

UNITED STATES COURT OF APPEALS
FOR THE FIFTH CIRCUIT

No. 98-30673

MUSSER DAVIS LAND CO,

Plaintiff - Appellee,

VERSUS

UNION PACIFIC RESOURCES,

Defendant - Appellant.

Appeal from the United States District Court
for the Western District of Louisiana

January 21, 2000

Before JONES, DeMOSS, and DENNIS, Circuit Judges.

DENNIS, Circuit Judge:

In this diversity case, Union Pacific Resources (UPR) appeals from adverse declaratory relief granted to Musser Davis Land Company (Musser Davis) by the district court concerning the rights of each party under an oil and gas lease with respect to seismic exploration. The district court concluded that UPR, as assignee of a mineral lease with the exclusive right to enter upon and use the land of the lessor, Musser Davis, for the purpose of exploration for and production of oil and gas, does not enjoy the right to conduct seismic exploration of the leased premises. The district

court also concluded that UPR had no right to sell or disseminate to third parties any seismic data gleaned from Musser Davis lands. Because we are of the opinion that the district court's decision is contrary to the applicable state law as we believe it would be determined by the state's highest court, the district court's declaratory judgment is reversed and the case is remanded.

I. FACTS and PROCEDURAL HISTORY

By assignments dated April 1, 1997 and October 17, 1997, UPR purchased a 72.1875 per cent interest in an oil and gas lease originally contracted between Musser Davis (lessor) and Eagle Oil and Gas Company (lessee) on September 1, 1996.¹ Through the assignments from Eagle Oil and Gas to two other entities and their subsequent assignments to UPR, UPR acquired the mineral exploration rights granted to Eagle Oil and Gas in the original lease. See La.R.S. §§ 31:127 ("The lessee's interest in a mineral lease may be assigned or subleased in whole or in part.") and 31:128 ("To the extent of the interest acquired, an assignee or sublessee acquires the rights and powers of the lessee and becomes responsible directly to the original lessor for performance of the lessee's obligations."). Musser Davis does not dispute that the original lessee acquired the exclusive right to explore for and produce oil and gas on the leased lands or that UPR has the authority to

¹On October 2, 1996, Eagle Oil and Gas Company assigned its interest in the lease -- 50 per cent to Shield Petroleum Incorporated and 50 per cent to Hugoton Energy Corporation. By the April 1, 1997 assignment, UPR purchased a 46.25 per cent interest in the lease from Shield Petroleum; by the October 17, 1997 assignment, UPR purchased an additional 25.9375 per cent interest in the lease from Hugoton Energy.

exercise that right.

The lease covers 1066.46 acres -- all of Musser Davis's lands in Beauregard Parish, Louisiana. In July 1997, UPR sought to obtain from Musser Davis a seismic permit before conducting a seismology survey of the lands and offered to pay in advance \$7,290 for anticipated incidental property damages. Musser Davis refused and negotiations ensued. Musser Davis offered to condition its consent to the survey on UPR's agreement not to transfer any seismic data to third parties. UPR rejected the offer and informed Musser Davis of its intention to conduct the survey under the lease without a special permit.

On February 24, 1998, Musser Davis obtained a temporary restraining order in Louisiana state court to prevent the seismic survey and the transfer of seismic data. UPR, upon the basis of diversity of citizenship, removed the action to the United States District Court for the Western District of Louisiana on March 4, 1998. The district court denied Musser-Davis's motion to remand.

The district court dissolved the temporary restraining order when the parties agreed that UPR would be permitted to conduct the proposed seismic operations with the district court to determine the consideration to be paid Musser Davis pursuant to a declaratory judgment action. The parties also agreed that UPR would refrain from disseminating the seismic data pending a final decision in the litigation.

Musser Davis sought declaratory relief on two issues: (1) whether UPR has the right to conduct seismic operations on the

leased premises solely by virtue of its rights under the mineral lease; and (2) whether UPR has the right to sell or disseminate to third parties any seismic data it develops pertaining to the Musser Davis properties. The district court held a bench trial on the existing record, briefs, and affidavits. By memorandum opinion dated May 20, 1998, the district court decided both issues in favor of Musser Davis and against UPR, concluding that (1) UPR does not enjoy under the terms of the oil and gas lease the right to conduct seismic operations without additional express consent of the lessor; Louisiana Revised Statute 30:217 proscribes as a criminal trespass geological surveys conducted by UPR without Musser Davis's special, express consent; and (2) Musser Davis, as landowner, exclusively owns any seismic data developed by UPR from geophysical surveys of the leased lands.

II. ANALYSIS

We review the district court's interpretation of contracts and conclusions of law de novo and under the same standards that guided the district court. See Exxon Corp. v. Crosby-Mississippi Resources, Ltd., 154 F.3d 202, 205 (5th Cir. 1998) (citing American Totalisator Co. v. Fair Grounds Corp., 3 F.3d 810, 813 (5th Cir. 1993)). Because this is a diversity action, we sit as an Erie court and must apply Louisiana law in an attempt to rule as a Louisiana court would if presented with the same issues. See Erie R.R. v. Tompkins, 304 U.S. 64, 79-80 (1938); Mozeke v. Int'l Paper Co., 856 F.2d 722, 724 (5th Cir. 1988). To determine a state law question, we first look to decisions of the Louisiana Supreme

Court. See Transcontinental Gas v. Transportation Ins. Co., 953 F.2d 985, 988 (5th Cir. 1992). If the Louisiana Supreme Court has not spoken on the issue, it is our duty to determine as best we can what that court would decide. See id; Hulin v. Fibreboard Corp., 178 F.3d 316, 318-19 (5th Cir. 1999).

A. Right to Conduct Seismic Exploration

Under Louisiana law, the right to explore and develop one's property for the production of minerals, and to reduce minerals to possession and ownership, belongs exclusively to the landowner. See La.R.S. § 31:6; Frey v. Amoco Production Co., 603 So.2d 166, 171 (La. 1992). Musser Davis, as landowner, enjoyed this exclusive right and was free to convey, reserve, or lease the right. See La.R.S. § 31:15; Frey, 603 So.2d at 171. "In this manner, rights in minerals may be considered 'separable component parts of the ownership of land.'" Frey, 603 So.2d at 171 (citing and quoting 2 A.N. Yiannopoulos, Louisiana Civil Law Treatise: Property § 118 (3rd ed. 1991) (in turn citing La.R.S. § 31:8)).

Under the Louisiana Mineral Code, Louisiana Revised Statutes Title 31, "[a] mineral lease is a contract by which the lessee is granted the right to explore for and produce minerals." La.R.S. § 31:114. The Mineral Code preeminently, but not exclusively, governs the interpretation of mineral leases and was intended to prevail in any conflict between it and the Civil Code or other state laws. The Civil Code and other laws are applicable in the absence of an explicit or implicit Mineral Code provision. See La.R.S. § 31:2 ("In the event of conflict between the provisions of

this [Mineral] Code and those of the Civil Code or other laws the provisions of this Code shall prevail. If this Code does not expressly or impliedly provide for a particular situation, the Civil Code or other laws are applicable."); Frey, 603 So.2d at 171; American Lung Ass'n v. State, 645 So.2d 1219, 1221-22 (La.App. 1st Cir. 1994).

Under the Mineral Code, the landowner-lessor and lessee "must exercise their respective rights with reasonable regard for those of the other." La.R.S. § 30:11. Article 122 of the Mineral Code defines the lessee's obligations: "A mineral lessee is not under a fiduciary obligation to his lessor, but he is bound to perform the contract in good faith and to develop and operate the property leased as a reasonably prudent operator for the mutual benefit of himself and his lessor. Parties may stipulate what shall constitute reasonably prudent conduct on the part of the lessee." La.R.S. § 31:122. This article codifies Civil Code and jurisprudential principles that require every lessee to enjoy the thing leased as a "good administrator" and obligates a mineral lessee to act as a "reasonably prudent operator." See La.Civ.Code art. 2710; La.R.S. § 31:122 and comment. The lessee's obligation to develop or explore the leased premises, which springs from the obligation to act as a prudent operator, was first articulated by the Louisiana courts in Carter v. Arkansas Louisiana Gas Company, 36 So.2d 26 (1948), and later confirmed in Article 122 of the Louisiana Mineral Code. See Thomas A. Harrell, A Mineral Lessee's Obligation to Explore Unproductive Portions of the Leased Premises

in Louisiana, 52 La.L.Rev. 387, 390-92 (1991). The very nature of the mineral lease "implies that the parties contemplate that the lessee will do whatever is customary and reasonable to discover and exploit the mineral deposits underlying the leased premises." Harrell, supra, at 387.

Because the Mineral Code expressly recognizes the principle of freedom of contract, see La.R.S. § 31:3, the reach of the term "exploration" may not be ascertained without reference to the oil and gas lease in which it appears. See Frey, 603 So.2d at 171. The operative provision in the mineral lease at issue is as follows:

Grant of Lease. Lessor hereby grants, leases and lets unto Lessee the exclusive right, subject to all the provisions hereof, to enter upon and use the land in Beauregard Parish, Louisiana, described in Section 2 hereof, for the purpose of the exploration for and the production of oil and gas, and derivatives therefrom, it being understood that Lessor reserves all other minerals in, under and appertaining to the land. Lessee's rights shall include the reasonable use of the surface of the land in order to accomplish the exploration for and the production of oil or gas. It is specifically understood, however, that the Lessee shall be responsible for any damage done to Lessor's property as more fully set forth hereinafter.

The lease does not define the term "exploration" or expressly provide whether seismic operations are contemplated by the parties. Thus the question before this court is whether a lease granting the lessee the exclusive right to explore for oil and gas without defining or limiting in any way the term "exploration" bestows upon

the lessee the right to conduct seismic exploration to determine the presence of subsurface trapping mechanisms favorable to oil and gas production.

The Louisiana Supreme Court, in Frey v. Amoco Production Company, recognized that mineral leases are construed as leases generally, and, wherever pertinent, the Civil Code provisions applicable to ordinary leases are applied to mineral leases. 603 So.2d at 171 (citing Succession of Doll v. Doll, 593 So.2d 1239 (La. 1992); Melancon v. Texas Co., 89 So.2d 135 (1956); La.R.S. § 31:2; McCollam, A Primer for the Practice of Mineral Law Under the New Louisiana Mineral Code, 50 Tul.L.Rev. 729, 733 (1976); L. McDougal, Louisiana Oil and Gas Law § 3.1 (1991)). Accordingly, in interpreting and applying a general royalty clause in a mineral lease to take-or-pay payments made to a lessee, the Court relied in part on the Civil Code articles pertaining to interpretation of contracts. See Frey, 603 So.2d at 171-72. The Court stated:

The purpose of interpretation is to determine the common intent of the parties. See La.Civ.Code art. 2045. Words of art and technical terms must be given their technical meaning when the contract involves a technical matter, see La.Civ.Code art. 2047, and words susceptible of different meanings are to be interpreted as having the meaning that best conforms to the object of the contract. See La.Civ.Code art. 2048. A doubtful provision must be interpreted in light of the nature of the contract, equity, usages, the conduct of the parties before and after formation of the contract, and other contracts of a like nature between the same parties. La.Civ.Code art. 2053. When the parties made no provision for a

particular situation, it must be assumed that they intended to bind themselves not only to the express provisions of the contract, but also to whatever the law, equity, or usage regards as implied in a contract of that kind or necessary for the contract to receive its purpose. La.Civ.Code art 2054. To these basic concepts, we add one other. In Louisiana, a mineral lease is interpreted so as to give effect to the covenants implied in every such lease. See La.Rev.Stat. § 31:122.

Id. at 172.

Accordingly, the usages, words of art, and technical terms of the oil and gas industry should be taken into consideration in interpreting the lease exploration clause. A leading mineral law treatise defines mineral exploration operations, as the term is regularly used in the industry, as including aerial and geophysical surveys, geological studies, core testing, and drilling test wells, see 8 Patrick H. Martin & Bruce M. Kramer, William & Meyers Oil and Gas Law: Manual of Terms, 364 (1998); and a seismic survey as one of the principal methods of geophysical survey. See Martin & Kramer, supra, at 457-58.² The purpose of geophysical operations is to determine the characteristics of underground structures, with particular reference to characteristics which are favorable to the possible presence of oil or gas. See 1 Eugene Kuntz, A Treatise on

²Definitional support is also provided by state and federal statutes. See La.R.S. §§ 30:208 and 209 (to "explore" the mineral resources of state lands the State Mineral Board may "conduct geological and geophysical surveys"); 43 U.S.C. § 1331 (for purposes of the Outer Continental Shelf Lands Act, "exploration" includes "geophysical surveys where magnetic, gravity, seismic, or other systems are used to detect or imply the presence of such minerals").

the Law of Oil and Gas, § 12.7 (1987). Geophysical operations involve the detection and measuring of subsurface structures, and the seismic method obtains this information by measuring the reflection, refraction, and velocity of shock waves created by explosive charges set off in holes in the earth. See Kuntz, supra. Moreover, the extensive and prevalent use of seismic exploration, especially the three dimensional methodology, distinguishes it as the preeminent method of mineral exploration currently employed in the industry. See, e.g., Owen L. Anderson and John D. Pigott, 3D Seismic Technology: Its Uses, Limits, & Legal Ramifications, 42 Rocky Mtn. Min. L. Inst. § 16.01 (1996) ("During the past twenty-five years the 3D (three dimensional) seismic method has revolutionized the petroleum industry, in the way it conducts seismic exploration and exploitation, and in the way it thinks. At present, geophysicists who use 3D seismic technologies, together with geologists and engineers are necessary components of the petroleum team. In fact, in most cases today, it would be unthinkable to exclude geophysicists.") (internal citation omitted); Martin & Kramer, supra, at 457 ("Perhaps the most commonly used geophysical device is the seismograph Today, in any new exploration area, geophysical investigation is the almost universal preliminary to exploratory drilling."); Nick N. Savit, Reflections on Ownership, Protection And Transfer Of Seismic Data: Are There Bright Spots On The Horizon?, 37 Rocky Mtn. Min. L. Inst. § 14.02[1] (1991) ("Seismic exploration is among the first steps in the oil and gas exploration process.").

In fact, two oil and gas treatises say that seismic operations are generally accepted as included in the methods of "exploration" even if they were not extant at the time of the lease or specifically referred to in the mineral deed or lease:

It now appears generally accepted that a mineral owner or lessee may engage in geophysical work including seismic operations and that he may conduct secondary recovery operations on the land even though the deed or lease did not specifically refer to such operations and even though at the time of the execution of the deed or lease such operations were uncommon or even unknown. The deed or lease in authorizing exploration for and production of minerals cannot reasonably be said to limit the methods employed for the exploration and production to those known at the time of the execution of the instrument.

1 Patrick H. Martin & Bruce M. Kramer, Williams & Meyers Oil and Gas Law, § 218.5 (1998); see also Kuntz, supra, at 351 (the mineral lessee has the implied right to make geophysical explorations by seismographic tests, even over the lessor's protest, although the lease is silent regarding exploration and even though such methods were not known at the time the lease was granted).³

³These treatises each rely in part upon this court's opinion in Yates v. Gulf Oil Corp., 182 F.2d 286, 289 (5th Cir. 1950) (under a 1924 mineral lease, granted before the advent of seismographic geophysical testing and silent with respect to exploration, the lessee impliedly enjoyed the right to conduct seismic explorations over the landowner's objections). Yates concerned Texas law, but the opinion is instructive in the instant matter because it sheds light upon industry practice and custom. As the lease at issue in this litigation expressly conferred upon the lessee the exclusive right to conduct exploration for oil and gas and because seismographic geophysical testing had long been recognized as a common, if not prevalent, exploration method before the lease was granted, as assignee of the lease UPR enjoys the right to conduct

Commentators on Louisiana mineral law reach the same conclusion: a mineral lessee, by virtue of a lease granting the exclusive and unqualified right to explore the leased premises, has the right to engage in geophysical exploration of the leased property. See Luther T. McDougal, Louisiana Oil and Gas Law § 3.4 (1991)(citing 5 Howard R. Williams & Charles J. Meyer, Oil & Gas Law § 826.3 (1986) for the proposition that geophysical operations are but one example of the lessee's implied right under Louisiana law to use the surface of the leased premises to the extent "reasonably necessary" to explore for and drill oil and gas wells). Moreover, "[s]eismic exploration [and] geological studies . . . are [] things that prudent operators do to discover potentially productive mineral reservoirs under lands, and things that the [Louisiana] courts have recognized as being comprehended within the obligation to investigate the mineral potential of the property." Harrell, supra, at 405; see also Wadkins v. Wilson Oil Corp., 6 So.2d 720, 721 (La. 1942)(a mineral lease creates an "implied covenant that the lessee [will] develop the leased premises according to the recognized custom and progressive practices among operators in the field"); 5 Patrick H. Martin & Bruce M. Kramer, Williams & Meyers Oil and Gas Law § 861.3 (1998) (implied covenant to conduct operations with reasonable care and due diligence requires lessee to use modern production techniques) (citing Wadkins, 6 So.2d at 721).

Thus the industry usages and practices indicate that in

seismic explorations of the leased premises.

Louisiana and elsewhere an exclusive right of exploration lease clause generally is understood to include the right to conduct seismic operations. We have found no reported Louisiana court decision expressly holding that a mineral lessee (or assignee) with the exclusive and unqualified right to explore for oil and gas may, in the absence of a contrary contractual provision, conduct prudent and reasonable seismic operations on the leased premises. Nevertheless, we believe that the Louisiana Supreme Court would so hold if the question were squarely presented.

Several Louisiana cases contain assumptions, implicit holdings, or dictum to this effect. See, e.g., IP Timberlands Operating Co., Ltd. v. Denmiss Corp., 657 So.2d 282, 300 (La.App. 1st Cir. 1995) ("Under a mineral lease, the lessee is granted the right to explore and develop minerals either by seismic exploration or drilling operations without obtaining further permission from the mineral owners.") (holding that the surface lessee and timber owner lacked authority to grant seismic permits over lands the mineral rights of which were owned by another); Tinsley v. Seismic Explorations, Inc., 117 So.2d 897, 903 (La. 1960) (a mineral lessee was assumed to have exclusive seismic rights and but for the failure to prove damages could have recovered for geophysical trespass by a third party who acted with the land owner/lessor's consent).⁴ Significantly, a federal district court applying

⁴The court of appeal had held that, by virtue of the mineral lease, Tinsley, as lessee had a real right, the exclusive right to explore the leased premises for minerals, assertable in an action in tort for unauthorized seismic tests by a trespasser. See Tinsley v. Seismic Explorations, Inc. of Delaware, 111 So.2d 834,

Louisiana law has expressly held that a mineral lessee vested with the exclusive and unqualified right to explore for minerals enjoys the right to conduct seismic operations anywhere on the leased premises, even over the landowner's objections, so long as the landowner's rights are reasonably regarded and his use of the surface is not unduly disrupted. See Pennington v. Colonial Pipeline Co., 260 F.Supp. 643, 649 (E.D.La. 1966).

After considering the foregoing data, we conclude that the mineral lease in the present case granted the lessee the right to prudently conduct reasonable seismic operations as part of the exclusive and unqualified right to explore for oil and gas. Consequently, if UPR were to conduct a seismic survey on the leased premises as a reasonable and prudent operator, its actions would not constitute a trespass under Revised Statute 30:217 because the lease constitutes authorization and consent to such operations by the landowner.⁵ The district court interpreted this criminal

836-37 (La.App. Cir. 1959), rev'd on other grounds, 117 So.2d 897 (La. 1960). The precedential value of the court of appeal's decision is diminished, however, by the Supreme Court's resolution of the case.

⁵ In pertinent part, La.R.S. § 30:217 provides:
A.(1) No person shall conduct geological surveys for oil, gas, or other minerals by means of a torsion balance, seismograph explosions, mechanical device, or any other method whatsoever, on any land, unless he has obtained the consent of either the owner or the party or parties authorized to execute geological surveys, leases, or permits as provided in the Louisiana Mineral Code.
(2) "Owner" as used herein shall not include a person or legal entity with only a surface or subsurface leasehold interest in the property.
(3) Whoever violates this Subsection shall be fined not less than five hundred dollars nor more than five thousand dollars or imprisoned for not less than thirty days nor more than six months, or both.

trespass statute to require that a mineral explorer must obtain the mineral owner's express and specific consent to geophysical operations, not just consent to exploration for minerals, before conducting seismic operations. We do not believe the statute would be given this interpretation by the state courts. Under the Mineral Code as illumined by Louisiana jurisprudence and industry usages and practices, the right to conduct prudent, reasonable seismic operations is implied within the exclusive and unqualified right to explore the leased premises for oil and gas, unless the mineral lease or other contract provides otherwise. Thus the owner's grant of the exclusive right of exploration in accordance with the Mineral Code evidences both the grantee's right to conduct such seismic tests and the grantor's agreement or consent to such operations. Section 217 by its express terms requires a person conducting seismographs to obtain "consent of either the owner or the party or parties authorized to execute geological surveys, leases, or permits as provided in the Louisiana Mineral Code." La.R.S. § 217. Under Louisiana law, criminal statutes are strictly construed against the state. See, e.g., Gibbs Const. Co., Inc. v. Louisiana, 540 So.2d 268, 268-69 (La. 1989); Int'l Harvester Credit Corp. v. Seale, 518 So.2d 1039, 1041 (La. 1988). Strictly construed, § 217 does not criminalize the conduct of a seismic operator acting under the authority of a mineral lease granted by a mineral owner that vests the lessee with the exclusive and unqualified right to explore for and produce oil and gas. See

La.R.S. §§ 31:15, 31:114-148.

The district court, without extensive discussion, cited three Louisiana courts of appeal decisions as authority for its conclusion that the land owner's grant of the exclusive right to explore by a mineral lease does not include consent to conduct seismic operations: Jeanes v. G.F.S., 647 So.2d 533 (La.App. 3rd Cir. 1994); Ard v. Samedan Oil Corp., 483 So.2d 925 (La. 1986); and Lloyd v. Hunt Exploration, Inc., 430 So.2d 298 (La.App. 3rd Cir. 1983). Of these cases, only Jeanes involved the application of Revised Statute 30:217. More importantly, none of these cases involved seismic operations conducted by a mineral lessee or other person vested with the right to explore for minerals.

Musser Davis also argues that UPR's attempts to obtain a "seismic permit" demonstrate that the mineral lease alone does not confer the right to conduct seismic exploration. This contention is without merit. Even when a mineral lease vests in the lessee exclusive right to explore for minerals, under industry usage and practice the lessee usually obtains a "seismic permit" from the landowner as an added precaution against undue interference with the surface owner's use of the premises and as a matter of courtesy to inform the owner of the time, location, and method of seismic exploration to be conducted. In this regard, the permit is but a mechanism by which the mineral lessee can discharge its duty under Article 11 of the Louisiana Mineral Code to exercise its exploration rights with reasonable regard for the surface rights of the landowner. See La.R.S. § 31:11; Pennington, 260 F.Supp. at

649; McDougal, supra. This permit is also a convenient mechanism by which the lessee can prepay for incidental property damage caused by the seismic operation. UPR was obliged to repair such damages by the Mineral Code, see La.R.S. § 31:122 (the implied obligation as a prudent operator to restore the surface), and the mineral lease itself ("It is specifically understood, however, that the Lessee shall be responsible for any damage done to Lessor's property as more fully set forth hereinafter."). In the context of this case, as assignee of the mineral lease with the exclusive and unqualified right to explore for oil and gas on the leased premises, UPR had the right to conduct seismic operations as an element of mineral exploration, and the "seismic permit" was not a legal prerequisite to such operations by UPR. See McDougal, supra; 42 Rocky Mtn. Min. Inst., supra, at §§ 16.04[1] and 16.04[3][g].

B. Ownership of Seismic Data

The district court's decision that Musser Davis owns the seismic data obtained by UPR was based directly upon its erroneous conclusion that UPR's seismic operations without additional express consent by Musser Davis would constitute geophysical trespass under § 217. The district court cited Layne Louisiana Co. v. Superior Oil Co., 26 So.2d 20 (La. 1946) in support of its decision. However, that case further illustrates that the district court's decision is not consistent with Louisiana legal principles. In Layne, the landowner owned a 2098 acre tract of land subject to an outstanding mineral servitude on 1363.5 acres of the tract. See id. at 21. A person with no right of exploration from either the

landowner or the mineral servitude owner unlawfully conducted seismic operations on the entire tract. See id. The court awarded the landowner damages only for trespass upon the 734.5 acres in which his mineral rights were intact and unburdened. See id. at 22. He was not allowed recovery for trespass upon the acreage burdened by the mineral servitude because the right to explore that acreage had been transferred with the grant of the servitude, and damage to his reversionary interest in those mineral acres was too speculative, especially since the mineral acres might never revert to the landowner if production were achieved. See id. at 24; see also Holcombe v. Superior Oil Co., 35 So.2d 457, 458 (La. 1948) (mineral servitude owners of 1163.5 of the 1363.5 acres to which Layne held only a reversionary mineral interest prevailed in their geophysical trespass action related to lands burdened by their mineral servitude, as their right to explore by virtue of their mineral servitude encompassed the right to conduct seismic operations).

That a mineral lessee or permittee ordinarily acquires a valuable exclusive property right in data derived from its geophysical survey has been confirmed by criminal and civil litigation involving the misappropriation and right to sell such data. See, e.g., Tidelands Royalty B Corp. v. Gulf Oil Corp., 804 F.2d 1344, 1351 (5th Cir. 1986) (exploration company that conducted geophysical survey on federal lands owned resulting confidential data and could sell it to lessee production company for fee and overriding royalties); U.S. v. Kent, 608 F.2d 542, 544-45 (5th Cir.

1989) (mail fraud indictment is sufficient where it alleges that defendants used mails to execute fraudulent scheme involving the theft and illegal use of confidential geophysical data of production company); Abbott v. U.S., 239 F.2d 310, 312-24 (5th Cir. 1956)(prosecution and conviction of defendant for theft of a production company's geological surveys and maps causing company's loss of valuable property interests).⁶

Accordingly, in the absence of a contrary provision in the oil and gas lease or other contract between the parties, we conclude that UPR would be entitled to the ownership of the seismic data it develops pursuant to its prudent and reasonable geophysical operations incidental to its exercise of the exclusive right to explore and produce oil and gas under the lease.

III. CONCLUSION

For the foregoing reasons, the district court judgment is REVERSED and the case is REMANDED for further proceedings consistent with this opinion.

⁶It is also telling that in a major mineral law treatise giving extensive treatment to the subject of "Reflections on Ownership, Protection and Transfer of Seismic Data," there is no mention of even the possibility that the mineral lessees or permittees collecting seismic data on lands owned by others do not acquire ownership of that data. See 37 Rocky Mtn. Min. L. Inst. § 14. Rather, that treatise expressly refers to permittees as "data owners." 37 Rocky Mtn. Min. L. Inst., supra, at § 14.01.