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INTERPRETATION OF "OTHER MINERALS" IN A GRANT OR RESERVATION OF A MINERAL INTEREST

When property owners wish to convey or reserve mineral interests in their property, they enumerate the specific minerals in the deed, lease, or other instrument. The phrase "and other minerals" commonly follows the list of specific minerals granted or reserved. Yet, often, the instrument neither defines nor specifies these "other minerals." The discovery of additional minerals on the property not anticipated by either the surface or mineral owners² can cause conflicts between the surface and mineral owners, often far removed in time from the original transaction, over whether the instrument's "other minerals" language grants or conveys a particular substance.

This Note examines the methods courts use to interpret the phrase "other minerals" in deeds, leases, and other instruments. The Note evaluates the extent to which the courts' "traditional formulations" and an approach recently articulated in *Moser v. United States Steel Corp.* forward two goals for settling mineral rights controversies: ensuring the stability and certainty of land titles and fairly accommodating the interests of the parties. This evaluation demonstrates that courts have encountered considerable difficulty in consistently and efficiently applying any of the traditional formulations. The number and variety of traditional formulations used, and the difficulty in applying them to new fact patterus, creates con-

¹ For example, the property owner may convey or reserve "oil, gas, and other minerals," "coal, oil, and other minerals," or a multitude of other potential combinations. See, e.g., McCombs v. Stephenson, 154 Ala. 109, 111, 44 So. 867, 868 (1907) ("all the coal, ores, and other minerals and metals"); Cain v. Neumann, 316 S.W.2d 915, 917 (Tex. Civ. App.—San Antonio 1958, no writ) ("all of the oil, gas, coal and other minerals"); Eldridge v. Edmondson, 252 S.W.2d 605, 606 (Tex. Civ. App.—Eastland 1952, writ ref'd n.r.e.) ("all oil, gas, casinghead gas and other minerals"); West Va. Dep't of Highways v. Farmer, 159 W. Va. 823, 824, 226 S.E.2d 717, 719 (1976) ("oil, gas and other minerals").

² Substances not recognized as minerals or as having any independent value may become valuable with the development of new technologies. In addition, new technology may enable production of a previously unrecoverable substance.

³ In this Note "traditional formulations" will refer to the six methods courts frequently employ when determining "other minerals" questions. These methods are the topic of section II.

⁴ 676 S.W.2d 99 (Tex. 1984). The court withdrew a previous opinion, 26 Tex. Sup. Ct. J. 427 (June 8, 1983), which was never officially reported.

⁵ See, e.g., Northern Pac. Ry. v. Soderberg, 188 U.S. 526, 530 (1903) ("The word 'mineral' is used in so many senses, dependent upon the context, that the ordinary definitions . . . throw but little light upon its signification in a given case.").

flict, confusion, and disarray within and among the jurisdictions.⁶ Conflict and confusion in the courts produce two undesirable results: uncertainty of land titles and inequitable treatment of the parties.

In Moser the Texas Supreme Court announced a new method that provides an efficient and consistent approach to the "other minerals" question. The Moser approach severs from the surface estate all minerals within the ordinary and natural meaning of the word⁷ and compensates the surface owner for damages to his estate resulting from extraction of a substance conveyed by an "other minerals" clause.⁸ The Note argues that this approach gives stability and certainty to land titles while respecting the interests of both parties. The Texas court's "other minerals" formulation will greatly assist other courts struggling with this question.⁹ Those courts should reject the problem-ridden traditional formulations and implement a new formulation modeled on the Moser approach.

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THE GOALS OF FORMULATIONS FOR DETERMINING UNSPECIFIED MINERALS

Two goals should guide courts when they seek to resolve disputes arising from an "other minerals" clause. First, courts should strive to ensure stability and certainty of land titles by adopting a generally applicable standard that does not require multiple factual determinations. Reducing the number of required, factual findings

⁶ See Emery, What Surface is Mineral and What Mineral is Surface, 12 Okla. L. Rev. 499, 501 (1959) ("While some of the decisions may be reconciled, many are apparently in irreconcilable conflict."); see also Mack Oil Co. v. Laurence, 389 P.2d 955, 958 (Okla. 1964) ("The diversity of views is impressive"); Beck v. Harvey, 196 Okla. 270, 272, 164 P.2d 399, 401 (Okla. 1944) ("Many of the cases cannot be reconciled"); Western Dev. Co. v. Nell, 4 Utah 2d 112, 115, 288 P.2d 452, 454 (1955) (noting "confusion in the authorities" over interpreting mineral grants and reservations); O. Matthews, Legal Pitfalls, Land Status and the Acquisition of Mineral Rights 177-79 (1981) ("No consistent policy exists in the state courts"); Note, The Surface-Mineral Dilemma: A Proposed Standard for Mississippi, 48 Miss. L.J. 852, 865 (1977) (calling approach to "other minerals" question "haphazard").

⁷ 676 S.W.2d at 102.

⁸ *Id*. at 103.

⁹ Texas courts often lead in the evolution of mineral law. Thus, Texas decisions on mineral law questions will likely influence other states dealing with similar questions. See Patterson, A Survey of Problems Associated With Ascertaining the Ownership of "Other Minerals," 25 Rocky Mtn. Min. L. Inst. 21, 21-13 (1979) ("Texas represents at least one state, among a relative few, that has attempted to promulgate a precise set of rules pertaining to interpretation of instruments involving the ownership of 'other minerals'. . . ."); Note, Moser v. United States Steel Corp.: Owners of "Other Minerals" Hit Pay Dirt as Texas Buries Acker-Reed Surface Destruction Test, 5 J. Energy L. & Pol'y 147, 147 (1983) ("Texas . . . has naturally been viewed as a leader in formulating laws governing the extraction and production of energy resources.").

increases stability because parties to subsequent disputes can more easily duplicate the process of determining the meaning of an "other minerals" clause. Stability and certainty of land titles also encourages the development of new mineral resources. ¹⁰ Increased stability benefits mineral owners who wish to proceed with development and surface owners hoping to sever the mineral rights from their property. Stability also makes each party more certain of the content and limits of his estate. Indeed, stability means that title readers, land and mineral owners, and other individuals need not resort to the judicial system to interpret mineral grants and reservations accurately.

Second, any "other minerals" formulation that courts adopt should fairly accommodate the interests of the parties. The courts must recognize the surface owner's interest in the value of his property and the mineral owner's interest in extracting substances from beneath the surface of the property. Courts should develop a formulation that prevents the forfeiture of either interest and strikes a balance between the benefits and costs to each owner from development or production of "other minerals."

II TRADITIONAL FORMULATIONS FOR DETERMINING UNSPECIFIED MINERALS

Courts use the traditional formulations to discern the intent of the parties when deciding whether an "other minerals" clause embraces a particular mineral not specified in the instrument.¹¹ The courts often struggle with these decisions because neither party may have considered the disposition of the substance at issue when he executed the grant or reservation.¹² In such cases, a court must de-

¹⁰ Kuntz, The Law Relating to Oil and Gas in Wyoming, 3 Wro. L.J. 107, 114 (1949) (certainty in land titles of utmost importance because of great expense of exploration, development, and production of minerals). Businessmen and developers are less likely to initiate costly mineral production projects if they cannot be sure of having clear title to a substance. Resorting to litigation to determine what a title encompasses is expensive and time-consuming.

¹¹ See 1 E. Kuntz, A Treatise on the Law of Oil and Gas § 13.3, at 300 (1962) ("general rule of construction that the court will seek the intention of the parties"); 1A W. Summers, The Law of Oil and Gas § 135, at 263 (1954) ("The word 'mineral' is not a definite term, and its meaning must necessarily depend upon the intent with which it is used.") (footnote omitted); Reeves, The Meaning of the Word "Minerals," 54 N.D.L. Rev. 419, 444 (1978) ("courts usually say that the purpose of construing an instrument is to give effect to the intention of the parties").

¹² Professor Kuntz criticized judicial efforts to determine the specific intent of the parties as to any particular unnamed substance:

The contradiction and conflict between the cases on the [other minerals] point arise from the very fact that the courts are seeking to give effect to an *intention* to include or exclude a *specific substance*, when, as a

termine "as best as it can, what the intention of the parties would have been had they thought about the matter."¹³ To settle the question, courts apply one of the traditional formulations and presume that their findings conform with the parties' intent.¹⁴

A. Ejusdem Generis

Courts may apply ejusdem generis¹⁵ to determine whether a disputed mineral falls within an "other minerals" clause when the agreement is ambiguous¹⁶ and does not indicate the parties' intent.

matter of fact, the parties had nothing specific in mind on the matter at all. It is submitted that an intention test is the proper one, but not as applied heretofore. The intention sought should be the *general intent* rather than any supposed but unexpressed *specific intent*, and, further, that general intent should be arrived at, not by defining and re-defining the terms used, but by considering the *purposes* of the grant or reservation in terms of manner of enjoyment intended in the ensuing interests.

Kuntz, supra note I0, at II2 (emphasis in original). This is the basis of the "manner of enjoyment" test discussed infra section III B.

Reeves, supra note 11, at 444.

One state, North Dakota, has limited judicial interpretation of mineral conveyances and reservations by statute. Under the North Dakota law a grant or reservation of minerals includes all minerals "except those specifically excluded by name;" however, gravel, clay, and scoria are not granted or reserved unless specifically included by name. N.D. Cent. Code §§ 47-10-24 to -25 (Supp. 1985).

Statutes in other states require compensation and special protection for the surface estate in the event of damage from mineral production. See, e.g., Colo. Rev. Stat. § 34-48-106 (1984) (when mineral and surface are severed, surface owner "may demand satisfactory security from the miner, and if it is refused, he may enjoin such miner from working until such security is given"); Okla. Stat. Ann. tit. 52, § 318.1 (West 1969 & Supp. 1985) (requiring evidence of financial responsibility in form of net worth statement, letter of credit, or bond, to establish ability to comply with requirements for plugging oil and gas wells). See generally Dycus, Legislative Clarification of the Correlative Rights of Surface and Mineral Owners, 33 Vand. L. Rev. 871, 897 (1980) (proposing a "Model Surface Rights Clarification Act"); Walker, The Evolving Dominance of the Surface Estate, 34 Inst. on Oil & Gas. L. & Tax'n 123, 133-37 (1983) (discussing statutes that reduce mineral estate dominance).

In some instances, especially where former government lands are involved, reference to legislative history may be necessary to determine what substances are included in mineral rights. See Watt v. Western Nuclear, Inc., 462 U.S. 36, 60 (1983) (holding gravel a mineral reserved under Stock-Raising Homestead Act).

15 The words "ejusdem generis" mean:

Of the same kind, class, or nature. In the construction of laws, wills, and other instruments, the "ejusdem generis rule" is, that where general words follow an enumeration of persons or things, by words of a particular and specific meaning, such general words are not to be construed in their widest extent, but are to be held as applying only to persons or things of the same general kind or class as those specifically mentioned.

BLACK'S LAW DICTIONARY 464 (5th ed. 1979).

Courts should apply the doctrine only to ambiguous instruments; an unambiguous instrument needs no aid in construction. See Cole v. McDonald, 236 Miss. 168, 187, 109 So. 2d 628, 637 (1959) (ejusdem generis not applicable where manifest intention of parties is evident); Anderson & Kerr Drilling Co. v. Bruhlmeyer, 134 Tex. 574, 582, 136 S.W.2d 800, 804-05 (1940) (ejusdem generis merely rule of construction to be used as "an aid to interpretation when . . . intention is not otherwise apparent"); Burdette v.

Ejusdem generis is a common rule of construction applied to all types of legal documents, including deeds, leases, and other instruments conveying or reserving mineral interests.¹⁷ If general language such as "other minerals" supplements an enumeration of specific minerals, the ejusdem generis rule interprets the phrase to refer only to substances with characteristics similar to the minerals specifically enumerated,¹⁸ thus limiting the scope of the "other minerals" clause.

Ejusdem generis is a problematic formulation because minerals may be similar in some characteristics and dissimilar in others. Courts must arbitrarily emphasize one characteristic over another to make a determination. In *Huie Hodge Lumber Co. v. Railroad Lands Co.*, ¹⁹ the court used ejusdem generis to interpret a reservation of "iron, coal, and other minerals." The court emphasized that because the enumerated minerals were solids, the grant could not include oil and gas. ²⁰ Other characteristics of the enumerated minerals that courts might emphasize in applying ejusdem generis include chemical composition, ²¹ method of production, ²² or the practical use of the enumerated minerals, such as use as an energy

Bruen, 118 W. Va. 624, 628-29, 191 S.E. 360, 361-62 (1937) (ejusdem generis cannot be invoked "where the language under consideration is clear and unambiguous as to what is intended"). *But see* Wulf v. Shultz, 211 Kan. 724, 508 P.2d 896 (1973) (ejusdem generis applied to concededly unambiguous instrument).

Oklahoma courts frequently and consistently apply ejusdem generis to cases determining mineral interests. See, e.g., Panhandle Coop. Royalty Co. v. Cunningham, 495 P.2d 108, 114 (Okla. 1971) (finding it unnecessary to use ejusdem generis, but noting that "[t]his rule of construction is a useful part of our law"); Vogel v. Cobb, 193 Okla. 64, 67, 141 P.2d 276, 280 (1943) (deed conveying "'oil, petroleum, gas, coal, asphalt and all other minerals'" did not include water); West v. Aetna Life Ins. Co., 536 P.2d 393, 397 (Okla. Ct. App. 1975) (holding copper, silver, gold, or other metallic minerals not included in "oil, gas and other minerals," and discussing Oklahoma's long adherence to ejusdem generis).

Other states have also applied ejusdem generis, although not as consistently as has Oklahoma. See Wulf v. Shultz, 211 Kan. 724, 508 P.2d 896 (1973); State Land Bd. v. State Dep't of Fish & Game, 17 Utah 2d 237, 408 P.2d 707 (1965); West Va. Dep't of Highways v. Farmer, 159 W. Va. 823, 226 S.E.2d 717 (1976); see also Bumpus v. United States, 325 F.2d 264, 266, 267 (10th Cir. 1963) (determining as matter of federal law and according to "the applicable principles of general law" that "other minerals" does not include gravel).

- ¹⁸ See, e.g., Wulf, 211 Kan. at 726, 731, 508 P.2d at 899, 902 (lease of "gas, petroleum, and other mineral substances" did not include coal, clay, gypsum, limestone, gravel, rock, dirt, and clay-like materials); Keller v. Ely, 192 Kan. 698, 699, 391 P.2d 132, 133 (1964) (reservation of "oil, gas, casing-head gas and other liquids semi-solid and solid minerals" held not to include gypsum); West, 536 P.2d at 397 ("oil, gas, and other minerals" held not to include copper, silver, gold, or other metallic minerals).
 - 19 151 La. 197, 91 So. 676 (1922).
 - ²⁰ Id. at 199, 91 So. at 677.

²¹ See Waugh v. Thompson Land & Coal Co., 103 W. Va. 567, 572, 137 S.E. 895, 897 (1927) ("oil and gas [are] hydrocarbons, and might be considered as minerals of like kind and character as coal"). See also Shell Oil Co. v. Dye, 135 F.2d 365, 368 (7th Cir. 1943) (rejecting ejusdem generis but noting that oil and coal are similar from chemical

resource.23

As a formulation for determining unspecified minerals, ejusdem generis fails to serve the two goals of "other minerals" determinations. First, the doctrine fosters uncertainty and instability in land titles. Title readers cannot predict with certainty which characteristic of the enumerated minerals a court will select to determine substances qualifying as "other minerals." Thus, ejusdem generis makes it "impossible to determine, with certainty, the extent of the estate reserved, or conveyed, from the face of the document."²⁴ Courts have expressed their frustration with attempting to draw from the enumerated minerals a single characteristic on which to base their determinations.²⁵ This difficulty has prompted some

standpoint); Christman v. Emineth, 212 N.W.2d 543, 549 (N.D. 1973) (same); Western Dev. Co. v. Nell, 4 Utah 2d 112, 117, 288 P.2d 452, 455 (1955) (same).

²² See, e.g., Federal Gas, Oil & Coal Co. v. Moore, 290 Ky. 284, 287-89, 161 S.W.2d 46, 48 (1941) (oil and gas included in "coal salt-water and minerals" because of common knowledge that oil is usually produced with or near salt water); Huie Hodge Lumber Co., 151 La. at 199, 91 So. at 677 (oil and gas not included in "iron, coal, and other minerals" because they require different method of production). Cf. Besing v. Ohio Valley Coal Co., 155 Ind. App. 527, 535, 293 N.E.2d 510, 514 (1973) ("other minerals" include substances "produced as a component or constituent of" enumerated minerals from same mine or well as enumerated minerals).

A number of courts, although not applying ejusdem generis themselves, have noted use as a relevant characteristic of the enumerated minerals to be considered in ejusdem generis analysis. See, e.g., Northern Natural Gas Co. v. Grounds, 441 F.2d 704, 713-14 (10th Cir. 1971) (noting argument that principal use of natural gas has been for fuel, but refusing to exclude helium from gas lease); Shell Oil Co., 135 F.2d at 368 (rejecting ejusdem generis and holding oil included in "coal and other minerals," but stating that oil and coal are both primarily used for fuel); Christman v. Emineth, 212 N.W.2d 543, 549 (N.D. 1973) (not applying ejusdem generis, but holding coal included in "oil, gas, and other minerals" and noting similarity between coal, oil, and gas as to use).

²⁴ Note, Ownership of Unspecified Minerals in Texas and Oklahoma After Reed v. Wylie II, 16 Tulsa L.J. 511, 521 (1981).

Other limits to ejusdem generis make the rule difficult to apply in certain situations. Courts have limited the doctrine to instruments enumerating more than one mineral on the basis that determining the character of "other minerals" requires an enumeration of several specified minerals. See, e.g., Shell Oil Co., 135 F.2d at 368 ("all the coal and other minerals" does not enumerate particular minerals from which general term "and other minerals" could draw its character). In addition, some courts have limited use of the doctrine where other provisions of the instrument, such as a provision for payment of royalties, explicitly include substances that application of ejusdem generis would exclude. In these cases the specific language of the instrument is controlling. E.g., MacMaster v. Onstad, 86 N.W.2d 36, 41-42 (N.D. 1957) (holding provision for payment of royalty on sulphur indicated sulphur included and stating that where ejusdem generis applied, classification must be broad enough to include all minerals specifically mentioned in lease).

25 See Shell Oil Co., 135 F.2d at 368 (criticizing application of ejusdem generis because "it is predicated upon a single physical characteristic to the exclusion of all others"); Western Dev. Co. v. Nell, 4 Utah 2d 112, 117, 288 P.2d 452, 455 (1955) (courts have rejected application of ejusdem generis because they are "unable to determine whether the classification of the minerals granted should be approached from the view of use, physical characteristics, or value"); see also Note, Beneath the Surface-Destruction

courts to dismiss ejusdem generis as an "unsafe guide" for the interpretation of "other minerals." ²⁶

Ejusdem generis also fails to meet the goal of fairness. It has the potential to damage the financial interests of the surface owner if a court rules that a near-surface mineral belongs to the mineral estate without providing special compensation to the surface owner for the damages to his estate. Likewise, the interests of the mineral owner are vulnerable because a court may rule that some substance generally considered a mineral is not included in the mineral estate. Thus, the mineral owner might lose a mineral that he could have reasonably anticipated as included in the "other minerals" he owned.

B. Destruction of the Surface Estate

When extracting a disputed mineral substance would destroy or substantially damage the surface estate, courts may apply the surface destruction test to exclude the substance from a grant or reservation of "other minerals."²⁷ The test excludes all substances that "must be removed by methods that will, in effect, consume or de-

Test: The Dialectic of Intention and Policy, 56 Tex. L. Rev. 99, 101 (1977) ("The difficulty with the rule is determining which characteristics of the substances specifically named are relevant for defining the general term").

²⁶ E.g., Luse v. Boatman, 217 S.W. 1096, 1099 (Tex. Civ. App.—Fort Worth 1919, writ ref'd). The court rejected ejusdem generis and interpreted a reservation of all the "coal and mineral[s]" to include oil and gas. *Id.* at 1096. The court refused to accept ejusdem generis because it was unable to select a single characteristic of the enumerated mineral, coal, to apply to the minerals at issue, oil and gas. *Id.* at 1099. The court explained that coal and oil are similar in value, use, and nature of origin, but dissimilar in form, as coal is solid and oil is liquid. *Id.*

The Texas courts have generally rejected the use of ejusdem generis to determine unspecified minerals, for the reasons stated in Luse. See Acker v. Guinn, 464 S.W.2d 384, 349-50 (Tex. 1971) (rejecting ejusdem generis and lower court's application of doctrine, but affirming on other grounds); Southland Royalty Co. v. Pan Am. Petroleum Corp., 378 S.W.2d 50, 54 (Tex. 1964) (reversing lower court application of ejusdem generis and stating that "the doctrine of ejusdem generis as applied to minerals has never been accepted in this state"). But see Fleming Found. v. Texaco, 337 S.W.2d 846, 851-52 (Tex. Civ. App.—Amarillo 1960, writ ref'd n.r.e.) (applying ejusdem generis and holding that reservation of "oil, gas, and other minerals" did not include subsurface water).

²⁷ See, e.g., Pariani v. State, 105 Cal. App. 3d 923, 933, 164 Cal. Rptr. 683, 688 (1980) (geothermal resources included in mineral reservation when development had "not significantly affected the beneficial use of the land surface"); Holloway Gravel Co. v. McKowen, 200 La. 917, 931, 9 So. 2d 228, 233 (1942) ("It would not be reasonable to construe the reservation of 'mineral, oil and gas rights' so as to embrace the right to exploit minerals which could not be removed from the land without destroying its surface for agricultural and grazing purposes."); Christensen v. Chromalloy Am. Corp., 99 Nev. 34, 37, 656 P.2d 844, 847 (1983) (title to minerals vests in surface owner unless mineral owner "can remove the minerals in question by methods of extraction which will not consume, deplete or destroy the surface estate"); West Va. Dep't of Highways v. Farmer, 226 S.E.2d 717, 719 (W. Va. 1976) (sand and gravel not included in "oil, gas, and other minerals" because their recovery would destroy the land's surface).

plete the surface estate"28 from the "other minerals." Widely applied in Texas,29 the test was criticized by commentators30 and was finally rejected in *Moser*.31

The surface destruction test fails to meet the two goals of lending stability and certainty to land titles and providing a fair accom-

Acker quoted and purported to follow the theory of Professor Kuntz, see supra notes 10, 12 and infra section 111 B. Under the Kuntz theory a grant or reservation of "other minerals" would effect a total severance of the minerals from the surface. The surface owner would then, according to Kuntz, receive compensation for damages to the surface. See Kuntz, supra note 10, at 113. The Acker court actually reached a result contrary to the Kuntz approach. Kuntz would not restrict ownership but would place restrictions only on the manner of taking the mineral by requiring compensation to the surface owner for "unreasonable injury." Id. Acker, on the other hand, restricted the ownership of the mineral by excluding specific substances that would cause surface destruction when extracted.

The Texas surface destruction test was refined in two subsequent cases. Reed v. Wylie, 554 S.W.2d 169 (Tex. 1977) (Reed I); Reed v. Wylie, 597 S.W.2d 743 (Tex. 1980) (Reed II). In Reed I the court explicitly reaffirmed Acker and held that the surface owner in an "other minerals" dispute must prove that, "as of the date of the instrument being construed, if the substance near the surface had been extracted, that extraction would necessarily have consumed or depleted the land surface." Reed I, 554 S.W.2d at 172. This created a requirement of proof that surface destructive methods were the only methods of removal available. The court also found that once an instrument had been interpreted to exclude a near-surface substance, that same substance was excluded at all depths. Id.

In Reed II, the court defined a near-surface mineral as one within 200 feet of the surface and overruled part of Reed I by requiring only that any reasonable method of removal, not the only method available, would cause surface destruction. Reed II, 597 S.W.2d at 747-48. Reed II also overruled the requirement that the methods of extraction used as of the date of the instrument determined the extent of surface destruction. Id. The test articulated in Reed II was that if a deposit lies near the surface the substance will not be granted or retained as a mineral if any reasonable method of production would destroy or deplete the surface. Id.

³⁰ See, e.g., Maxwell, The Meaning of "Minerals"—The Relationship of Interpretation and Surface Burden, 8 Tex. Tech. L. Rev. 255, 287 (1976) ("certainty and orderly development would be enhanced by the rejection of the Acker approach"); Reeves, supra note 11, at 435, 438 (Acker rule "contains enough mischief to provide employment for several generations of Texas real property and mineral lawyers"); Note, supra note 6, at 868 (calling Acker "springboard of confusion"). See also Reed I, 554 S.W.2d at 178 (Daniel, J., dissenting) (predicting majority approach would lead to "ownership uncertainties" and "inequities").

31 Moser v. United States Steel Corp., 676 S.W.2d 99, 101 (Tex. 1984) ("We now abandon...the *Acker* and *Reed* approach to determining ownership of 'other minerals'...."). See infra notes 101-07 and accompanying text.

Acker v. Guinn, 464 S.W.2d 348, 352 (Tex. 1971). As with the other traditional formulations, courts generally apply the surface destruction test when construing ambiguous instruments. *But see* Williford v. Spies, 530 S.W.2d 127, 131 (Tex. Civ. App.—Waco 1975, no writ) ("[T]he term 'other minerals' is not ambiguous," and, unless the instrument provides otherwise, "minerals that must be strip mined belong to the surface estate.").

Texas adopted the surface destruction test in Acker v. Guinn, 464 S.W.2d 348 (Tex. 1971). Prior to Acker, Texas followed an ordinary and natural meaning test, see infra section 11 F, to determine "other minerals," but considered surface destruction as a factor in deciding such questions. Heinatz v. Allen, 147 Tex. 512, 518-19, 217 S.W.2d 994, 998 (1949).

modation of the parties' interests. The test makes land titles uncertain because courts and other title interpreters must make numerous factual determinations to determine the unspecified minerals.³² Applying this analysis, courts must determine whether a particular substance rests near the surface and what methods of production were available to extract the substance at a certain date, either the date when the instrument was construed, or possibly when the instrument was executed.³³ Application of the test could require that title to a substance change ownership if development of a new method of production permitted the extraction of the substance without surface destruction. This "passage of title by technology" creates uncertainty by making land titles dependent upon constant technological advances in the field of mineral production.³⁴

The surface destruction test fails to meet the goal of fair accommodation of the interests of the parties by unjustly enriching the surface owner to the detriment of the mineral owner.³⁵ The parties to the original conveyance of "other minerals" may have expected to include in the mineral owner's estate substances objectively considered "minerals." However, courts excluding a substance from "other minerals" based on the surface destruction test award the surface owner title to a "mineral." Consequently, the surface owner may mine or develop the mineral even after conveying "other minerals" to the mineral owner. The test's emphasis on preventing destruction to the surface owner's estate thus yields added benefits to the surface owner, who may receive title to valuable minerals, and financial loss to the mineral owner, who cannot develop substances that he reasonably may have expected to come within his estate as "other minerals."

Moser, 676 S.W.2d at 101. See also Reed II, 597 S.W.2d at 750 (Spears, J., concurring) (noting fact issues that must be resolved under surface destruction test and stating need for new rule that would be fair and lend stability to land titles); Note, supra note 25, at 108 ("That it creates undue uncertainty of mineral titles is the most common attack on the surface-destruction test.").

³³ See the discussion of the evolution of the surface destruction test in Texas, supra note 29.

³⁴ Patton, Recent Changes in the Correlative Rights of Surface and Mineral Owners, 18 ROCKY MTN. MIN. L. INST. 19, 25-26 (1973) (articulating how passage of title by technology could occur and stating that concept "could lead to premature grayness in a title examiner").

³⁵ See Note, Surface or Mineral: A Single Test?, 23 BAYLOR L. Rev. 407, 416 (1971) ("The surface should be compensated or in some way protected, but it should not reap an increment in value merely because the destruction of the surface would result if the substance were extracted by presently known methods."); Comment, Is Coal Included in a Grant or Reservation of "Oil, Gas, or Other Minerals"?, 30 Sw. L.J. 481, 500 (1976) ("As a result of an enthusiasm to protect the surface estate from any damage, the court has conferred upon the surface owner a valuable mineral deposit and left the mineral owner with nothing.").

C. Common Recognition as a Mineral in the Locale

Another approach available to courts interpreting an ambiguous instrument containing an "other minerals" clause is to consider whether the substance at issue was commonly recognized as a mineral in the area at the time of the instrument's execution.³⁶ This "rule of contemporaneous construction" is often called the "Strohacker doctrine," after the Arkansas case of Missouri Pacific Railroad v. Strohacker.³⁷

In Strohacker the court found that the phrase "all coal and mineral deposits" did not reserve title to oil and gas because at the time of the deed's execution those substances were not commonly recognized in the area as minerals³⁸ and "were not given the slightest commercial consideration in connection with land values."³⁹ The "other minerals" clause could have included oil and gas only "[i]f the reservations had been made at a time when oil and gas production, or exploration, were general, and legal or commercial usage had assumed them to be within the term 'minerals." "⁴⁰ Arkansas courts frequently invoke the Strohacker approach to determine "other minerals" questions.⁴¹

The Strohacker doctrine fails to meet either goal of formulations to determine "other minerals." The test fails to provide stability and certainty in land titles because, like the surface destruction test, 42 the Stohacker approach requires special factual inquiries that may vary among cases. A court or title examiner attempting to interpret an "other minerals" clause under this test must resort to his-

³⁶ See cases cited infra note 41 (Arkansas Supreme Court's approach); see also Western Coal & Mining Co. v. Middleton, 362 F.2d 48, 52 (8th Cir. 1966) (affirming finding from exhibits that common or commercial usage of "other minerals" in Sebastian County, Arkansas, in 1904 did not include oil and gas); Singleton v. Missouri Pac. R.R., 205 F. Supp. 113, 115-17 (E.D. Ark. 1962) (reservation of "all minerals" included oil and gas in deed conveying land in area in which oil and gas activity was present prior to execution of deed); Huie Hodge Lumber Co. v. Railroad Lands Co., 151 La. 197, 199, 91 So. 676, 677 (1922) ("we should consider the conditions and circumstances surrounding the parties at the time"); Deer Lake Co. v. Michigan Land & Iron Co., 89 Mich. 180, 186, 50 N.W. 807, 809 (1891) ("they could have only meant . . . mines and ores of metals and minerals in common use, and commonly known as such").

^{37 202} Ark. 645, 152 S.W.2d 557 (1941).

³⁸ *Id.* at 656, 152 S.W.2d at 563.

³⁹ Id

⁴⁰ Id. at 650-51, 152 S.W.2d at 561.

⁴¹ See, e.g., Ahne v. Reinhart & Donovan Co., 240 Ark. 691, 695, 401 S.W.2d 565, 568 (1966) (finding deed conveying "coal, oil and mineral" to include gas where gas was commonly recognized mineral in area at time of deed execution); Stegall v. Bugh, 228 Ark. 632, 633-34, 310 S.W.2d 251, 252-53 (1958) (reservation of "mineral interest in said lands" did not include oil and gas because in 1900 oil and gas were not considered "minerals" in area); Brizzolara v. Powell, 214 Ark. 870, 873, 218 S.W.2d 728, 729 (1949) (Strohacker "has become a rule of property").

⁴² See supra section II B.

torical resources and other research material to determine whether the substance at issue was generally recognized as a mineral in the area at the time of the original instrument. This approach unduly burdens courts by requiring them to determine the dates on which individual substances became generally recognized as minerals43 in individual geographic areas.44

Moreover, refusing to include an undiscovered or unknown mineral in a grant or reservation fails to accommodate fairly the parties' interests. For example, in Stegall v. Bugh45 the court excluded oil and gas from a reservation despite evidence that traces of oil had appeared on freshwater springs on or near the property in question. In addition, the grantor had apparently reserved the mineral interest with oil and gas specifically in mind.46 This application of the Strohacker rule gave the surface owner a windfall in the form of oil and gas rights and disregarded the parties' interests in the use of their respective estates.47 Some courts have expressed dissatisfaction with the assertion that absence of local development of a mineral is sufficient to exclude it from an instrument with an "other minerals" clause.48 These courts argue that "the mere fact that a particular mineral had not been discovered in that vicinity would

Furthermore, even a court decision about when a certain substance was generally recognized as a mineral may not improve stability. Historical information is always subject to change because of the possible revelation of other historical data, which may cast uncertainty on the durability of court decisions.

A dissenter in several of the most recent Arkansas Supreme Court cases following Strohacker argued that the court, in following Strohacker, was proceeding on a countyby-county basis to determine when oil and gas became recognized as minerals. The dissenter proposed that the court should declare that by January 1, 1900, oil was generally considered and understood to be a mineral. Ahne v. Reinhart & Donovan Co., 240 Ark. 691, 700, 401 S.W.2d 565, 570 (1966) (McFaddin, J., concurring in part and dissenting in part); Stegall v. Bugh, 228 Ark. 632, 636, 310 S.W.2d 251, 254 (1958) (Mc-Faddin, J., dissenting).

²²⁸ Ark. 632, 310 S.W.2d 251 (1958).

Id. at 633, 637, 310 S.W.2d at 252, 254. The grantor recognized oil as a mineral, discussed with other persons the possibility of oil and gas production in the area, and told the grantee that he wanted to reserve the oil. He also put forth extra effort in finding someone to draft the mineral reservation. Id.

Relying on a federal court interpretation of the Strohacker approach, Thomas v. Markham & Brown, Inc., 353 F. Supp. 498, 501 (E.D. Ark. 1973), the Arkansas court has ruled that a substance will not necessarily constitute a mineral even though its presence, value, and uses are well known. Southern Title Ins. Co. v. Oller, 268 Ark. 300, 303, 595 S.W.2d 681, 683 (1980) ("the fact that it is well known that a valuable substance is in or on the ground does not necessarily make the substance a 'mineral' within a mineral grant or reservation").

See, e.g., Maynard v. McHenry, 271 Ky. 642, 645, 113 S.W.2d 13, 14 (1938) ("mere fact that a particular mineral has not been discovered in the vicinity of the land conveyed or is unknown at the time the deed is executed" does not prevent mineral from being included in deed); see also Reeves, supra note 11, at 457-59 & n.269 (citing cases).

not preclude the granting of rights to such a mineral."49

D. Knowledge of the Parties as to the Presence of a Mineral

Some courts look to the knowledge of the parties with respect to the substance at issue when deciding "other minerals" questions. These courts will exclude from a grant or reservation of "other minerals" substances that the parties did not know existed. Then a substance does not come within "other minerals," title to that substance either remains with the surface owner, in the case of a conveyance of the mineral rights, or passes to the new surface owner, in the case of a sale of the surface subject to a reservation of mineral rights. This narrow approach focuses on the subjective intent of the parties, instead of the objective historical factors considered under the *Strohacker* rule. When applying the approach, courts must investigate the parties' specific thoughts, not by implication as with the other traditional formulations, but by direct inquiry into their knowledge at the time they granted, reserved, or conveyed a mineral interest.

Relying on the knowledge of the parties, however, does not fulfill the goal of title certainty. The test has utility only if neither party possesses any knowledge of the substance at issue and that lack of knowledge is readily discernible. In those cases the lack of knowledge easily allows a court to exclude the substance from the grant or reservation. The test, however, does not apply with similar ease to most other situations. In a jurisdiction following this formulation, courts and title interpreters must inquire into the parties' thoughts and expectations at the time of the instrument's execution. Arbitrary judgments may occur where parties suspected the presence of a mineral but possessed no definite knowledge of it. Furthermore,

⁴⁹ Western Dev. Co. v. Nell, 4 Utah 2d 112, 116-17, 288 P.2d 452, 455 (1955).

⁵⁰ See McKinney's Heirs v. Central Ky. Natural Gas Co., 134 Ky. 239, 120 S.W. 314 (1909) (natural gas not included in mineral grant where court found no intent to include it); Kinder v. LaSalle County Carbon Coal Co., 310 Ill. 126, 141 N.E. 537 (1923) (grantor of mineral rights did not intend to convey limestone where conveyance would destroy his surface estates); Detlor v. Holland, 57 Ohio St. 492, 502, 49 N.E. 690, 692 (1898) (oil not included in "other valuable minerals" where neither party knew of its existence); Dunham & Shortt v. Kirkpatrick, 101 Pa. 36 (1882) (oil not included in instrument where parties did not intend to include it and probably did not know of its existence).

⁵¹ See, e.g., McKinney's Heirs, 134 Ky. at 248, 120 S.W. at 317; Detlor, 57 Ohio St. at 502, 49 N.E. at 692.

The Strohacker approach could be categorized as a branch of the "knowledge of the parties" method. Courts using Strohacker simply impute knowledge to the parties upon a finding of mineral development in the locale based on historical evidence. The courts rejecting the Strohacker approach and taking a more literal reading of "other minerals" would also reject dependence on the actual knowledge of the parties. See cases cited supra notes 48-49.

the test does not easily apply where one party knew of the existence of a mineral but the other party had absolutely no knowledge. In such cases, the parties have no unanimity of intent,⁵³ and courts cannot reasonably interpret the "other minerals" language by relying on the parties' unequal knowledge.

This formulation also fails to fulfill the goal of fairly accommodating the interests of the parties. When the surface owner has conveyed "other minerals," the knowledge of the parties formulation restrains the mineral owner from developing an unspecified mineral unless the mineral owner and the surface owner knew of the mineral's existence. Otherwise, the surface owner will retain the rights to the mineral which he may then develop or sell. Additionally, in cases where the mineral owner, as a grantee, knew of a mineral and the surface owner, as grantor, had no such knowledge, a court attempting to apply the test would likely exclude the mineral from "other minerals" because the parties lacked unanimity of knowledge. The surface owner, retaining title to the mineral, would be enriched, and the mineral owner would suffer a loss to the extent that he could not develop a mineral that he had knowledge of when he obtained the mineral interest. The net benefits under this test would generally accrue to surface owners, who would have title to all unknown minerals discovered subsequent to a mineral grant or reservation. Mineral owners could only protect their interests in future discoveries by having the instruments drafted to include "other minerals, known and unknown" or by disclosing their knowledge of a substance to the surface owner, with the result that the surface owner would then demand a greater price for a mineral interest.

E. Circumstances Surrounding the Mineral Grant or Reservation

Some courts take a broad view of the general circumstances surrounding the agreement. These courts adopt a less restrictive approach than *Strohacker*, which admits extrinsic evidence only as to the general recognition of a substance at the date of the instrument. In determining "other minerals" questions these courts take into account extrinsic circumstances such as the business positions or other relationships of the parties,⁵⁴ any existing production or de-

⁵³ See McKinney's Heirs, 134 Ky. at 242, 120 S.W. at 315 ("But the question to be determined is: What was the intention of the parties to the deeds at the times they were made? . . . Did the one understand that he was conveying, and the other that he was purchasing, the gas thereunder?").

⁵⁴ See Besing v. Ohio Valley Coal Co., 155 Ind. App. 527, 532-33, 293 N.E.2d 510, 513 (1973) (coal not included in "oil, gas and other minerals" when party engaged in oil business did not deal with coal); Hans v. Great Bend Brick & Tile Co., 172 Kan. 478, 483, 241 P.2d 475, 478 (1952) (noting that "relative positions of the parties interested"

velopment on the property at issue,⁵⁵ and the general "preoccupation" of the parties with a particular substance.⁵⁶

Considering extrinsic evidence of circumstances surrounding the execution of an instrument fails to promote title stability and certainty or accommodate the interests of the parties. The test contributes to title instability and uncertainty because title readers can never predict with certainty, or interpret with confidence, the factors a court will select for examination.⁵⁷ Furthermore, interpretation in the courts is difficult. For example, courts that consider the business of the parties as a factor might have to determine what percentage of a business is sufficiently significant to affect an interpretation of "other minerals." Difficult fact determinations render the parties and other title readers unable to predict a court's conclusion.

The consideration of evidence of surrounding circumstances causes unfairness in accommodating the interests of the parties when a court considers circumstances that the parties never intended to affect their relationship. For example, when courts rely on evidence of the parties' principal business activity, a coal producer who obtained "other minerals" with the undisclosed intent of moving into the oil and gas business could lose that portion of his mineral interest. Similarly, the surrounding circumstances test could also disadvantage the surface owner. Because the courts alone choose the circumstances and assess their importance, a court could include a mineral that the parties had not intended to convey or reserve. If removal of that mineral caused surface destruction, the surface owner would suffer an unanticipated loss.

In applying the surrounding circumstances test, some courts also will examine the instrument in its entirety by looking beyond

should be taken into account; both were dealing with oil and gas, so clay deposits not included); Witherspoon v. Campbell, 219 Miss. 640, 646, 69 So. 2d 384, 386 (1954) (stating that consideration must be given to situation of parties and their businesses and noting that gravel did not constitute "other mineral" because grantor had no use for gravel at time of conveyance); see also Reeves, supra note 11, at 457.

⁵⁵ See Wulf v. Shultz, 211 Kan. 724, 726-28, 508 P.2d 896, 899-900 (1973) (noting that active oil and gas wells stood on property at date of lease of "natural gas, petroleum, and other mineral substances," and finding coal, clay, limestone, gravel, and other material not included).

⁵⁶ See Besing, 155 Ind. App. at 533, 293 N.E.2d at 513 ("the parties to the conveyance were preoccupied with oil and gas"); Wulf, 211 Kan. at 727, 508 P.2d at 900 ("the entire lease is couched in terms of oil and gas, those substances dominating the attention of the parties"); Patterson v. Wilcox, 11 Utah 2d 264, 265-266, 358 P.2d 88, 90 (1961) (holding grant of "all mineral rights" limited to uranium-like ores where area involved was one of "intense activity in staking claims and searching for [uranium]" and negotiations over transaction involved "nothing but uranium potentials").

⁵⁷ Moser v. United States Steel Corp., 676 S.W.2d 99, 101 (Tex. 1984) (title uncertainty occurs when ownership of minerals cannot be determined from grant or reservation alone).

the provisions of the mineral grant or reservation. These courts will consider matters such as the form or title of the instrument,⁵⁸ specific provisions of the instrument regarding royalties or existing development on the land,⁵⁹ and the general purpose or subject matter of the agreement.⁶⁰ The consideration of other circumstances within the agreement itself is a more reliable means of deciding the "other minerals" question. However, it still requires a title reader to examine the terms of the instrument beyond the mineral grant or reservation itself and to predict a judicial interpretation of those terms. For maximum stability and certainty of titles and fairness to the parties' interests, a reading of the provisions of the mineral grant or reservation should suffice to determine the ownership of unspecified minerals.

F. Ordinary and Natural Meaning

The ordinary and natural meaning formulation examines only whether the substance at issue constitutes a mineral. If the substance is a mineral, it automatically comes within an "other minerals" clause.⁶¹ Courts applying the test must determine whether knowledgeable individuals ordinarily and naturally consider the substance a mineral according to common recognition or general understanding.⁶² The other traditional formulations differ from the

⁵⁸ See Wulf, 211 Kan. at 727, 508 P.2d at 900 (noting importance of fact that original parties to lease designated it an "oil and gas lease").

⁵⁹ See id. at 729, 508 P.2d at 900-01 (discussing portion of instrument at issue that permitted party to remove "buildings, machinery, pipelines, casing and tubing" and stating that these items were commonly found on oil and gas operations but were not used for removal of other mineral substances); MacMaster v. Onstad, 86 N.W.2d 36, 41 (N.D. 1957) (provision in instrument for payment of royalty on sulphur indicated that this substance was to be included in "all other minerals"); Patterson v. Wilcox, 11 Utah 2d 264, 266, 358 P.2d 88, 90 (1961) (oil and gas excluded where instrument was typical of those for uranium production and provided for work methods and royalty payment typical to ore mining).

⁶⁰ See Davis v. Plunkett, 187 Kan. 121, 124, 353 P.2d 514, 516 (1960) (oil and gas excluded where "primary object" and "subject matter" of instrument were volcanic ash and gypsum); Hans v. Great Bend Brick & Tile Co., 172 Kan. 478, 483, 241 P.2d 475, 478 (1952) ("the substance of the transaction which the instrument embodies must be taken into account"); Dawson v. Meike, 508 P.2d 15, 18 (Wyo. 1973) ("court should consider not only the terms of the writing but also the surrounding circumstances").

The ordinary and natural meaning approach applies to instruments that are unambiguous in the sense that they embrace all "minerals," specified or otherwise. Thus, the ordinary and natural meaning test only determines what substances are considered "minerals." See Schreier v. Chicago & N.W. Ry., 96 Ill. App. 2d 425, 431-32, 239 N.E.2d 281, 284 (1968) (because terms in deed followed settled legal meaning, court could not construe them otherwise through resort to extrinsic evidence); Maynard v. McHenry, 271 Ky. 642, 644, 113 S.W.2d 13, 14 (1938) ("The deed is not so ambiguous as to authorize resort to extrinsic evidence as an aid to its construction."); Heinatz v. Allen, 147 Tex. 512, 514, 217 S.W.2d 994, 995 (1949) ("intention . . . is to be ascertained without aid from evidence as to the attending circumstance").

⁶² See Farrell v. Sayre, 129 Colo. 368, 373, 270 P.2d 190, 193 (1954) (" 'the true test

ordinary and natural meaning approach by assuming that the substance at issue is a mineral, and then shifting the focus to whether the substance comes within the "other minerals" clause.

Some courts have attempted to clarify the interpretation of the phrase "ordinary and natural meaning." In *Heinatz v. Allen*, ⁶³ a Texas court stated that a substance would not constitute a mineral within the ordinary and natural meaning unless it was "rare and exceptional in character or possess[ed] a peculiar property giving [it] special value." According to the court, sand valuable for making glass or limestone suitable for manufacture into cement would suffice as minerals, but substances "useful only for building and road-making purposes, are not regarded as minerals in the ordinary and generally accepted meaning of the word." Other courts applying an ordinary and natural meaning test have stated it variously as "usual and ordinary sense," plain and ordinary meaning," and "ordinary popular sense."

The ordinary and natural meaning test facilitates stability of land titles.⁶⁹ Unlike the other traditional formulations, the ordinary and natural meaning approach requires few factual determinations.⁷⁰ The approach demands only that the title reader interpret an instrument according to the ordinary understanding that attaches

is what ["mineral"] means in the vernacular of the mining world, the commercial world and landowners at the time of the grant, and whether the particular substance was so regarded as a mineral" (quoting Waring v. Foden, [1932] 1 Ch. 276, 294); Mack Oil Co. v. Laurence, 389 P.2d 955, 961 (Okla. 1964) ("determination . . . must turn upon what the word . . . ordinarily is understood to mean in the meaning and intention (vernacular) of the particular industry, the commercial world and the landowners").

Courts use the ordinary and natural meaning test to limit the broader scientific and technical definitions of substances as minerals. See, e.g., Farrell v. Sayre, 129 Colo. 368, 270 P.2d 190 (1954); Heinatz v. Allen, 147 Tex. 512, 217 S.W.2d 994 (1949); Puget Mill Co. v. Duecy, 1 Wash. 2d 421, 96 P.2d 571 (1939). The scientific or geological definition would include many substances that the parties likely did not intend to convey. One court noted that "the scientific or technical definition of minerals is so broad as to embrace not only metallic minerals, oil, gas, stone, sand, gravel and many other substances, but even the soil itself [I]t is rare, if ever, that mineral is intended in the scientific or geological sense in the ordinary trading transactions about which deeds and contracts are made." Heinatz, 147 Tex. at 517, 217 S.W.2d at 997. Cf. New Mexico & Ariz. Land Co. v. Elkins, 137 F. Supp. 767, 771 (D.N.M.), appeal dismissed, 239 F.2d 645 (10th Cir. 1956) (arguably combining scientific definition and ordinary meaning into single test).

⁵³ 147 Tex. 512, 217 S.W.2d 994 (1949).

⁶⁴ Id. at 518, 217 S.W.2d at 997. The court excluded limestone from the testamentary conveyance, finding that it was not a mineral because it had value only for building purposes. Id.

⁶⁵ Id.

⁶⁶ Lambert v. Pritchett, 284 S.W.2d 90, 91 (Ky. 1955).

⁶⁷ Burdette v. Bruen, 118 W. Va. 624, 628, 191 S.E. 360, 361 (1937).

⁶⁸ Silver v. Bush, 213 Pa. 195, 198, 62 A. 832, 833 (1906).

⁶⁹ See Patterson, supra note 9, at 21-34 (noting enhancement of title stability with strict ordinary and natural meaning approach).

⁷⁰ See supra text accompanying notes 19-23, 32-33, 42-44, 52-53, 57.

to a certain substance.⁷¹ More efficient and consistent determinations of land titles result because the courts' factual determinations remain more reliable over time.⁷² Once a substance is held to be a mineral, it will remain so. As new substances are discovered or become valuable, individual title readers will be able to ascertain whether they are generally considered minerals, and eventually courts will make the determinations for all substances in dispute.

The consequences of the ordinary and natural meaning formulation, however, may fall too harshly on the surface owner. The discovery of some substance that becomes popularly recognized as a mineral⁷³ and must be removed by surface destructive means could leave the landowner with surface damage he had never anticipated. Land sales subject to mineral reservations may not account for the cost of potential surface damage from future discovery of substances that become recognized as minerals. Similarly, the landowner who sells his mineral rights cannot calculate the value of an unknown mineral, or the damage to his surface estate from that mineral's extraction. In each case the surface owner suffers a financial disadvantage which accrues to the benefit of the mineral owner. The surface owner may, of course, bring an action for damages,⁷⁴ but the inconvenience and expense of suing may cause him to forfeit his rights. Thus, courts adopting an ordinary and natural meaning test should

Although the courts must determine whether individual substances come within the ordinary and natural meaning of "minerals," their determinations are not in the nature of the factual inquiries based on historical data, expert testimony, inquiries into a party's knowledge or intent, and other evidence required by the traditional formulations. A court applying the ordinary and natural meaning test need only discern the general understanding that persons in a given area have toward the substance.

A judicial determination that a substance constitutes a mineral within the term's ordinary and natural meaning gives greater stability to titles because courts need make such a determination only once. In contrast, determinations under the other traditional formulations may need revision as technology develops or other circumstances are changed. Furthermore, because an ordinary and natural meaning determination simply gauges the general attitude or sense toward a substance, the results of court decisions applying the test should prove more predictable. In most cases little controversy will surround the determination of whether a substance is a mineral. The ordinary sense that exists toward a certain substance may, of course, change over time, but the change would not be abrupt and should be apparent to observers. This ability to anticipate change would maintain title stability. Stability will allow parties to act with greater confidence concerning substances not yet subject to formal judicial evaluation.

⁷² See supra note 71.

⁷³ For example, in New Mexico & Ariz. Land Co. v. Elkins, 137 F. Supp. 767 (D.N.M.), appeal dismissed, 239 F.2d 645 (10th Cir. 1956), the court decided that uranium, first discovered in the area in 1950, was included in a 1946 deed reserving "minerals." *Id.* at 768, 773. Prior to the uranium discovery, the substance "had no commercial value in that locality" and was "not known to exist in that part of New Mexico." *Id.* at 769.

⁷⁴ See id. at 773 (holding uranium included in "oil, gas and minerals," but "reserving to the defendants... their... causes of action against the plaintiffs for any damages resulting to their estate as now delineated, from any activities of the plaintiffs in connection with the exploration and mining of minerals").

realize that although the approach lends stability to land titles, it does not fairly accommodate the interests of the parties.⁷⁵

III

THE Moser Approach to Determining Unspecified Minerals

In Moser v. United States Steel Corp. 76 the Texas Supreme Court refused to apply the surface destruction test that it had carefully developed since 1971. 77 Instead, the court adopted a new test patterned closely after the "manner of enjoyment" formulation advanced by Professor Kuntz. 78 The court's variation on the Kuntz test satisfies the two goals of a formulation to determine "other minerals" questions: title stability and fairness.

A. Background

Prior to *Moser*, Texas courts determined "other minerals" questions by applying the surface destruction test first advanced by the Texas Supreme Court in *Acker v. Guinn.*⁷⁹ In *Acker*, the court stated that "a grant or reservation of 'minerals' or 'mineral rights' should not be construed to include a substance that must be removed by methods that will, in effect, consume or deplete the surface estate." Thus, prior to *Moser*, Texas courts refused to include in an "other minerals" clause a substance that by any reasonable method of production would destroy or deplete the surface.⁸¹

The dispute in *Moser* concerned whether a reservation of "oil, gas and other minerals" included uranium.⁸² The plaintiff surface

⁷⁵ Commentators have criticized the ordinary and natural meaning approach for its harshness to the interests of surface owners. Patterson, supra note 9, at 21-34 ("The result in the Elkins case may seem harsh..."); Note, Real Property: Construction of Deeds: Reservation of "Oil, Gas, and Minerals" Includes Uranium Ores, 3 U.C.L.A. L. Rev. 613, 615 (1956) (commenting that Elkins "arrives at a harsh result and one which the transaction, taken as a whole, shows could not have been intended").

On the other hand, because it avoids scientific or geological definitions, see supra note 62, the approach may benefit surface owners by excluding substances associated with the land's surface, such as sand, gravel, and water.

⁷⁶ 676 S.W.2d 99 (Tex. 1984).

⁷⁷ See supra note 29. The court, however, did not abandon the surface destruction test for all purposes. See infra notes 102, 107 and accompanying text.

⁷⁸ See infra section III B.

^{79 464} S.W.2d 348 (Tex. 1971). See supra notes 29-31 and accompanying text.

^{80 464} S.W.2d at 352. See supra section II B.

⁸¹ Reed v. Wylie, 597 S.W.2d 743 (Tex. 1980) (Reed II). See supra note 29.

⁸² Moser, 676 S.W.2d at 100. The 1949 deed at issue in Moser reserved "all of the oil, gas, and other minerals of every kind and character, in, on, under and that may be produced from said tract of land, together with all necessary and convenient easements for the purpose of exploring for, mining, drilling, producing and transporting oil, gas or any of said minerals."

owners sued the mineral owners to establish ownership of the uranium. At trial, the court found that because extracting the uranium would cause no substantial surface destruction, the uranium came within the confines of the mineral estate.⁸³ An intermediate appellate court affirmed the decision of the trial court.⁸⁴ The Texas Supreme Court could have affirmed the lower courts' applications of the surface destruction test based on existing law. Instead, however, the court reexamined the test and the *Acker* court's adoption of the reasoning of Professor Kuntz's "manner of enjoyment" test⁸⁵ and forged a new formulation for interpreting "other minerals" clauses.⁸⁶

B. The Manner of Enjoyment Formulation

In an article discussing the problem of interpreting "minerals" in deed clauses,⁸⁷ Professor Eugene Kuntz advanced a formulation, sometimes termed the "manner of enjoyment" test,⁸⁸ for the developing mineral law of Wyoming. This approach enhances stability and certainty of land titles and fairly accommodates the interests of the parties.

Professor Kuntz asserted that the manner by which courts deciding "other minerals" questions purported to arrive at the intent of the parties was "completely unsatisfactory [as] demonstrated by the variety of results which flow from it" and "completely without value for use in the future in determining the character of substances which remain unknown or are presently considered to have no intrinsic value." He proposed an approach that searched for the general intent of the parties rather than any specific intent as to particular minerals. Courts would determine general intent "by considering the purposes of the grant or reservation in terms of manner of enjoyment intended in the ensuing interests." According to Kuntz, "[t]he manner of enjoyment of the mineral estate is through extraction of valuable substances, and the enjoyment of the surface is through retention of such substances as are necessary for the use

Id.

⁸³ Id

⁸⁴ Moser v. United States Steel Corp., 601 S.W.2d 731 (Tex. Civ. App.—Eastland 1980), aff d, 676 S.W.2d 99 (Tex. 1984).

⁸⁵ Acker v. Guinn, 464 S.W.2d 348, 352 (Tex. 1971) (quoting Kuntz test and stating that it is "entirely sound"). See supra note 29.

⁸⁶ See infra section III C.

⁸⁷ Kuntz, supra note 10.

⁸⁸ Note, supra note 6, at 869.

⁸⁹ Kuntz, supra note 10, at 112.

^{90 14}

⁹¹ See supra note 12.

⁹² Kuntz, supra note 10, at 112 (emphasis in original).

of the surface."93

Application of the Kuntz approach results in severing the entire mineral estate from the surface estate where a general grant or reservation of minerals lacks qualifying language. This approach, put into practice, would "sever from the surface all substances presently valuable in themselves, apart from the soil, whether their presence is known or not, and all substances which become valuable through development of the arts and sciences." Kuntz limited the approach, however, by requiring that only substances removable without unreasonable damage to the enjoyment of the surface estate or interference with the uses of the land may be extracted without compensation. 95

The Kuntz approach meets both of the goals for interpreting "other minerals" clauses. First, it encourages stability and certainty of land titles by completely severing the minerals from the surface. Severing the two estates eliminates confusion over title to unspecified minerals. Title readers interpreting a title under this approach know immediately, without looking beyond the words of the grant or reservation itself, the extent of the mineral estate. The test accommodates the passage of time and development of technology, because any new substance that is discovered or attains special value simply becomes part of the mineral estate.

This approach also equitably accommodates the parties' inter-

⁹³ Id.

⁹⁴ Id. at 113.

⁹⁵ Id.

A number of courts have attempted to apply the Kuntz theory. See Amoco Prod. Co. v. Guild Trust, 461 F. Supp. 279, 282-83 (D. Wyo. 1978), aff'd, 636 F.2d 261 (10th Cir. 1980); Pariani v. State, 105 Cal. App. 3d 923, 937, 164 Cal. Rptr. 683, 687 (1980); Spurlock v. Santa Fe Pac. R.R., 143 Ariz. 469, 478-79, 694 P.2d 299, 308-09 (Ariz. Ct. App. 1984); Storm Assocs., Inc. v. Texaco, Inc., 645 S.W.2d 579, 584 (Tex. App.—San Antonio 1982), aff'd sub nom. Friedman v. Texaco, Inc., 691 S.W.2d 586 (Tex. 1985). Their attempts, however, have sometimes produced results that are inconsistent with the approach Professor Kuntz advocated. See Acker v. Guinn, 464 S.W.2d 348 (Tex. 1971) (attempting to follow Kuntz approach but actually reaching contrary result); Storm Assocs., 645 S.W.2d at 584 (noting Acker's reference to Kuntz but excluding uranium from "oil, gas, and other minerals"). See supra note 29.

⁹⁶ See supra text accompanying note 94.

⁹⁷ See Note, supra note 35, at 416 ("[Kuntz] approach leaves the definition of minerals open and retains a flexibility to provide the answer for any substance which is or hereafter becomes valuable, whether by development of markets, science, or application of technology."); Note, supra note 6, at 869 ("the flexibility of the manner of enjoyment test may be its most attractive feature"). Note, however, that flexibility does not subject the Kuntz approach to the "passage of title by technology" criticism of the surface destruction test, see supra note 34 and accompanying text. Under the surface destruction test the technology may exist to produce a mineral, but title to the mineral does not pass until a method of production that does not damage the surface becomes available. Under Kuntz, every mineral passes to the mineral owner regardless of the difficulty of extraction or the damage to the surface estate caused by extraction.

ests.⁹⁸ To mitigate the potential unfairness of including even minerals produced by surface destructive means, the approach requires compensation for damage to the surface. Some commentators have criticized the approach for resulting in a "forced sale of the surface [estate]."⁹⁹ Because all minerals are simply severed without further inquiry, the surface owner has no choice in the matter. Moreover, the approach may not satisfy the surface owner who wishes to preserve the surface in its original form. The Kuntz approach is inadequate for a surface owner who desires to maintain certain aesthetic or sentimental characteristics or uses of his property. However, the Kuntz approach, and the traditional formulations as well, focus on the compensable economic interests of the surface and mineral owners. The Kuntz approach fairly accommodates these interests to the extent the parties each realize economic value from their respective estates.¹⁰⁰

C. The *Moser* Formulation

In Moser the Texas Supreme Court, noting that the approach in the Acker and Reed cases had required the determination of a number of factual issues to interpret an "other minerals" clause, abandoned the surface destruction test in favor of an ordinary and natural meaning approach coupled with a workable method of compensation to the surface owner. According to the court, the old test created uncertainty because title readers could not determine ownership from examining the instrument alone. Thus, the Moser court abandoned, "in the case of uranium," 102 the Acker and Reed

⁹⁸ See Lazy D Grazing Ass'n v. Terry Land & Livestock Co., 641 F.2d 844, 846 n.5 (10th Cir. 1981) ("The [Kuntz] approach has the advantage of protecting against an unintended destruction of the surface estate, without awarding the surface owner the equally unintended bonus of mineral ownership.").

Note, supra note 35, at 417; see also Comment, supra note 35, at 504 ("[t]his theory is fair to both mineral and surface estate owners," and Kuntz approach is more equitable than surface destruction test, but it may lead to forced sale).

¹⁰⁰ Kuntz specified "the reduction in value of the land for its surface use" as the appropriate measure of damages. Kuntz, supra note 10, at 115.

^{101 676} S.W.2d at 101.

¹⁰² Id. The original opinion in Moser, Moser v. United States Steel Corp., 26 Tex. Sup. Ct. J. 427 (June 8, 1983), which the court withdrew and replaced with the current opinion, used more sweeping language. It stated, "We now abandon the Acker and Reed approach to determining ownership of minerals and hold that title to a substance which we have determined to be a mineral is held by the owner of the mineral estate as a matter of law." Id. at 428. The language of the official opinion, discussed in this Note, ties the holding more closely to the facts of the individual case and perhaps fulfills the court's desire to make its change of course less dramatic.

Although the Moser opinion may be literally interpreted to apply only to uranium, the Texas courts likely will apply the Moser approach to future "other minerals" controversies involving substances not subject to a previous court determination. See Comment, Determining Mineral Ownership in Texas After Moser v. United States Steel Corp.—The

approach and held that "title to uranium is held by the owner of the mineral estate as a matter of law." 103

The court reiterated its support of the Kuntz formulation, first noted in *Acker*, stating that

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. 104

The court held that "a severance of minerals in an oil, gas and other minerals clause includes all substances within the ordinary and natural meaning of that word"¹⁰⁵ and that "uranium is a mineral within the ordinary and natural meaning of the word."¹⁰⁶ The court stated, however, that it would continue to adhere to earlier decisions by Texas courts which held that certain substances belong to the surface estate as a matter of law.¹⁰⁷

The court then turned to the issue of reasonable use of the surface estate by the mineral owner. Before Moser, courts held a min-

Curiously, the court included near-surface lignite, iron, or coal in its list of substances that as a matter of law belong to the surface estate, based on *Reed II*, a seminal decision in the development of the surface destruction test. Moreover, the Texas courts have continued to recognize the surface destruction test in subsequent opinions concerning near-surface lignite, iron, or coal. *See* Schwarz v. State, 28 Tex. Sup. Ct. J. 488, 489 (June 12, 1985); Holland v. Kiper, 696 S.W.2d 588, 591 (Tex. App.—Tyler 1984, writ ref'd n.r.e.). The Texas Supreme Court contradicted itself in adhering to the results of *Reed II* while criticizing the surface destruction test, which it accused of causing title uncertainty. *Moser*, 676 S.W.2d at 101. Because the *Moser* court held that the mineral owner is liable to the surface owner for damages, the element of surface destruction should no longer be used to exclude substances that would otherwise be considered within the ordinary and natural meaning of the word "mineral." *See* Comment, *supra* note 102, at 211-16 (advocating total abandonment of surface destruction test and application of *Moser* to all severances of minerals in Texas).

Surface Destruction Nightmare Continues, 17 St. MARY'S L.J. 185, 201-03 (1985); Note, Title to Uranium Is Held by the Mineral Estate Owner as a Matter of Law: Moser v. United States Steel Corp., 16 Tex. Tech. L. Rev. 809, 822-23 (1985). Furthermore, this Note advocates Moser as a general approach that would be appropriately applied in its broad sense by states with a less complex history of "other minerals" jurisprudence than Texas.

^{103 676} S.W.2d at 101.

¹⁰⁴ Id. at 102.

¹⁰⁵ Id.

¹⁰⁶ Id

¹⁰⁷ Id. The court cited as examples decisions covering a variety of substances: Reed v. Wylie, 597 S.W.2d 743, 747 (Tex. 1980) (Reed II) (near-surface lignite, iron, or coal not included in "other minerals" if any reasonable method of production would damage surface); Heinatz v. Allen, 147 Tex. 512, 517-18, 217 S.W.2d 994, 997 (1949) (limestone and building stone not included in devise of "mineral rights"); Atwood v. Rodman, 355 S.W.2d 206, 207 (Tex. Civ. App.—El Paso 1962, writ ref'd n.r.e.) (limestone, caliche, and surface shale not included in "oil, gas, and other minerals"); Fleming Found. v. Texaco, 337 S.W.2d 846, 852 (Tex. Civ. App.—Amarillo 1960, writ ref'd n.r.e.) (water not a mineral); Psencik v. Wessels, 205 S.W.2d 658, 661 (Tex. Civ. App.—Austin 1947, writ ref'd) (sand and gravel not minerals).

eral owner liable to the surface owner only for negligently inflicted damage to the surface. ¹⁰⁸ The *Moser* court explained the unfairness of this liability rule in an "other minerals" context:

Restricting the mineral owner's liability to negligently inflicted damage to, or excessive use of, the surface estate is justified where a mineral is specifically conveyed. It is reasonable to assume a grantor who expressly conveys a mineral which may or must be removed by destroying a portion of the surface estate anticipates his surface estate will be diminished when the mineral is removed. It is also probable the grantor has calculated the value of the diminution of his surface in the compensation received for the conveyance. This reasoning is not compelling when a grantor conveys a mineral which may destroy the surface in a conveyance of "other minerals." ¹⁰⁹

Following this reasoning, the *Moser* court held that in the "other minerals" setting "liability of the mineral owner must include compensation to the surface owner for surface destruction."¹¹⁰ Although the court did not specify the extent of damages that the rule should cover, the holding could be read to mandate strict liability for damage to the surface estate.¹¹¹

In Texas, the mineral owner or lessee has an implied grant to make any use of the surface estate that is reasonably necessary to remove the substance. See Sun Oil Co. v. Whitaker, 483 S.W.2d 808 (Tex. 1972) (fresh water underlying land may be used for production of oil without liability for water used); Getty Oil Co. v. Jones, 470 S.W.2d 618 (Tex. 1971) (use of vertical space for pumping units not reasonably necessary where prevented surface owner's use of irrigation sprinkler system); Humble Oil & Refining Co. v. Williams, 420 S.W.2d 133 (Tex. 1967) (surface owner seeking damages for construction of roads must show that they were built over more of premises than reasonably necessary). Negligent use of the surface estate by the mineral owner triggers liability to the surface owner. See General Crude Oil Co. v. Aiken, 344 S.W.2d 668 (Tex. 1961) (oil lease operator liable for pollution of underground water due to negligent disposal of salt water); Warren Petroleum Corp. v. Martin, 153 Tex. 465, 271 S.W.2d 410 (1954) (mineral lessee has legal right to use as much of leased premises as is reasonably necessary and bears no liability for nonnegligent, unintentional injury to surface owner's cattle); Texaco, Inc. v. Spires, 435 S.W.2d 550 (Tex. Civ. App.—Eastland 1968, writ ref'd n.r.e.) (mineral lessee liable for loss of horse from negligent construction and maintenance of cattle guard). Moser changed this by making the mineral owner liable for surface estate damages resulting from the extraction of unspecified minerals. See infra text accompanying notes 109-10.

^{109 676} S.W.2d at 103.

¹¹⁰ Id.

¹¹¹ See Note, Mines and Minerals—Title to Minerals—Title to Substances Determined To Be Minerals as a Matter of Law Is Held by Owner of the Mineral Estate, 15 St. Mary's L.J. 477, 490 (1984) (stating that first opinion in Moser provided strict liability for substances not enumerated and asserting that "[t]his is a bold decision, since Texas has historically repudiated in strong language the doctrine of strict liability"; relevant language remains same in current Moser opinion).

D. Moser as a Useful Approach to the "Other Minerals" Question

Moser's approach fulfills the two goals for determining "other minerals" by combining elements of several other approaches. First, the Moser formulation lends stability and certainty to land titles by applying the ordinary and natural meaning test to sever from the surface all minerals within the ordinary and natural meaning of the word. Thus, the Moser approach requires few factual determinations. The court also provided clarity by enumerating substances that, according to previous court determinations, are not included in the ordinary and natural meaning of "minerals." Judicial recognition of newly discovered substances as minerals or nonminerals will continue to render the law more stable and reliable. 115

The Moser formulation also facilitates fair accommodation of the parties' interests. The approach respects both the mineral owner's interest in extracting all mineral substances and the surface owner's interest in protecting the value of his estate. Because Moser severs ownership of all minerals from the surface estate, the mineral owner receives title to all unnamed minerals and enjoys the right to extract them. This approach is fairer than the ejusdem generis¹¹⁶ or surface destruction117 formulations, which may exclude certain substances commonly recognized as minerals. To mitigate the potential unfairuess of passing title to an unspecified mineral, the Moser approach requires that the mineral owner compensate the surface owner for surface destruction from extraction of the unspecified mineral, not merely for negligently inflicted damages. Although the surface owner cannot prevent mineral production on his property because all minerals belong to the mineral estate, he is made whole through the payment of damages. Each party realizes the value of his estate: the mineral owner through mineral production, and the surface owner through payments from the mineral owner. This

The Moser court combined the ordinary and natural meaning test with elements of the surface destruction test in a manner that avoids many of the most problematic characteristics of each formulation. Compensating surface owners for damage to their estate mitigates the harshness of the ordinary and natural meaning test. Moser therefore demotes the surface destruction approach from its position of determining what is included in an "other minerals" clause to a secondary position of determining compensation for surface damages from the extraction of unspecified substances.

¹¹³ See supra notes 70-72 and accompanying text (discussing benefits of ordinary and natural meaning test). For a discussion of the ordinary and natural meaning test generally, see supra section II F.

¹¹⁴ See supra note 107 and accompanying text.

Parties and other title examiners, with increasing frequency, will be able to interpret an instrument by looking only at the face of the document because the courts will have decreed whether the substance concerned is a mineral.

¹¹⁶ See supra section II A.

¹¹⁷ See supra section II B.

compromise equalizes the treatment of the parties and ultimately produces results which satisfy the goal of fairness.

A more complete adoption of the Kuntz approach would advance title certainty even further than does the *Moser* approach. The *Moser* court adopted the basic framework of Kuntz,¹¹⁸ but varied from the theory by adopting the ordinary and natural meaning test. Indeed, one of the weaknesses¹¹⁹ of the *Moser* formulation is the difficulty courts may encounter in selecting substances included within the ordinary and natural meaning of "minerals."¹²⁰ The Kuntz approach does not adhere to the ordinary and natural meaning test but instead places all valuable substances within the mineral owner's estate,¹²¹ thus eliminating uncertainty as to what is included in a mineral grant or reservation. Because the instrument alone is determinative in the Kuntz formulation, it provides greater certainty than does the *Moser* approach.

What *Moser* lacks in certainty, however, it may make up in fairness. Presumably, a court could find that a severance under the Kuntz framework includes substances such as sand and gravel, which do not ordinarily constitute minerals.¹²² Although the Kuntz

¹¹⁸ Moser, 676 S.W.2d at 102.

One weakness in the *Moser* opinion that the Texas courts will have to clarify is how to measure damages when calculating compensation to the surface owner. The Texas courts may choose to apply their existing standards or follow Professor Kuntz's suggestion that damages should "be measured by the reduction in value of the land for its surface use." Kuntz, *supra* note 10, at 115.

Another weakness of *Moser*, which the Texas Supreme Court has already addressed, concerns what standards to apply to instruments executed during the period controlled by the *Acker-Reed* surface destruction formulation. *See supra* notes 29-31 and accompanying text (discussing *Acker* and *Reed*). The first *Moser* opinion stated that the surface destruction test would continue to apply to instruments executed between the dates of *Acker* and the first *Moser* opinion, Moser v. United States Steel Corp., 26 Tex. Sup. Ct. J. 427, 428 (June 8, 1983), thus creating a "window period" in the law. *See* Note, *Determination of Ownership of Near-Surface Minerals as a Matter of Law:* Moser v. U.S. Steel, 36 BAYLOR L. REV. 715, 725 (1984). In the second *Moser* opinion the court held that its new formulation would apply prospectively from the date of the first opinion. *Moser*, 676 S.W.2d at 103. The Texas Supreme Court addressed the problems of the "window period" and what standard to apply to pre-*Acker* conveyances in Friedman v. Texaco, Inc., 691 S.W.2d 586, 587 (1985), holding that the *Moser* opinion "applies only to those severances of the surface and mineral estates occurring after [the date of the first *Moser* opinion]."

¹²⁰ But see supra notes 69-72. Although the ordinary and natural meaning test provides more certainty than the other traditional formulations, it does not yield the title certainty that the Kuntz approach does, particularly as to newly discovered or newly valuable substances.

¹²¹ Kuntz, *supra* note 10, at 113 (mineral severance should include "all substances presently valuable in themselves, apart from the soil, whether their presence is known or not, and all substances which become valuable through development of the arts and sciences").

¹²² A court following the Kuntz theory could reach this conclusion. Under Kuntz the mineral owner has title to all valuable substances apart from the soil. Kuntz, *supra* note 10, at 113. Sand and gravel deposits are valuable apart from the soil.

framework calls for compensation for surface damages incurred by removing the sand and gravel, compensation might not make the surface owner whole if he planned to exploit commercially these substances as an incident of his estate. The Kuntz framework thus results in a "forced sale" of the surface estate, because the surface owner has no choice but to accept compensation from the mineral owner in return for the destruction of his estate. The Moser approach mitigates this harshness by applying the ordinary and natural meaning test to prevent substances not generally recognized as minerals from passing to the mineral owner. In sum, although the Kuntz formulation would result in greater title stability, Moser may represent a better balance between stability of title and fairness to the interests of the parties.

Conclusion

Deeds, leases, and other instruments frequently convey or reserve "other minerals" without specifically enumerating those minerals. As a result, parties have been forced to call upon the courts to determine the scope of the "other minerals" language with regard to unspecified substances. All formulations for the determination of unspecified minerals should meet two goals: first, promoting the stability and certainty of land titles, and, second, fairly accommodating the interests of the parties. Unfortunately, courts deciding "other minerals" questions traditionally have relied on formulations that do not satisfactorily advance or accommodate these goals. Although the courts may have found one or another of the traditional formulations useful in individual cases, these formulations do not adequately serve as standards for new fact situations. Consequently, the courts are often in conflict, land titles are unstable, the interests of the parties are abused, and the development of mineral resources is hindered.

In Moser, the Texas Supreme Court developed a formulation that includes within "other minerals" substances falling within the ordinary and natural meaning of the word "mineral." This formulation substantially eliminates the uncertainty of determining an unspecified mineral and fosters title stability. The Moser court also held that mineral owners are liable to surface owners for surface damage resulting from the extraction of "other minerals." This requirement fairly accommodates the interests of the parties by ensuring that each party may enjoy the economic benefits of his estate without diminishing the value of the other estate.

Courts seeking to adopt an "other minerals" formulation that

meets the goals of stability and fairness should adopt the *Moser* approach because it is a superior alternative to the unsatisfactory traditional formulations.

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