and gas, leaving a mixture of fracking fluid, hypersaline brine, residual

themselves in the cracks, propping them open against the enormous subsurface pressure that would force them shut as soon as the fluid was gone”).

⁸ Estimates of how much fracking water remains underground vary depending on the formation. See, e.g., OHIO DEP’T OF NAT. RES., DIV. OF OIL & GAS RES. MGMT., *Flowback (Wastewater) from Hydraulic Fracturing*, https://dam.assets.ohio.gov/image/upload/ohiodnr.gov/documents/oil-gas/factsheet/wastewater-flowback_0815.pdf (last visited June 21, 2025) (“Most of the water used in fracturing remains thousands of feet underground, however, about 15-20 percent returns to the surface through a steel-cased wellbore and is temporarily stored in steel tanks or lined pits. The wastewater which returns to the surface after hydraulic fracturing is called flowback.”).

⁹ See *Coastal Oil*, 268 S.W.3d at 6-7 (describing the fracking process); *Bethel Oil & Gas, LLC v. Redbird Dev., LLC*, 258 N.E.3d 470, 479 (Ohio Ct. App. 2024) (describing the composition of “residual waste fluids” produced by the hydraulic fracturing process); AM. GEOSCIENCES INST., *What is Produced Water?* (“Produced water can also contain varying amounts of oil residues, sand or mud, naturally occurring radioactive materials, chemicals from frac fluids, bacteria, and dissolved organic compounds.”) (citing Richard W. Healy et al., *The Water-Energy Nexus—An Earth Science Perspective*, U.S. GEOLOGICAL SURV. (Apr. 10, 2015), <https://pubs.usgs.gov/circ/1407/>), <https://profession.americangeosciences.org/society/intersections/faq/what-produced-water/> (last visited June 21, 2025).

hydrocarbons, and other substances of varying concentrations.¹⁰ This solution, known in the industry as “produced water,” can carry serious risk to human health and the environment and must be treated and disposed of in accordance with applicable regulatory standards. Hydrocarbons cannot be produced without generating this hazardous adjunct—and vice versa. Under the law at the time of the conveyances, and to this day, the well operator—in this case, COG—has been charged with proper handling and disposal of produced water.¹¹ Waste disposal is authorized only with a permit or in accordance with sanctioned methods.¹² As a contaminant, produced water must be kept separate from surface and subsurface water,¹³ and the well operator is subject to penalties and other liability for improper disposal.¹⁴

To facilitate waste-handling operations, COG entered into a surface-use compensation agreement (SUCA) in 2015 and multiple right-of-way agreements (ROWs) between 2013 and 2016 with the

¹⁰ Martha Pskowski & Dylan Baddour, *Companies Aim to Release More Treated Oilfield Wastewater into Rivers and Streams*, TEX. TRIB. (Apr. 29, 2024), <https://www.texastribune.org/2024/04/29/texas-treated-produced-water-disposal-discharge-rivers/> (observing that produced water “can be ten times saltier than seawater and is often laced with leftover fracking chemicals”).

¹¹ 16 TEX. ADMIN. CODE §§ 3.8(a)(26), (b), (d)(5), .13(a)(1).

¹² *Id.* § 3.8(d)(1)–(6).

¹³ *Id.* § 3.8(b) (“No person conducting activities subject to regulation by the commission may cause or allow pollution of surface or subsurface water in the state.”).

¹⁴ *Id.* § 3.8(a)(17), (d)(5) (the generator of oil-and-gas waste has responsibility for disposal), (h) (authorizing penalties in accordance with state law).

landowner for three of the hydrocarbon leases.¹⁵ These agreements allowed COG to (1) construct tank battery sites to gather, store, and transport “oil, gas, other petroleum products, water, and/or any other liquids, gases or substances which can be transported through a pipeline”; (2) lay “[f]resh water lines, produced water lines and flow lines”; and (3) lay pipelines for the “transportation of oil, gas, petroleum, produced water and any other oilfield related liquids or gases.” COG’s tank batteries can only separate and store up to 24 hours’ worth of produced water, and then it must be handled elsewhere for production to continue.

Since the dawn of the petroleum era, the burden and expense of liquid-waste disposal has been an unwanted, but quotidian, fact of oil-and-gas production.¹⁶ “Disposing of produced water is one of the largest operation costs for an oil well”¹⁷ and a significant factor in well

¹⁵ The SUCA was amended from time to time thereafter to include additional tracts but otherwise remained unchanged.

¹⁶ Benjamin W. Sebree, *Ownership of Produced Water Under Texas Law: Waste or Water?*, 4 TEX. TECH. J. ENERGY L. PRAC. 1, 5 (2024); David Wethe & Kevin Crowley, *‘Disposal Nightmare’: In Permian Basin, Every Barrel of Oil Means Four Barrels of Toxic Water*, DALL. MORNING NEWS (Aug. 29, 2018), <https://www.dallasnews.com/business/energy/2018/08/29/disposal-nightmare-in-permian-basin-every-barrel-of-oil-means-four-barrels-of-toxic-water/>; see *Turner v. Big Lake Oil Co.*, 96 S.W.2d 221, 226 (Tex. 1936) (“One of the by-products of oil production is salt water, which must be disposed of without injury to property or the pollution of streams.”); *Brown v. Lundell*, 344 S.W.2d 863, 866-67 (Tex. 1961) (observing that separation and disposal of saltwater are necessary and incident to oil-and-gas production).

¹⁷ Brett Walton, *Permian Oil Boom Uncorks Multibillion-Dollar Water Play*, CIRCLE OF BLUE (Feb. 15, 2019), <https://www.circleofblue.org/2019/world/permian-oil-boom-uncorks-multibillion-dollar-water-play/>.

profitability.¹⁸ Under its leasehold interests, COG has drilled 72 horizontal wells targeting deep formations several thousand feet below groundwater reservoirs.¹⁹ These wells, all classified as oil wells by the Railroad Commission,²⁰ have generated nearly 52 million barrels of produced water. COG has managed disposal of this byproduct both independently and through third parties. From December 2018 to March 2021, COG paid nearly \$21 million in disposal fees to a third-party contractor. COG has exclusively borne all disposal expenses.

Although disposal is the norm, recent technological innovations have given new purpose to produced water as a potentially lucrative commodity.²¹ Reusing it as drilling or fracking fluid, on or off the leased

¹⁸ BENCHMARK MEASUREMENT SOLS., *What Is Produced Water?* (Apr. 5, 2021), <https://oilinwatermonitors.com/what-is-produced-water/>.

¹⁹ See TEX. WATER CODE § 35.002(5), (6) (defining “groundwater” and “groundwater reservoir”).

²⁰ The Railroad Commission determines whether a well is classified as an oil well or a gas well based on data such as gas/oil ratios and the composition of the constituent components of the produced fluid. See, e.g., TEX. NAT. RES. CODE §§ 81.051 (delineating the Railroad Commission’s jurisdiction), 86.002(5), (6) (providing relevant definitions including “gas well” and “oil well”); 16 TEX. ADMIN. CODE §§ 3.27–.28, .49, .52–.53 (governing matters such as data and reporting for gas and oil wells).

²¹ See TEX. PRODUCED WATER CONSORTIUM, *Beneficial Use of Produced Water in Texas*, at 7 (2024), <https://www.depts.ttu.edu/research/tx-water-consortium/TPWCFINALDRAFT.pdf>. The Texas Produced Water Consortium was established on June 18, 2021, by Senate Bill 601 “to bring together information resources to study the economics of and technology related to, and the environmental and public health considerations for, beneficial uses of fluid oil and gas waste.” TEX. EDUC. CODE § 109.202.

premises, is one repurposing option.²² If sufficiently treated to meet safety and environmental standards,²³ produced water can potentially be recycled and reused for other beneficial purposes.²⁴ But treating and recycling is much more costly than disposal and, therefore, remains economically less attractive.²⁵ According to the record before the Court,

²² See 16 TEX. ADMIN. CODE § 3.8(d)(7)(B) (pertaining to “[a]uthorized recycling,” including “[t]reated fluid” used as “makeup water for a hydraulic fracturing fluid treatment(s), or as another type of oilfield fluid to be used in the wellbore of an oil, gas, geothermal, or service well”).

²³ AM. GEOSCIENCES INST., *supra* note 9 (“Differences in composition affect how produced waters are treated, used, and/or disposed.”).

²⁴ In 2021, the Legislature directed the Railroad Commission to adopt rules and establish standards to encourage commercial recycling of liquid oil-and-gas wastes. See TEX. NAT. RES. CODE § 122.004. Pursuant to that mandate, the Railroad Commission issued a “Produced Water Beneficial Reuse Framework for Pilot Study Authorization” in January 2024. R.R. COMM’N OF TEX., *Produced Water Beneficial Reuse Framework for Pilot Study Authorization* (Jan. 8, 2024), <https://www.rrc.texas.gov/media/nznn2wsj/240108-produced-water-framework-final.pdf>. The objective of the pilot study program is to evaluate “the efficacy” of recycling and reuse efforts “on a limited scale” to determine “whether the activity can be successfully implemented on a larger scale” practically, logistically, and economically. *Id.* at 3. The Railroad Commission subsequently adopted revisions to 16 Texas Administrative Code Chapter 4, Subchapter B relating to commercial recycling and adopted new Subchapter A relating to oil-and-gas waste management, both with a stated effective date of July 1, 2025. 50 TEX. REG. 33, 65-103 (2025).

²⁵ In 2024, the Texas Produced Water Consortium reported to the Legislature that “the cost of disposal via injection . . . drastically outweighs the current capital and operating costs required to treat produced water to beneficial reuse qualities, even offset by the potential value of that treated water to external users such as irrigated agriculture and municipalities, among others.” TEX. PRODUCED WATER CONSORTIUM, *supra* note 21, at 7; see *Produced Water: A Texas Sized Issue*, BioSqueeze (Oct. 8, 2024), <https://web.archive.org/web/20250216222033/https://biosqueeze.com/blog/produced-water-a-texas-sized-issue#expand>] (“The chemical complexity of the water, with its high salinity and variability, makes treatment for reuse both

COG does not reuse produced water from its operations for any purpose, either on or off lease, or receive any compensation for its use elsewhere. And if COG is unable to expeditiously move produced water offsite for disposal, production from its wells must cease.²⁶ Here lies the genesis of the present dispute.

In 2019 and 2020, the surface owners executed “produced water lease agreements” (PWLAs) with Cactus Water Services, LLC.²⁷ These agreements purport to convey “all right, title and interest in and to” “water from oil and gas producing formations and flowback water produced from oil and gas operations” on the lands covered by COG’s leases. Employing a narrow definition of “water,” the PWLAs expressly exclude water unrelated to oil-and-gas production:

“Water” means any and all water contained in and *produced from* geologic formations under the Subject property *through any wellbores drilled for the production of oil, gas, and natural gas liquids . . .* whether economically productive or not, regardless of salinity.

difficult and expensive.”); Pskowski & Baddour, *supra* note 10 (“Treating [hypersaline produced water], which . . . is often laced with leftover fracking chemicals, has been uneconomical so far, especially compared with the low cost of injection disposal.”); *see also* Carlos Noguerras Ramos, *Can Texas Clean Up Fracking Water Enough to Use for Farming? One Company Thinks So*, TEX. TRIB. (May 1, 2025), <https://www.texastribune.org/2025/05/01/texas-water-crisis-oil-gas-fracking-farming/> (describing produced water as “all but unusable—unless treated” for beneficial reuse, including as fracking fluid, while observing that the wide variety of contaminants makes that process “highly complicated and unpredictable”).

²⁶ *See TDC Eng’g, Inc. v. Dunlap*, 686 S.W.2d 346, 348-49 (Tex. App.—Eastland 1985, writ ref’d n.r.e.) (observing that the well operator “must dispose of the salt water (which is produced with the oil) in order to produce the oil” and had the right to do so).

²⁷ Cactus is the lessee under one PWLA and the assignee of rights under the other.

“Water” *excludes* all water originating from shallow geological intervals that do not and have never produced oil, other hydrocarbon liquids, and/or natural gas anywhere in the [Delaware/Permian] Basin. “Water” also excludes water purposely and directly produced from . . . freshwater aquifers.²⁸

But like most surface-estate owners, Cactus possesses no permits, no infrastructure, and no ability to handle, transport, or dispose of produced water. Cactus has no assets other than the PWLAs and owns no pipelines, disposal wells, or processing facilities, nor has it committed to acquiring such infrastructure. Nonetheless, in March 2020, Cactus notified COG of its claimed rights under the PWLAs and asserted an entitlement to produced water from COG’s oil wells. That interaction did not go well.

In short order, COG sued for a declaration that COG, not Cactus, owns and has the exclusive right to possession, custody, control, and disposition of its production stream, including produced water. COG asserted that, absent a declaration of these rights, hydrocarbon production could not continue without capitulating to the demands of a middleman with no skin in the game. Cactus responded in kind, seeking a declaration that it alone owns produced water from COG’s oil-and-gas wells and has the exclusive right to sell or transfer it off the leased premises.²⁹ Other claims and counterclaims, both in tort and equity,

²⁸ Emphases added.

²⁹ Cactus has subsequently disclaimed ownership of the portion of produced water attributable to fracking fluid COG has injected into its wells but only to the extent COG can identify each owner’s aliquot share of the commingled produced-water solution with reasonable certainty. *See infra* note 36.

were also asserted. The surface owners, who were joined as necessary parties, filed answers but no counterclaims.³⁰

COG and Cactus both moved for summary judgment on their respective declaratory-judgment claims. The central issue was whether COG's claimed rights were baked into the express conveyance of oil-and-gas rights or whether produced water was part of the surface estate because no water rights were expressly and separately conveyed to COG. After a hearing on the cross-motions, the trial court ruled in COG's favor, and the parties nonsuited their other claims. The trial court then issued the following declarations in a final judgment:

- “COG owns the oil, gas and other products contained in commercial oil and gas bearing formations that are produced from COG wells on the four leases”;
- “COG has the right to exclusive possession, custody, control and disposition of the product stream produced from COG[s] wells”; and
- “Cactus has no rights in or to the product stream from COG wells” so long as the hydrocarbon leases are in effect.

Cactus appealed, and a divided court of appeals affirmed, holding that produced water constitutes oil-and-gas waste that belongs to the mineral lessee, not groundwater that belongs to the surface estate.³¹ The court arrived at that conclusion after consulting the legal backdrop and industry practice that contextualized the transaction and confirmed

³⁰ See TEX. CIV. PRAC. & REM. CODE § 37.006(a) (“When declaratory relief is sought, all persons who have or claim any interest that would be affected by the declaration must be made parties.”).

³¹ 676 S.W.3d 733, 738, 740-41 (Tex. App.—El Paso 2023) (framing the decisive question as “whether ‘produced water’ is, as a matter of law, water or if it is waste”).

the understanding that groundwater and produced water are not the same.³² In determining that the PWLAs were ineffective, the court explained that “nothing in the mineral leases suggests the parties intended to assign rights at a molecular level, following both extraction from the well and post-production processing,” or “to reserve oil and gas waste produced through COG’s drilling operations.”³³ The dissent argued that the granting language in the hydrocarbon leases conveyed oil, gas, and hydrocarbons produced from the leased lands but not subsurface water incidentally recovered and separated from produced hydrocarbons.³⁴

We granted Cactus’s petition for review to address this important issue of first impression.³⁵

II

Texas law has developed a sophisticated framework governing the respective rights of surface and mineral owners under severed estates. Though historical and regulatory practices have squarely placed control of waste handling and disposal in the mineral developer’s hands, emerging disputes about who actually owns produced water have

³² *Id.* at 735-37, 739-40.

³³ *Id.* at 741.

³⁴ *Id.* at 742 (Palafox, J., dissenting).

³⁵ Among the third parties submitting amicus curiae briefs are Aris Water Solutions, Inc.; Deep Blue Midland Basin LLC; NGL Energy Partners LP; Permian Basin Petroleum Association; South Texans’ Property Rights Association; Standard Lithium, Ltd.; Texas and Southwestern Cattle Raisers Association; Texas Civil Justice League; Texas Farm Bureau; Texas Land & Mineral Owners Association; Texas Landowners Council; Texas Independent Produced Water Association; Texas Oil & Gas Association; and WaterBridge Operating LLC.

raised a cavalcade of questions.³⁶ Chief among them: have waste generators been merely “using” produced water without “owning” it? Recent legislative enactments have undertaken to quell uncertainty and cultivate a growing focus on reuse and stewardship, but none are of assistance here.³⁷

In this dispute, ownership of produced water depends on the scope of the language employed in the granting clauses of COG’s leases, which specifically name only “oil and gas” or “oil, gas, and other hydrocarbons.” Interpretation of the hydrocarbon leases presents a question of law that comes to us following cross-motions for summary judgment on

³⁶ Because processing out the oil and gas leaves a mixed solution with similar management, treatment, and disposal needs, the terms “produced water” and “flowback fluid” are often used collectively and interchangeably. Cactus acknowledges that COG owns the injected fluids comprising a significant portion of the liquid waste generated with oil-and-gas production if COG can make a proper allocation of its share of the commingled solution with reasonable certainty. *See supra* note 29.

³⁷ In 2019, the Legislature amended section 122.002 of the Natural Resources Code to state that whoever takes possession of “fluid oil and gas waste”—including produced water—to treat it for “subsequent beneficial use” owns it “unless otherwise expressly provided by an oil and gas lease” or other “legally binding document.” TEX. NAT. RES. CODE §§ 122.001–.002. Whether the statute changed the law—permissibly or not—or merely codified it is a matter of some debate. But as the court of appeals recognized in this case, that amended statute “does not assign ownership rights here” because it was adopted after the hydrocarbon leases were signed. *See* 676 S.W.3d at 740 n.4. The court nonetheless viewed the statute as “codif[ying] the understanding that under Texas law, produced water is oil and gas waste byproduct, not regarded as ‘water’ as Cactus claims.” *Id.*

Other new and significant pieces of legislation demonstrating the state’s commitment to finding new solutions for produced water management are summarized in the Texas Produced Water Consortium’s most recent report to the Legislature. *See* TEX. PRODUCED WATER CONSORTIUM, *supra* note 21, at 5.

declaratory-judgment claims.³⁸ In this procedural posture, “each party bears the burden of proving its entitlement to judgment as a matter of law.”³⁹ “When the trial court grants one motion and denies the other, as in this case, we determine all questions presented and render the judgment the trial court should have rendered.”⁴⁰

As is often the case, the parties here agree the leases in question are unambiguous, and that is certainly true as to the issue presented. Resolution of the ownership dispute ultimately depends not on any uncertainty about the lease language but on what set of established principles governs conveyance of the unnamed substance in dispute: produced water. Water, unlike oil and gas, is not considered part of the mineral estate.⁴¹ Unless expressly severed, subsurface water remains part of the surface estate subject to the mineral estate’s implied right to use the surface—including water—as reasonably necessary to produce and remove the minerals.⁴² A conveyance of water is not effected by implication. But if an unnamed substance is part and parcel of an oil-and-gas conveyance, there is no need to list it separately because any

³⁸ *Devon Energy Prod. Co. v. Sheppard*, 668 S.W.3d 332, 343 (Tex. 2023) (mineral leases are contracts and are construed according to the intent expressed in the language).

³⁹ *Id.* at 342-43.

⁴⁰ *Id.* at 343 (internal quotation marks and citation omitted).

⁴¹ *Sun Oil Co. v. Whitaker*, 483 S.W.2d 808, 811 (Tex. 1972); *Hous. & Tex. Cent. R.R. Co. v. East*, 81 S.W. 279, 281 (Tex. 1904).

⁴² *Sun Oil*, 483 S.W.2d at 811; *Getty Oil Co. v. Jones*, 470 S.W.2d 618, 621 (Tex. 1971).

such substance would already be included in what was clearly and expressly conveyed.⁴³

Under Texas law, “the general intent of parties executing a mineral deed or lease is presumed to be an intent to sever the mineral and surface estates, convey all valuable substances to the mineral owner regardless of whether their presence *or value* was known at the time of conveyance, and to preserve the uses incident to each estate.”⁴⁴ Any “reservation” or exception must be “by clear language” and cannot be implied.⁴⁵ Furthermore, the right of the lessee to explore for and produce oil and gas embraces not only what was expressly granted but also what was “necessarily implied in the lease as necessarily incidental thereto.”⁴⁶ In discerning intent, we consider lease language in light of “the facts and circumstances surrounding the [instrument’s] execution”⁴⁷ but only to the extent the context is “objectively

⁴³ See, e.g., *Garrett v. Dils Co.*, 299 S.W.2d 904, 906 (Tex. 1957) (“[S]hould there be any doubt as to the proper construction of the deed, . . . [the deed should] be held to convey the greatest estate permissible under its language.”); *Sharp v. Fowler*, 252 S.W.2d 153, 154 (Tex. 1952) (describing as a “sound elementary principle of conveyances” that “a deed passes whatever interest a grantor has in the land, in the absence of [l]anguage showing an intention to grant a less estate”).

⁴⁴ *Moser v. U.S. Steel Corp.*, 676 S.W.2d 99, 102 (Tex. 1984) (emphasis added). The mineral conveyances here were only of “oil and gas” or “oil, gas, and other hydrocarbons,” and no other minerals are at issue here.

⁴⁵ *Sharp*, 252 S.W.2d at 154.

⁴⁶ *Brown v. Lundell*, 344 S.W.2d 863, 866 (Tex. 1961).

⁴⁷ *Sun Oil Co. v. Madeley*, 626 S.W.2d 726, 731 (Tex. 1981).

determinable” and “informative, rather than transformative,” of the instrument’s text.⁴⁸

In this case, the court of appeals framed the parties’ disagreement as being about “whether ‘produced water’ is, as a matter of law, water or if it is waste.”⁴⁹ We think it beyond cavil, and not in genuine dispute, that produced water is, and was at the time of the conveyance, oil-and-gas waste. While the leases do not mention or define “waste” or “produced water,”⁵⁰ this textual silence is not unexpected. The production of liquid waste is an inevitable and unavoidable byproduct of oil-and-gas operations; one cannot occur without the other. Accordingly, it goes without saying that granting the right to produce hydrocarbons necessarily contemplates and encompasses the right to produce and manage the resulting waste.⁵¹

⁴⁸ *URI, Inc. v. Kleberg County*, 543 S.W.3d 755, 767-68 (Tex. 2018).

⁴⁹ 676 S.W.3d 733, 738 (Tex. App.—El Paso 2023).

⁵⁰ The leases vary in their discussion of COG’s pollution responsibilities, including requiring COG to prevent contamination of “any and all surface and subsurface water bearing strata”; prevent contamination of the surface “from salt water or other contaminating substances flowing over or seeping onto the same”; comply with all applicable environmental laws; and indemnify and hold the surface owner harmless from damages related to pollution. One of the leases also grants COG the right to construct “water wells, disposal wells, injection wells, [and] pits” on the leased premises as COG deems necessary to “treat” the “production,” while two others disallow “dumping of trash or fluids of any sort, except at such disposal sites, if any, as may have been designated by Lessor as such.” The SUCA and ROWs that were executed ancillary to the hydrocarbon leases mention but do not define produced water.

⁵¹ *Brown*, 344 S.W.2d at 87-88 (lessee had the right to dispose of wastewater generated by its oil-and-gas production subject to liability for improperly doing so); *Turner v. Big Lake Oil Co.*, 96 S.W.2d 221, 226 (Tex. 1936) (lessee had a duty to dispose of the saltwater byproduct of oil operations

Absent a special definition, the scope of a conveyance depends on the common and legal meaning of its language.⁵² At the time of the conveyances, and for decades before, the law was well-established: produced water is liquid oil-and-gas waste, and operators bear the burden, right, and duty of possessing, handling, and disposing of it. The statutory and regulatory authority that contextualizes the conveyances confirms the understanding and expectation that waste and hydrocarbon production go hand in hand.⁵³ Then and now, applicable laws define “oil-and-gas waste” in terms that include produced water:

- “waste that arises out of or [is] incidental to the drilling for or producing of oil or gas, including . . . salt water, brine, sludge, drilling mud, and other liquid, semiliquid, or solid waste material”;⁵⁴
- “waste arising out of or incidental to drilling for or producing of oil, gas, or geothermal resources The term includes but is not limited to salt water, brine, sludge, drilling mud, and other liquid or semi-liquid waste material”;⁵⁵ and

without injuring property or polluting streams as a “necessary part of the oil business” and could therefore construct facilities on the surface estate to do so subject to liability in negligence for improper disposal).

⁵² *Wessely Energy Corp. v. Jennings*, 736 S.W.2d 624, 626 (Tex. 1987) (“The law[] existing at the time a contract is made becomes a part of the contract and governs the transaction.”).

⁵³ The statutory and regulatory treatment of produced water forms part of the legal framework against which the parties contracted but does not alter, or purport to alter, what the leases say.

⁵⁴ TEX. NAT. RES. CODE § 91.1011; *see* Act of May 19, 1983, 68th Leg., R.S., ch. 967, § 7, sec. 91.1011, 1983 Tex. Gen. Laws 5251, 5260-61.

⁵⁵ TEX. WATER CODE § 27.002(6); *see* Act of May 13, 1977, 65th Leg., R.S., ch. 870, § 1, sec. 27.002, 1977 Tex. Gen. Laws 2207, 2323.

- “[m]aterials to be disposed of or reclaimed which have been generated in connection with activities associated with the exploration, development, and production of oil or gas or geothermal resources The term ‘oil and gas wastes’ includes, but is not limited to, saltwater, other mineralized water, sludge, spent drilling fluids, cuttings, waste oil, spent completion fluids, and other liquid, semiliquid, or solid waste material.”⁵⁶

The Legislature reaffirmed this understanding in 2013 by comprehensively defining “fluid oil and gas waste” as referring to “waste containing salt or other mineralized substances, brine, hydraulic fracturing fluid, flowback water, *produced water*, or other fluid that arises out of or is incidental to the drilling for or production of oil or gas.”⁵⁷ Judicial precedent further confirms that an express grant of oil and gas includes the right to separate, handle, and properly dispose of saltwater incidentally produced with the leased minerals.⁵⁸ Finally, the transaction documents support a construction of the leases as assigning

⁵⁶ 16 TEX. ADMIN. CODE § 3.8(a)(26).

⁵⁷ TEX. NAT. RES. CODE § 122.001(2) (emphasis added).

⁵⁸ See *Brown v. Lundell*, 344 S.W.2d 863, 866-67 (Tex. 1961) (observing that separation and disposal of oil-and-gas wastewater are necessary and incident to production and therefore included in the conveyance of the right to explore for and produce oil); *Turner v. Big Lake Oil Co.*, 96 S.W.2d 221, 226 (Tex. 1936) (identifying saltwater as “[o]ne of the by-products of oil production” that must be disposed of as “a necessary part of the oil business” “without injury to property or the pollution of streams”). We express no view regarding the ownership of any other substances in what the trial court and court of appeals called the “product stream.” 676 S.W.3d 733, 737, 741 (Tex. App.—El Paso 2023). Nor do we express any view regarding the hydrocarbon lessors’ rights, if any, under the hydrocarbon leases.

to COG pollution-control responsibilities that presuppose its right to possession, custody, control, and disposition of produced water.⁵⁹

But according to Cactus, this is all beside the point because produced water, even if waste, is also the surface estate's water. Its ownership claim to produced water rests on a seductively simple proposition: because the solvent in produced water includes molecules of subsurface water, the solution *is water* such that some potentially segregable part still belongs to the surface estate and thus can be leased to third parties. To support this conclusion, Cactus relies on *Edwards Aquifer Authority v. Day*,⁶⁰ *Robinson v. Robbins Petroleum Corp.*,⁶¹ and *Sun Oil Co. v. Whitaker*,⁶² which affirm that a landowner owns groundwater, whether fresh or saline, under its land. Cactus asserts that the mineral estate's rights to produced water have always been only usufructuary in nature—an implied right to reasonable and necessary use—and that this is all COG has acquired under the hydrocarbon leases.

Cactus is correct in what it says about our groundwater cases, but that precedent is simply inapplicable to the question before us: whether incidentally produced liquid waste was included in the hydrocarbon conveyances. *Edwards Aquifer*, *Robinson*, and *Sun Oil* do not address waste byproducts of oil-and-gas production. Each case focuses on ownership of groundwater *in situ* or extracted through water wells for

⁵⁹ See *supra* note 50.

⁶⁰ 369 S.W.3d 814, 832 (Tex. 2012).

⁶¹ 501 S.W.2d 865, 867-68 (Tex. 1973).

⁶² 483 S.W.2d 808, 811 (Tex. 1972).

use as water. But as we explained in *Guffey v. Stroud*, “The grant of the oil carried with it a grant of the way, surface, soil, water, gas, and the like essential to the enjoyment of the actual grant of the oil,” including the right to consume or waste the same.⁶³ As discussed above, the common and ordinary meaning of a grant of hydrocarbons includes the water incidentally produced with those substances at the mineral lessee’s expense, which the lessee is required to properly dispose of free from third-party interference.⁶⁴

Despite its colloquial appellation, produced water is not water. While produced water *contains* molecules of water, both from injected fluid and subsurface formations, the solution itself is waste—a horse of an entirely different color. Statutes and regulations treat water and produced water differently and distinctly because they are distinct and different. Produced water is a hazardous, even toxic, mixture produced with hydrocarbons and separated from them after extraction at the wellbore. Unlike water, produced water is subject to laws distinctly focused on oil-and-gas production and environmental safety concerns.

⁶³ 16 S.W.2d 527, 528 (Tex. [Comm’n Op.] 1929).

⁶⁴ The record in this case shows that any interference with the disposal obligation risks shutting down hydrocarbon production as well as substantial liability for the hydrocarbon lessee.

Water is something that must be protected from oil-and-gas waste;⁶⁵ the two are not interchangeable.⁶⁶

Although Cactus acknowledges COG's right to possess and dispose of produced water, it views these rights as usufructuary in nature. Usufructuary rights allow someone to use and enjoy another's property without owning it, *if the property is not damaged or diminished*.⁶⁷ The right to destroy, dispose of, or consume property is generally inconsistent with a merely usufructuary right.⁶⁸ Instead, the right to the capital value of property, including by means of

⁶⁵ See TEX. NAT. RES. CODE § 91.101(a) (requiring the Railroad Commission to adopt and enforce rules to “prevent pollution of surface water or subsurface water,” including from “oil and gas waste”); 16 TEX. ADMIN. CODE § 3.8(b) (“No person conducting activities subject to regulation by the commission may cause or allow pollution of surface or subsurface water in the state.”); see also 16 TEX. ADMIN. CODE §§ 3.8(a)(26), (d)(1), (d)(5)(B), .13(a)(1) (water protection).

⁶⁶ As several amici point out, many things are composed mostly or largely of water but are not commonly understood to be water. See, e.g., Brief of *Amicus Curiae* Permian Basin Petroleum Association at 8-9 (listing several substances with substantial water components that are not commonly considered to be water: blood plasma (90% water), vodka (60%), whiskey (60%), and concrete (up to 23%)).

⁶⁷ *Usufruct*, BLACK'S LAW DICTIONARY at 1864 (12th ed. 2024) (“A right for a certain period to use and enjoy the fruits of another's property without damaging or diminishing it . . .”).

⁶⁸ Cf. *Acker v. Guinn*, 464 S.W.2d 348, 352 (Tex. 1971) (noting that destruction or substantial impairment is not ordinarily contemplated as reasonable use of the surface for mineral production). The right to destroy one's own property has ancient origins. See Lior Jacob Strahilevitz, *The Right to Destroy*, 114 YALE L.J. 781, 787 (2005) (“Under Roman law, the ability to destroy one's own property was considered an important right of ownership. A Roman's property rights consisted of the *jus utendi fruendi abutendi*: the rights to use the principal (i.e., the property), to use the income generated by the property, or to completely consume and destroy the property.”).

“consumption, waste, or destruction,” is inherent in property ownership.⁶⁹ When the hydrocarbons were leased, conveyance of the specifically named minerals included transferring the entrained water molecules to the lessee along with the right to dispose of them in accordance with the law.⁷⁰ Although industry methods are evolving to better manage waste byproducts, that does not change the original scope of the conveyance, which must be interpreted as of the transfer of rights, not through a modern lens.⁷¹

Furthermore, if either party genuinely believed otherwise, the leases or other transaction documents would likely include provisions facilitating the transfer of produced water from the hydrocarbon lessee

⁶⁹ *Evanston Ins. Co. v. Legacy of Life, Inc.*, 370 S.W.3d 377, 383 (Tex. 2012) (describing the bundle of various rights associated with property ownership).

⁷⁰ *Cf. Bowden v. Phillips Petrol. Co.*, 247 S.W.3d 690, 706 (Tex. 2008) (“[H]aving bought and paid for such gas [the lessee] owned the same, including all of its constituent elements, and therefore had the lawful right to make such use of it as it might deem proper.” (internal quotation marks and citation omitted)); *Guffey v. Stroud*, 16 S.W.2d 527, 528 (Tex. [Comm’n Op.] 1929) (stating that “[t]he grant of the oil carried with it the grant of the . . . water . . . essential to the enjoyment of the actual grant of the oil” and indicating, by rejecting Shylock’s rule from *The Merchant of Venice*, that such a grant is not merely usufructuary such that the lessee may consume or waste incidentally produced water: “The bond for a pound of flesh, if valid, did carry with it by necessary implication of law as much Christian blood as was necessary to be shed in the operation.”).

⁷¹ *Bowden*, 247 S.W.3d at 698 (“Although the dispute in this lawsuit arose in modern times, we interpret the obligations and rights of the parties according to their expressed intent when they entered the agreement.”); *id.* at 706 (observing that “sophisticated parties in today’s market might enter a contract that distinguishes the forms and components of natural gas” but the gas royalty agreements at issue “were entered long before extraction and sale of natural gas liquids was commonplace”).

to the surface owner. Produced water is a regulated substance that requires appropriate permits, proper handling, and disposal, including essential infrastructure. The absence of any provisions for transferring possession and custody of produced water to the surface owner confirms the conclusion that the leases conveyed exclusive possession, custody, control, and disposition of produced water as part of the hydrocarbon production rights.

Other lease provisions bear this out. For example, the hydrocarbon leases give the lessors the option to take delivery of gas in kind *but only if* the lessors provide certain equipment or construct essential facilities, including securing necessary permits.⁷² There are no similar provisions in the leases, SUCA, or ROWs that contemplate the transfer of other hazardous substances from the producing party, let alone produced water.⁷³ The leases, when construed as a whole and in connection with the other transaction documents, do not reflect an

⁷² The 2005 and 2010 Collier leases state that, if the lessor elects to take or have its share of royalty gas “in kind,” “such gas shall be metered through a meter furnished by Lessor” and “Lessor also agrees to secure any authority or permit required from any governmental agency having jurisdiction [and] make all necessary reports to any such agency.” The 2014 Collier lease similarly states: “Whenever Lessor takes its royalty share of oil or gas in kind, it shall construct or cause to be constructed, such facilities as may be necessary in connection with such taking in kind at or near Lessee’s facilities, at Lessor’s sole cost and expense.” The 2010 Balmorhea lease conditions the lessor’s receipt of gas in kind on the lessor’s bearing the cost of any facilities required to take its royalty share of gas in kind and providing the metering equipment.

⁷³ See *Ft. Worth Indep. Sch. Dist. v. City of Fort Worth*, 22 S.W.3d 831, 840 (Tex. 2000) (“[I]nstruments pertaining to the same transaction may be read together to ascertain the parties’ intent, even if the parties executed the instruments at different times and the instruments do not expressly refer to each other.” (footnotes omitted)).

understanding or intent that produced water is anything other than a waste byproduct necessarily included in the hydrocarbon conveyance. COG's rights to those water molecules as a constituent of produced water is as an owner, not a usufruct.

In asserting the contrary, Cactus points out that several of the hydrocarbon leases explicitly restrict COG's water usage and from this posits that the leases are clear that no water produced from on or under the land could have been included in the conveyance. But the express limitations on water use only further emphasize the distinction between water molecules entrained in hydrocarbon production and the common understanding of water. Under the water-use restrictions, COG could not "use" the entrained water to produce hydrocarbons without the lessor's written consent under one lease or at all under two others. But the hydrocarbons could not be produced without entrained water molecules. If produced water were water, as Cactus says, the leases' express water-use constraints would be irreconcilable with a supposed right to use that water to produce the conveyed minerals.⁷⁴ The water-use limitations would frustrate, not facilitate, the production of minerals.

Cactus's best authority, *Robinson v. Robbins Petroleum Corp.*,⁷⁵ is distinguishable in critically important ways. In that case, a failed oil well was converted into a water well from which the mineral lessee

⁷⁴ See, e.g., *Bowden*, 247 S.W.3d at 701 ("[T]here is no implied covenant when the oil and gas lease expressly addresses the subject matter of an asserted implied covenant.").

⁷⁵ 501 S.W.2d 865 (Tex. 1973).

extracted saltwater for flooding operations on other tracts.⁷⁶ The mineral lease had a provision allowing free use of water, but only for on-lease operations.⁷⁷ The surface owner claimed ownership of the saltwater because “water is part of the surface estate according to the ordinary and normal use of the words conveying or reserving minerals.”⁷⁸ But the mineral lessee claimed ownership of the solution based on the solute—salt—being a mineral, which distinguished it from freshwater cases like *Sun Oil v. Whitaker*.⁷⁹

In holding that saltwater is not a mineral even though it contains a dissolved mineral, we explained: “We are not attracted to a rule that would classify water according to a mineral contained in solution. Water is never absolutely pure unless it is treated in a laboratory. It is the water with which these parties are concerned and not the dissolved salt.”⁸⁰ We then offered a hypothetical that Cactus finds dispositive of its argument that produced water is the property of the surface estate regardless of its constituents:

If a mineral in solution or suspension were of such value or character as to justify production of the water for the extraction and use of the mineral content, we would have a different case. The substance extracted might well be the property of the mineral owner, and he might be entitled to use the water for purposes of production of the mineral. In either case the water itself is an incident of surface ownership in the absence of specific conveyancing language

⁷⁶ *Id.* at 866.

⁷⁷ *Id.*

⁷⁸ *Id.* at 867.

⁷⁹ *Id.*

⁸⁰ *Id.*

to the contrary. And in our case the saline content has no consequence upon ownership.⁸¹

Though a hypothetical is not a holding, there is a superficial appeal to Cactus's argument. *Robinson*, however, cannot bear the weight Cactus supposes.

Robinson is a water case, not a produced water or waste case. The saltwater produced there was not part and parcel of oil-and-gas production;⁸² it was produced from a water well. Due to its potential contamination from chemicals and hydrocarbons, produced water is subject to a specialized regulatory scheme that includes environmental and energy-law considerations. Under that scheme, produced water, as a waste byproduct, is subject to unique disposal, treatment, and reuse regulations in adherence to state oil-and-gas and environmental standards. This distinction in both the nature of the resource and the regulatory oversight, which provide context for our interpretation of the conveyance here, renders the holding in *Robinson* inapplicable to the legal complexities surrounding produced water.

* * *

“Although mineral leases are contracts, they are subject to legal and regulatory restrictions,”⁸³ and parties are presumed to contract in

⁸¹ *Id.* (citations omitted).

⁸² Saltwater or brine can, of course, be oil-and-gas waste when it arises from or is incidental to oil-and-gas production. *See supra* notes 54–57.

⁸³ *Endeavor Energy Res., L.P. v. Discovery Operating, Inc.*, 554 S.W.3d 586, 595 (Tex. 2018).

reference to the law.⁸⁴ We hold that a deed or lease using typical language to convey oil-and-gas rights, though not expressly addressing produced water, includes that substance as part of the conveyance whether the parties knew of its prospective value or not. That being so, if the surface owner actually wants to retain ownership of constituent water incidentally and necessarily produced with hydrocarbons, the reservation or exception from the mineral conveyance must be express and cannot be implied. The conveyances here include no such reservation or exception. Accordingly, we affirm the court of appeals' judgment that COG, not Cactus, has the right to possession, custody, control, and disposition of the constituent water in the liquid waste from its hydrocarbon production.

John P. Devine
Justice

OPINION DELIVERED: June 27, 2025

⁸⁴ See *XOG Operating, LLC v. Chesapeake Expl. Ltd. P'ship*, 554 S.W.3d 607, 612 (Tex. 2018).