

PRESENTED AT

46th Annual Ernest E. Smith Oil, Gas and Mineral Law Institute

March 27, 2020

Houston, TX

**The Sand Paper: The Anatomy of Acquiring,
Divesting, and Leasing Sand**

Reagan M. Marble & Peter E. Hosey

Reagan M. Marble
Peter E. Hosey
Jackson Walker LLP
San Antonio, Texas

ABOUT THE AUTHORS

Reagan M. Marble

rmarble@jw.com

210.978.7770

Reagan M. Marble's practice focuses on complex energy litigation and transactions.

In his energy litigation practice, Reagan regularly represents oil and gas operators, mineral and royalty buyers, high-net-worth family trusts and partnerships, and renewable energy developers in their litigation matters throughout South and West Texas. Reagan's extensive experience in the field ranges from achieving summary dismissal of multimillion dollar title disputes in the Eagle Ford Shale and Permian Basin to favorably resolving renewable energy contract disputes along the Gulf Coast.

In his energy transactions practice, Reagan frequently drafts and negotiates agreements affecting all aspects of upstream oil and gas exploration and production including oil and gas leases, purchase and sale agreements, farmouts, and joint operating agreements.

Reagan has particular experience helping clients develop, produce, and dispose of other natural resources including water (water leases, water sales contracts, water operating agreements, and saltwater disposal agreements) and sand (sand supply contracts and purchase and sale agreements). A national award-winning advocate, Reagan takes pride in being a professional, efficient, and successful advocate in the courtroom or the boardroom.

Education

B.A., Baylor University

J.D., *cum laude*, Texas Tech University School of Law

Peter E. Hosey

phosey@jw.com

210.228.2423

Peter has more than 40 years of experience representing clients in the energy and natural resources area. He has advised clients concerning all aspects of exploration, production, transportation, processing, sale and marketing of oil and gas and other natural resources. Peter not only advises clients with regard to oil and gas matters, but also has many years experience with regard to the exploration, production, transportation and leasing of hard minerals, including coal and uranium. Peter has also advised clients concerning the sale and purchase of natural gas storage facilities and secondary recovery operations. He advises clients regarding the formation of and use of various entities, both public and private, and the financing of the acquisition and development of oil and gas, coal, uranium, and related assets.

Peter represents clients in the preparation and negotiation of merger and acquisition agreements, purchase and sale agreements, joint exploration agreements, lease acquisition agreements, seismic option agreements, leases, operating agreements, farmouts, oil and gas sales contracts, transportation agreements, processing agreements, pipeline construction and operating agreements, easement agreements, and other related documents. In addition, he advises and prepares surface use agreements to provide for the protection and development of both the surface and mineral estates and has more than 40 years experience in title examination and the preparation of title opinions, title curative documents, conveyancing instruments and other land title related agreements. Peter also has many years of experience with regard to regulatory matters concerning the oil and gas industry.

Peter also represents many landowners, including owners of large Texas ranches, negotiating and preparing oil and gas leases, surface use agreements, rights of way, easements and royalty agreements.

Peter also represents landowners in land title and royalty litigations and serves as a mediator of oil and gas and land title disputes. Peter's experience in oil and gas matters includes not only Texas but other states where he has been instrumental in advising parties concerning oil and gas interests located in the Marcellus Shale areas of New York, West Virginia and Pennsylvania.

Education

B.A., University of Texas at El Paso

J.D., St. Mary's University School of Law

TABLE OF CONTENTS

I.	LIKE SAND THROUGH AN HOURGLASS, SAND AS A COMMODITY IN TEXAS	5
II.	SAND: WHAT THE FRAC IS IT USED FOR?.....	5
	A. Sand as a Proppant	5
	B. The Frac Sand Chain.....	6
III.	ACQUIRING, DIVESTING, AND LEASING SAND: THE SAND LEASE, SAND SUPPLY CONTRACT, AND UNIQUE STRUCTURES.....	6
	A. The Sand Mining Lease	6
	B. The Sand Supply Contract.....	8
	C. Unique Structures.....	9
IV.	CONCLUSION	10

I. LIKE SAND THROUGH AN HOURGLASS, SAND AS A COMMODITY IN TEXAS

The more things change, the more they stay the same. It is a tale as old as time that, when “the gettin’ is good” in oil and gas, other commodities enjoy record high prices. However, the recent (unprecedented) fall in the price of oil and gas has significantly affected the price of commodities tangential to oil and gas production. Fueled by the demand for its use as a proppant in hydraulic fracturing, sand reached a peak high in 2014 selling for almost \$65 per ton. But like oil and gas, the price of sand has also fallen sharply in recent months and currently trades from some plants at under \$20 per ton.

Despite such price volatility, there remains renewed interest in lease activity for sand. “Renewed” is a loose reference to the days of a high demand for aggregate sand like the famed “Brady Brown” in McCulloch County. Lawyers may once again be confronted with determining the best way to structure and draft sand leases, sand supply contracts, and ultimately, the sale of sand mines (or partial interests therein) from one party to another.

This paper strives to be your quick reference guide to most things sand, will generally discuss the ins and outs of sand mining, and a provide a basic framework including some important issues to spot for acquiring, divesting, and leasing sand.

II. SAND: WHAT THE FRAC IS IT USED FOR?

A. Sand as a Proppant

Using sand as a “proppant” is nothing new in the oil and gas world. Sand was used as early as 1947 in Standard Oil’s test of the Hugoton Gas field when 1,000 pounds of gelled gasoline and sand were injected into a limestone formation.¹ After George P. Mitchell

¹<https://www.blackmountainsand.com/what-is-proppant/>.

revolutionized hydraulic fracturing, sand saw increased demand when it was used to “prop” open fractures or fissures in shale and was pushed down the wellbore along with water and other chemicals.

In 2014, during the “boom” of the Permian Basin, operators imported a type of sand known as “Wisconsin White” by rail from Western Central Wisconsin. Wisconsin White made up almost 75% of the sand used downhole in oil and gas wells in the Permian Basin in 2014. The rest of the market was made up of some combination of Brady Brown and very little “in-basin” sand.² Over the next three years, as the demand for frac sand increased to some 1500 lbs. of sand per lateral foot, companies discovered the value in-basin sand provided logistically and downhole. Companies rushed to secure valuable sand deposits throughout West Texas (particularly in Winkler County) leading the summer of 2017 to become known in the industry as the “summer of sand.”³ Hi-Crush, High Roller, Atlas, US Silica, Black Mountain, and other sand mining companies invested hundreds of millions of dollars into sand mines across West Texas’s Permian basin and became key players in the new gold rush.

Fast forward to the present year 2020, the oil price war between Russia and the Saudis as well as COVID-19 seem here to stay.⁴ It is now projected that only 43% of sand used in oil and gas wells in Texas is from Wisconsin; the sand mines in and around Brady, Texas are all but shuttered; and “Winkler White” makes up arguably the largest part of what goes down the wellbore today.⁵ For example, a lateral Wolfcamp

²<https://www.kut.org/post/hill-country-town-picks-pieces-after-sand-plants-head-west>

³<https://www.ogj.com/home/article/17294226/a-summer-of-sand-regional-sand>

⁴ For help navigating the legal challenges presented by this novel virus, please visit: <https://www.jw.com/coronavirus/>.

⁵<https://apnews.com/0f0e3b4d2b6741a38c4a38bf490786cd>

horizontal well will use 13 million tons of sand;⁶ that's over 300 trucks!

So what does it take to get sand from the ground down the hole?

B. The Frac Sand Chain

The frac sand chain appears relatively simple, but is a complicated chain of heavy equipment, logistics, and (lawyer's favorite thing) paperwork.

The first step in the chain is the mining of sand with heavy equipment including backhoes and bulldozers and then transporting the sand to the plant with dump trucks. The second step in the chain is the processing of sand. Processing can be broken down into three segments. Segment one is the wet plant where sand is washed to remove silt, debris, and clay. The sand slurry is then put through a series of screens and separators and finally placed in a stockpile where excess water is drained and (hopefully) recycled. Segment two is the dry plant where the drained sand is dried and sifted through screens. Segment three is storage where the sand is often placed into silos or a "load-out" facility and awaits pick-up. The third step in the frac sand chain is transportation. Until recently, millions of tons of sand were transported by rail car from Wisconsin each year. Now, thousands of trucks carry sand in trailers (or boxes) designed to haul around tens of thousands of pounds of sand down the highway to the well-site.

This frac sand chain begs the question: as lawyers, what documents will we be tasked to prepare to acquire the rights to the sand, help facilitate the movement of sand from the ground, through the mine, onto the truck, and down the hole?

⁶<https://www.blackmountainsand.com/permian-basin-frac-sand-infographic/>

III. ACQUIRING, DIVESTING, AND LEASING SAND: THE SAND LEASE, SAND SUPPLY CONTRACT, AND UNIQUE STRUCTURES

Oversimplified, the legal documents governing the frac sand chain can be broken down into the Sand Mining Lease, the Sand Supply Contract, and a few other documents specific to divestiture structures unique to the sand business. The following is a brief overview of each document including issues to spot and important clauses to consider. This brief overview is not exhaustive, but is intended to highlight issues particular to sand. Capitalized phrases used throughout the examples below are defined terms within each document but those terms may not be defined in this paper.

A. The Sand Mining Lease⁷

The Sand Mining Lease is a document that finds its genesis in many other forms of mining leases (uranium, lignite, caliche) that have developed over time in Texas. Below are a few basic (and not so basic) provisions to include in your next Sand Mining Lease.

1. Option Period or Preliminary Agreement. Like other mining leases, a Sand Mining lease may begin with an "option" or "inspection" period or the parties may negotiate a separate "coring agreement." The purpose of the option or inspection period (or separate coring agreement) is that the lessee is provided time, in exchange for a sum of money, to take core samples and evaluate the potential deposits of sand on the tract of land. This preliminary agreement may also include the right to conduct soil tests, engineering studies, or environmental studies. The primary term of the Sand Mining Lease would not begin until after the lessee elects to proceed and tenders an additional sum of money.

⁷ The majority of this paper will focus on provisions in a sand lease considering parties to the sand supply contract and unique divestitures are likely sophisticated and will be driven by in-house counsel guiding outside counsel.

2. Granting Clause. There are no “magic words” for the granting language in a sand lease. However, these authors recommend use the phrase “demise, lease, and let.” The demise, lease, and let of the property would be *only* for the stated purpose of “exploring, producing, developing, mining, extracting, storing, and removing sand.” The granting clause should also include the right of ingress and egress over and across the property for the stated purpose.

3. Other Substances Clause. Because sand surface mining necessarily includes the opportunity to excavate other substances of value along with the sand, these authors recommend a clause requiring the lessee to segregate any other “commercially valuable substance.” For example, “in the event that Lessee should discover through its mining operations for Frac Sand⁸ other substances on the Leased Premises of commercial value (“Other Substances”) said Other Substances shall be segregated from the Frac Sand at no cost to Lessor, remain on the Leased Premises, and are hereby reserved to and remain the property of Lessor.”

4. Processing Operations Clause. If the lessor does not want the lessee to have sole discretion to locate its processing plant (including wet and dry processing facilities) anywhere on the property, then the lessor can include a “processing operations” clause. This clause prohibits “milling, refining, finishing, or processing” sand anywhere on the property except for an affirmatively established “Processing Area.”

5. Term. In a sand lease, the term has great flexibility but is likely the most important clause along with the royalty clause. For instance, like an oil and gas lease, there can be a primary term (a number of years) and a secondary term (“so long thereafter as Mining Operations are conducted on the Leased Premises”). For purposes of the secondary term, the definition of

“Mining Operations” is crucial and would necessarily include “the mining, extraction, and transportation of sand from the property without any cessation of more than ___ days.” In addition to a primary and secondary term, it is also not uncommon to include a sunset clause stating that “notwithstanding anything to the contrary, this Lease terminates ___ years from the Effective Date.” The term may also be structured to include a set number of years with an option (or multiple options) to extend.

6. Royalty. There are at least two types of royalty in a Sand Mining Lease: monthly royalty and minimum annual royalty. Monthly Royalty can be structured as a percentage of “Gross Monthly Revenue.” For example, monthly royalty can be 7.75% of all revenue received for the sale of sand from the premises. Monthly Royalty may also be a payment for each ton sold (*i.e.*, \$2.25 per each ton of sand). Annual (or on occasion monthly minimum royalty) is a minimum dollar amount. If the annual or monthly royalty do not add up to that floor price during the applicable month or year, the lessee owes the difference to the lessor.⁹

7. Records. Because sand mines are not required to report production to an regulatory entity like the Railroad Commission of Texas, it is important to impose a record keeping obligation upon the lessee. The lessee should be required to maintain: all records including the tons of sand mined, removed, shipped, and sold from the property; the number of trucks in and out of the property including truck number, company, and incoming/outgoing weight; and a life of mine plan (LOMP). All of this information can be included in a monthly report sent to the lessor with royalty payments.

8. Surface Development Provisions. Because there is no case law establishing clear development duties in a sand lease as it pertains to the surface, it is important to include provisions

⁸ “Frac Sand” is crystalline silica sand. The Texas Supreme Court says sand belongs to the surface estate as a matter of law. *Moser v. U.S. Steel Corp.*, 676 S.W.2d 99, 102 (Tex. 1984) (*citing Praeletorian Diamond Oil Ass’n v. Garvey*, 15 S.W.2d 698 (Tex. Civ. App.—Beaumont 1929, writ ref’d).

⁹ There may also be an opportunity for a lessor to receive an overriding royalty for each ton of sand that is processed at the plant on the property but not mined from the property. That concept can be very complicated to implement and is slightly beyond the scope of this paper.

outlining prudent development. A drafter may include express surface use agreements for the lessee to slope all surface pits in a manner consistent with good mining practices, fence pits, and/or dispose of all tailings and mining waste off premises.

9. Duty to Market. Texas case law does not impose implied duties on the lessee in a surface mining lease like a lessee in an oil and gas lease. Therefore, it is important to contractually impose, at the very least, an express duty to market. Such a duty is a duty to take all commercially reasonable and necessary steps to process the sand from mined from the property into a commercially marketable condition.

10. Express Contractual Lien. There are no statutory protections for sand lessors on the payment of royalty like there are in the oil and gas context.¹⁰ It is important for a lessor to include a provision establishing an express contractual lien on all sand extracted from the property, all proceeds from the sale of sand, all equipment located on the property, and all fixtures and improvements on the property.¹¹

11. Surface Priority. To avoid disputes between the surface estate and the mineral estate, where there is no current oil and gas lease covering the property, a lessee should draft a clause establishing that the estate created by the Sand Mining Lease is the “dominant” estate in order to protect its ability to develop the surface without interference. Of course, this only works in the situation where the surface owner also owns the mineral estate and can burden the mineral estate with that restriction.

12. Ability to Further Encumber the Surface. The lessor will likely want to continue the ability to profit from the surface estate during the term of the Sand Mining Lease. As such, the lessor should specifically reserve the right to grant easements, enter into other surface leases like hunting or cattle grazing, and sell water to third parties. The lessee, however, should condition any burden of the surface upon the express written

¹⁰ TEX. NAT. RES. CODE § 91.402.

¹¹ Liens will still have to be perfected including the filing of UCC-1 forms, etc.

consent of the lessee in order to prevent the sterilization of mineable reserves.

13. Reclamation. Mining and reclamation of sand and gravel pits are not regulated by the Railroad Commission of Texas like uranium and coal mining operations.¹² Because there is no statutory oversight on reclamation, reclamation obligations in a Sand Mining Lease need to be specific.¹³ The lessor should be very clear on restoration obligations for the soil, re-vegetation, and contour/slope.

B. The Sand Supply Contract

The second major document in moving sand is the sand supply contract which is the document governing the relationship between the sand supplier and the ultimate end user of the product such as a drilling contractor or the operator itself. Here are a few provisions that a drafter should consider when drafting the sand supply contract.

1. Recitals. The recitals in any contract are often overlooked but are important in a sand supply contract to frame the relationship of the parties. The following is an example:

- Supplier is in the business of providing industrial sands and aggregates;
- Customer is in the business of [performing various oilfield services or exploring for and producing oil, gas, and other minerals]; and
- Customer wishes to purchase and Supplier wishes to sell [crystalline silica (quartz) sand or industrial sand and aggregates] (“Product”) meeting the specifications and on the terms and conditions set forth herein.

2. Term. Typically, the term of these contracts is for one or two years from the Effective Date and can be set up for automatic

¹² TEX. NAT. RES. CODE § 134, “Texas Surface Coal Mining and Reclamation Act.”

¹³ Note that if there is a surface-water discharge or point-source discharge, there will be oversight from the Texas Commission on Environmental Quality.

renewal unless cancelled by either party on 30, 60, or 90 days' notice.

3. Price Per Ton. The price per ton is simply stated as an amount in dollars, and is typically, FOB the plant.

4. Required Tonnage. This provision sets forth the required amount of sand to be supplied and purchased during the term of the contract. It typically states that during each contract year, the supplier will sell and the customer will purchase x tons of product. The provision also sets forth the specific method of ordering product (*i.e.*, an attached form of purchase order). The most important part of the Required Tonnage provision might be the ceiling stating that the customer shall never require more than x numbers of tons of product for any given month during the contract year.

5. Supply Shortfall Provision. The order shortfall provision sets forth the method by which a supplier cures its failure to provide the ordered amount of product during any given month. Often, a supplier must provide the shortfall amount within a certain number of days after the end of the month in which the order was deficient.

6. Order Shortfall Provision. This provision requires an annual payment in the event a customer does not purchase the required tonnage in each year during the term of the contract.¹⁴ It functions similarly to a take or pay provision.

7. Disclaimer. The supplier should insist on a disclaimer of warranties that includes disclaiming "warranties, express or implied, regarding the Product or its fitness for any particular purpose, other than that the Product will meet or exceed the applicable Specifications."¹⁵

8. Silica Warning. Considering the potential effects of silica, it is important to include a silica warning that reads something to the effect of: "Supplier's products contain respirable crystalline silica, which is considered by some sources to be a cause of cancer. Breathing excessive amounts of respirable silica dust can also cause a disabling and potentially fatal lung disease called silicosis, and has been linked by some sources with other diseases. During transportation, use, clean-up or handling, follow all NIOSH and MSHA procedures and recommended practices, including wearing properly-fitted, NIOSH-approved or MSHA-approved air supplied protective equipment in accordance with applicable government regulations and manufacturer instructions. For further information, please refer to the appropriate Material Safety Data Sheet, a copy of which is available from the Supplier upon request. Customer hereby accepts all responsibility to maintain a safe work environment, warn, notify, train and provide all necessary and appropriate NIOSH/MSHA-approved protective equipment to all Persons handling or in the presence of Supplier's products, including the Product, and to enforce the requirement that NIOSH/MSHA-approved protective equipment be used when handling all such products."

C. Unique Structures

This last section of the paper focuses on a very brief overview of the unique purchase and sale structure that is found in the sand market. This particular structure only applies to: large transactions when an operator or drilling contractor is acquiring all or substantially all sand that a plant may produce for an extended period of time (*i.e.*, over a period of 5 or more years).

Under this unique structure, the party intending to purchase substantially all of the sand a mine can produce acquires a partial fee interest in the sand "in place" from the supplier at the closing of the transaction. The sand in place is acquired by deed, and as sand is supplied pursuant to a long term sand supply contract, a percentage of the acquired fee interest reverts back to the sand supplier with each ton of sand supplied. The joint ownership of the sand in place, and the creation of a cotenancy, necessitates a document

¹⁴ Likely the subject of forthcoming litigation; think "take or pay" litigation of the 1980s.

¹⁵ "Specifications" in a sand supply contract are highly technical dealing with mesh size, crush resistance, and turbidity.

akin to a joint operating agreement which governs important issues during the time the parties jointly own the sand in place (*i.e.*, partitionability, property access, etc.). Finally, this unique structure includes an instrument called a “precautionary mortgage.”¹⁶ The precautionary mortgage is the conditional grant of a mortgage on the property from the supplier to the customer. The precautionary mortgage only becomes effective in the event the deed is set aside by a court of competent jurisdiction and allows the customer to foreclose on its proportionate interest that has not reverted to the seller. As anyone familiar with bankruptcy can tell, the structure of this deal is driven almost entirely by bankruptcy concerns.

IV. CONCLUSION

Although we are currently in the midst of an unprecedented downturn in the oil and gas market, and the price of sand has been significantly affected, what goes down must (hopefully?) come back up. There will be opportunity for draftsmen to use their skills on leases, supply contracts, and sales of sand mines or portions thereof once again in the near future. The authors hope that this paper can be a resource for those of you jumping into the sandy end of the pool.

¹⁶ These authors prefer styling the instrument as a “quitclaim lien.”