The more things change, the more they stay the same. Along with oil and gas, hard minerals and uranium enjoyed record high prices in the late 1970s and early 1980s.

However, by the mid 1980s the run of high prices was over.

Joining in the collapse of the price of hydrocarbons and hard minerals, the price of uranium also fell, due primarily to the loss of the market for processed uranium (yellowcake-U\textsubscript{3}O\textsubscript{8}). The nuclear power industry no longer constructed new power plants.

Times have changed, or have they? Along with the recent rise in the price of oil, gas and other commodities, the price of coal, uranium and other hard minerals has also risen significantly. Fueled by renewed interest in nuclear power due to concerns about the contribution of fossil fuels to global warming, uranium reached a high of $95 per pound in December 2007. But like oil and gas, the price of uranium has also fallen sharply in recent months and currently trades at $46 per pound (November 2007).

Despite such price volatility, there is renewed interest in lease activity for hard minerals, especially uranium. Title examiners may once again be confronted with determining the ownership of these substances. This paper will discuss the status of Texas law as it pertains to the ownership of hard minerals, particularly uranium.

Determining title to uranium and other hard minerals has caused Texas courts much grief over the years as they have tried to devine the intention of the parties in interpreting the language of the instruments creating these interests. Unfortunately for title examiners, title to these substances cannot always be ascertained from the language of the grant or reservation. Facts outside of the record, such as the method of extraction, determine the intention of the parties and thereby the ownership of these substances. As a result, the attributes of ownership determine title, rather than the title determining the enjoyment of the interest owned. The use of evidence outside of the four corners of
the instrument has played a major role in the determination of the title to these substances.

I. INTRODUCTION

The confusion created by the Texas Supreme Court in this area is the result of an attempt to balance two competing interests: the right of the surface owner to preserve the integrity of the surface of the land; and the right of the mineral owner to explore and produce these severed mineral substances. Although, this article focuses on rights to uranium, the title examiner should know that previous decisions by the Texas Supreme Court have classified the ownership of other substances as a matter of law. A list is provided below, but will not be discussed in detail.

II. AN OVERVIEW OF URANIUM IN TEXAS

A. Uranium Deposits in Texas

The South Texas coastal plain contains mineralized uranium deposits, the majority of which are located in seven major sandstone formations: the Carrizo Formation, the La Para and La Bahia Members of the Goliad Formation, the Oakville Formation, the Dillworth and Deweeseville Members of the Whitsett Formation, and the Soledad Member of the Catahoula Formation. The bulk of uranium exploration and production has taken place in a region known as the South Texas Uranium Province, a segment located just south of the San Marcos arch. Most commercial deposits of uranium are located in large river channel systems, known as “mega-channels,” where clastic sediments have been deposited over time.

Uranium mineralization and the development of these deposits are possible due to the presence of fault structures in the area. These fault systems run in a northeast-southwest direction across South Texas and contain rising H2S gas, which is essential to the solution method of extracting uranium. The gas serves as a reducing agent causing the uranium to precipitate when the gas and oxidized solutions come into contact.

B. Methods for Producing Uranium

Depending on the depth of the deposits beneath the surface, hard minerals have been typically extracted by one of two methods: open pit mining or the in-situ leaching process. Open pit mining is used by the surface owner; not holding that “near surface lignite, iron and coal is part of the surface estate as a matter of law,” as indicated by the court in Moser. See Moser v. U.S. Steel Corp., 676 S.W.2d 99, 101 (Tex. 1984).

See Martin v. Schneider, 622 S.W.2d 620, 621 (Tex. App.—Corpus Christi 1981, writ ref’d n.r.e.), disapproved of by Plainsman Trading Co.
in mining coal, lignite, limestone, and other near-surface substances that can only be extracted by digging through the surface. In-situ leaching (ISL), or solution mining, is a method of extracting minerals such as uranium and copper by pumping leaching solution into boreholes drilled into the ore deposit. The uranium-bearing solution migrates to a well bore where it is pumped to the surface and processed without employing expensive drill-and-blast techniques, underground mining or open pit methods. The processed uranium is known as “yellow cake.” \( \text{U}_3\text{O}_8 \).

Uranium deposits closer to the surface have been exploited using the open pit method, while deeper concentrations of uranium have utilized the fault structures and oxidized groundwater to extract the mineral through in situ leaching methods. South Texas uranium is generally extracted using the ISL method.

C. Conveying Title to Uranium

Unfortunately for title examiners, parties do not always specifically reference the substances conveyed or reserved. They often utilize form instruments containing boilerplate language, without further thought being given to what is meant. The most common boilerplate phrase is the term, “and other minerals.” This phraseology appears in all form oil and gas leases and many grants and reservations in form deeds and other instruments. The court must determine the title to a particular substance through the interpretation of the words “and other minerals,” where a substance has become valuable and one of the parties seeks to exploit it. In accordance with the rules discussed below, the court may hold that the substance belongs to the mineral owner, or is a part of the surface estate.

This issue is more than the allocation of monies. The real fight is over the use, preservation or destruction of the surface itself. The courts have applied a general intent, rather than a specific intent and have been sympathetic to the view that the fee owner would not have intended to convey the minerals, the exploitation of which would also destroy the surface and the surface owner’s ability to use the land for any purpose. It has been this analysis which has animated the Texas Supreme Court for more than thirty years when determining title to uranium and other hard minerals.

III. DETERMINING THE INTENT OF THE PARTIES

In order to determine the ownership of uranium and other hard mineral substances, the court must derive the intention of the parties in the severance instrument by examining the document in its entirety and harmonizing the provisions of the document. The court must ascertain the intention of the parties by what was said in the instrument, not by what was meant but not said. This is known as the “four corners doctrine.”

When the intention of the parties is clear and the document specifically conveys or reserves uranium, coal or lignite, the court will enforce the terms of the document without evaluating the circumstances surrounding the transaction. Title examiners need only look to the recorded documents and the applicable case law to determine whether the surface or mineral owner has title to the specific substance.

The problem has arisen where the intention of the parties is not clear from the language of the severing document, such as where the language “and other minerals” is used to describe the interests being conveyed or reserved. As a result, the four corners doctrine as enunciated by the Texas Supreme Court in Luckel v. White cannot be

v. Crews, 898 S.W.2d 786, 791 (Tex. 1995) (“The solution, or in-situ method, entails no destruction or depletion of the surface. On the other hand, the surface, or pit mining method requires destruction of the surface.”).

8 See supra note 3.
used, since the four corners of the document are silent as to the intention of the parties. Texas courts have failed to consistently adhere to a clear legal definition when deciding which substances are included in this phrase. When faced with this boilerplate language, the Texas Supreme Court has looked to extrinsic evidence outside of the terms of the recorded documents in order to determine the intention of the parties.

IV. DEFINING “MINERALS” UNDER TEXAS LAW

It is important to note that certain rules of construction normally relied upon to interpret ambiguous mineral deeds have been expressly rejected under Texas law. For example, courts have refused to apply the rule of *ejusdem generis* to the phrase "oil, gas and other minerals." To do so would limit the mineral estate to ownership of only those hydrocarbons similar to oil and gas. The Texas Supreme Court has also declined to interpret "minerals" according to the technical scientific definition. This would provide the mineral estate with every substance beneath the surface, "even the soil itself." The court has also confirmed that ownership to an unnamed substance will not depend on whether the parties had knowledge of the substance's value, or even its existence, at the time the severing document was executed.

Generally, the Texas Supreme Court has utilized two very different rules of construction to determine ownership to those substances not specifically mentioned in the severing instrument: (i) the "ordinary and natural meaning" test; and (ii) the "surface destruction" test.

---

9 Compare Moser v. U.S. Steel Corp., 676 S.W.2d 99, 102 (Tex. 1984) (establishing, without defining, the “ordinary and natural meaning” test as the legal mechanism for determining ownership to “other minerals” under Texas law for mineral severances executed after the date of the Moser opinion), Heinatz v. Allen, 217 S.W.2d 994, 997 (1949) (applying the ordinary and natural meaning test to conveyances of “minerals”), and Psencik v. Wessels, 205 S.W.2d 658, 661 (Tex. Civ. App.—Austin 1947, writ ref’d) (defining “minerals” to include “what that word means in the vernacular of the mining world, the commercial world, and land owners at the time of the grant”), with Acker v. Guinn, 464 S.W.2d 348 (Tex. 1971) (applying a fact-based surface destruction analysis to determine ownership to specific unnamed substances).


11 Under the *ejusdem generis* doctrine, a general word or phrase, like "and other mineral", which follows a list of specific words or phrases will be interpreted to include only those substances which are similar to those specifically stated. For example, in an oil and gas lease that conveys "oil, gas and other minerals," the general term "other minerals" would be interpreted to include only those minerals that are similar to oil and gas. Arguably, this would not include solid minerals, such as uranium.


14 The “exceptional characteristics” test focuses on whether the unnamed substance in question was considered valuable at the time of the conveyance. If the mineral was of no significant value at the time it was severed from the surface estate, then it must not have been on the minds of the grantor and grantee when the document was executed; thus, it was not included in the severed mineral estate. Conversely, if the unnamed substance did possess a marketable value at the time the document was executed, it must have been included in the mineral estate.

15 Acker v. Guinn, 464 S.W.2d 348, 352 (Tex. 1971) (adopting a general intent approach to determining ownership, resulting in actual knowledge of a substance’s existence irrelevant); Cain v. Neumann, 316 S.W.2d 915, 922 (Tex. Civ. App.—San Antonio 1958, no writ) (concluding that actual knowledge of the existence of uranium under the surface at the time of the conveyance should not be considered when making a determination of ownership).
A. “Ordinary and Natural Meaning” Test

Under the ordinary and natural meaning test, courts presume that the parties were familiar with the ordinary and natural meaning of the terms used in the severing instrument. The Texas Supreme Court has held that the ordinary and natural meaning of “minerals” does not require application of the scientific or technical definition of the word as it may be used by in the scientific community. But as we will see, the Court has failed to delineate exactly what is involved in applying the ordinary and natural meaning test.

Generally, application of this test results in courts defining minerals on a substance-by-substance basis. Even though ownership is determined this way, it is preferable to the case-by-case determination of the surface destruction test described below.

B. “Surface Destruction” Test

The surface destruction test looks to evidence outside of the four corners of the mineral deed to determine the general intent of the parties to the severance. The surface destruction test focuses on the methods of production that could reasonably be used to extract the unnamed substance and asks whether any reasonable method of developing the mineral would consume, destroy, or deplete the surface. This requires a two-step factual determination of the substance’s proximity to the surface and the reasonable methods available for extraction. Ownership is determined as a matter of fact, rather than by the court as a matter of law.

The application of the surface destruction test will depend upon the date that the mineral estate was severed from the surface. Consequently, ownership to valuable minerals, such as uranium, cannot be determined by a simple examination of the title documents. If the surface destruction test is applied, ownership becomes an issue of fact and title to the unnamed substances will be based upon the location of the substance to the surface and the reasonable methods for extracting that substance.

V. EVOLUTION OF THE TWO-TEST SYSTEM

Since 1919, Texas courts have disagreed whether the method used to extract a substance should be considered in a determination of title to that substance. In Luse v. Boatman, the Fort Worth Court of Appeals held that a reservation of the “coal and mineral, and the right to prospect for and mine the same” included oil and gas as part of the reserved mineral estate. The appellate court concluded that “it makes no difference whether the means used for extracting the mineral sought is that of pick and shovel or other implement used for excavating, or by drill or bit.”

Thirty years after Luse, however, the method used for extracting a substance became one of the factors to be considered when determining the intent of the parties to a severance of “mineral rights.” In Heinatz v. Allen, 217 S.W.2d 994, 997 (1949), the court held that gravel and limestone are not minerals within the ordinary and natural meaning of the word unless they are rare and exceptional in character or possess a peculiar property giving them special value, as for example sand that is valuable for making glass and limestone of such quality that it may profitably be manufactured into cement. Compare Moser v. U.S. Steel Corp., 676 S.W.2d 99 (Tex. 1984) (“[A] severance of minerals in an oil, gas and other minerals clause includes all substances within the ordinary and natural meaning of that word, whether their presence or value is known at the time of severance.”), with Heinatz v. Allen, 217 S.W.2d 994, 997 (1949) (“[G]ravel and limestone are not minerals within the ordinary and natural meaning of the word unless they are rare and exceptional in character or possess a peculiar property giving them special value, as for example sand that is valuable for making glass and limestone of such quality that it may profitably be manufactured into cement.”).

22 Luse, 217 S.W. at 1101.
v. Allen, the Texas Supreme Court concluded that the term “mineral rights” should be interpreted according to its “ordinary and natural meaning.” The court identified four factors to consider when determining whether a given substance is within the ordinary and natural meaning of the word “minerals” and included as part of the mineral estate: (i) the nature of the substance, (ii) its relation to the soil, (iii) its use and value, and (iv) the effect of its removal upon the surface of the land. Under later decisions, the fourth factor of the “ordinary and natural meaning” test—the effect of a substance’s removal on the surface of the land—became the exclusive factor for determining whether a substance belongs to the owner of the mineral estate or the owner of the surface estate.

One of the first cases dealing specifically with uranium is Cain v. Neumann. In Cain, the San Antonio Court of Appeals held that title to uranium was included in a mineral lease executed in 1918, which conveyed a twenty-five year determinable fee interest in ‘all of the oil, gas, coal and other minerals in and under, and that may be produced,’ the court concluded that the use of the term “other minerals” reveals “an unrestricted grant of minerals, including uranium.”

A. Adoption of the Surface Destruction Test

1. Acker v. Guinn

In 1971, the Texas Supreme Court first employed the “surface destruction” test as the sole factor for determining whether the parties to the transaction intended for an unnamed substance to be included in the severed mineral estate.

In Acker v. Guinn, the owners of an undivided one half interest in and to all of the oil, gas and other minerals in and under, and that may be produced,” brought a declaratory judgment action to determine ownership of the iron ore located under the property. Iron ore deposits were located in outcrops at the surface and extended approximately fifty feet below the surface. Furthermore, the evidence showed that the iron deposits under the land must be mined by open pit mining methods. The Texas Supreme Court affirmed the appellate court’s decision in favor of the surface estate owner, but based its holding on the surface destructive effect strip mining the iron ore would have on the surface estate.

Acker holds 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.” Through application of the surface destruction test, the Court sought to ascertain the “general intent” of the parties to the transaction. The Court rationalized that a surface owner would not convey a substance, the production of which would deprive the owner of the beneficial use of the surface estate.

2. Reed v. Wylie (Reed I & II)

The surface destruction test was further expanded in 1977, and again in a substitute opinion in 1980, with the Court’s decisions...
in Reed I and Reed II.\textsuperscript{34} Both Reed I and Reed II involved a 1950 deed reservation by Wylie of a one-fourth interest “in and to all oil, gas and other minerals on and under the land and premises herein described and conveyed.”\textsuperscript{35} Reed, the surface owner, initiated a declaratory judgment to determine whether Wylie retained a one-fourth ownership interest to coal and lignite through the 1950 reservation.\textsuperscript{36}

In Reed I, the court first made a distinction between substances located “at the surface of the land” and those located “near the surface.”\textsuperscript{37} If a substance is located “at the surface,” the surface destruction test need not be applied, and the surface owner retains the rights to that substance as a matter of law.\textsuperscript{38} If, however, the substance is “near the surface,” the surface owner retains the rights to that substance if he or she proves that it could only have been extracted through surface-destructive methods at the time the severing instrument in question was executed.\textsuperscript{39} Thus, Reed I placed the burden of proof on the surface owner to demonstrate: (i) the location of the substance; and (ii) if that substance is shown to be near the surface rather than at the surface, the surface destruction test must be satisfied.\textsuperscript{40} Reed I establishes the date of the conveyance as the time for determining whether all available methods of removal were surface-destructive.\textsuperscript{41} The case was then remanded for the trial court to apply the newly formulated surface destruction test.\textsuperscript{42}

In 1980, the Supreme Court modified its opinion in Reed I with a subsequent review of the Reed v. Wylie case (“Reed II”).\textsuperscript{43} In Reed II, the court broadened the application of the surface destruction test by vesting title to near surface lignite, iron or coal in the surface estate owner if the surface owner is able to prove that any reasonable removal method will result in the destruction of the surface.\textsuperscript{44} Furthermore, the time for determining whether any available methods of removal are surface-destructive was extended from the moment of the conveyance to any time between the date of the conveyance and the institution of suit.\textsuperscript{45} The court rationalized that this extension of time was necessary in order to avoid “a fact question as to the state of the art of removal of the substance upon some particular date in the past,” and to keep the parties from having to use expert testimony to establish what mining methods were used for a specific substance on the date of severance.\textsuperscript{46}

The irony of the court’s rationalization is apparent to any litigant who has been a party to a title dispute where the Reed II surface destruction test was applied. Costly expert testimony is still required to establish the depth of the substance at issue and the reasonable methods of extraction that have been available from the time of the severance to the time of the court proceeding.\textsuperscript{47} Although the court sought to avoid a rule that “would have a very unstabilizing effect upon land titles,”\textsuperscript{48} expert testimony remains crucial to a jury’s determination of ownership to uranium and other hard minerals under the surface destruction test. Furthermore, though the

\textsuperscript{34} Reed v. Wylie, 554 S.W.2d 169 (1977), modified, 597 S.W.2d 743 (Tex. 1980).

\textsuperscript{35} Reed v. Wylie, 554 S.W.2d 169, 171 (1977) (“Reed I”), modified, 597 S.W.2d 743 (Tex. 1980).

\textsuperscript{36} Id. at 170.

\textsuperscript{37} Id. at 172.

\textsuperscript{38} Id. at 173.

\textsuperscript{39} Id. at 172.

\textsuperscript{40} Id. at 173.

\textsuperscript{41} Id.

\textsuperscript{42} See id. (indicating that there was no evidence regarding the lignite’s location to the surface).

\textsuperscript{43} Reed v. Wylie, 597 S.W.2d 743, 747 (Tex. 1980) (“Reed II”).

\textsuperscript{44} Id.

\textsuperscript{45} Id.

\textsuperscript{46} Id.

\textsuperscript{47} See, e.g., Reed I, 554 S.W.2d at 172 (requiring qualifications for expert testimony regarding depth of lignite and reasonable methods used for producing lignite).

\textsuperscript{48} Reed II, 597 S.W.2d at 747.
extended timeframe was intended to avoid presenting evidence of past mining practices, for surface owners the date of severance remains the most likely time it would have been reasonable for surface destructive mining methods to have been available. Solution mining at ISL may not have been an available extraction method at the time of the severance.

Most important, Reed II reaffirmed and further clarified the rule announced in Reed I, that any substance “at the surface”—presumably, at least “7 to 8 feet,” but possibly even “twenty to twenty-two feet” below the surface—belongs to the surface estate owner as a matter of law, negating application of the surface destruction test. The depths provided above are based on the summary judgment evidence considered by the court in Reed II. The court concluded that “at the surface” meant “a depth shallow enough that it must have been contemplated that its removal would be by a surface destructive method.”

Unfortunately, the court failed to clarify a specific depth that would constitute “at the surface” as a matter of law for every substance. In future title disputes, it is possible that this grey area created by the court will provide the greatest advantage to surface owners and their successors who wish to challenge title to hard minerals, such as uranium.

On a positive note, the Court did firmly establish that substances not “at the surface,” but located within 200 feet of the surface, are “near the surface” as a matter of law and the surface destruction test must still be applied. However, the Court again failed to clarify whether the mineral owner is vested with title to substances located deeper than 200 feet as a matter of law. Perhaps a substance located deeper than 200 feet will be considered a mineral based on the Court’s analysis. However, the Court did not prohibit a surface owner from seeking to establish title to a substance located deeper than 200 feet through the application of the surface destruction test. Practitioners should be aware of this additional “grey area” in the “near surface substance” analysis.

As its final modification to the surface destruction test, the Court declared that if a substance is determined to belong to the surface owner, the surface owner owns that substance to any depth at which it may be found.

In 1986, the Corpus Christi Court of Appeals in Atlantic Richfield Co. v. Lindholm applied the Reed II test to pre-1983 conveyances (1934 and 1949), ignoring the application of the Texas Uranium Surface Co. v. Crews, 898 S.W.2d 786, 791 (Tex. 1995) (providing a brief analysis of uranium deposits twenty feet beneath the surface). Martin v. Schneider, a case decided by the Corpus Christi court of appeals, provides some guidance for how a court may classify the depth of uranium deposits relative to the surface. Despite not ultimately applying the surface destruction test because NPRI interests were at issue, the court in Martin observed that uranium ore deposits were located on the property “at an average depth of 55 to 66 feet, with the shallowest deposit at 20 feet;” and, further, that both ISL and open-pit methods had been used to extract the uranium. Id. at 621.

49 Reed II, 597 S.W.2d at 747.
50 Id. at 746.
52 Id. at 747.
53 Id. at 746.
54 Reed II, 597 S.W.2d at 747.
55 Id.
Mining and Reclamation Act,\textsuperscript{57} which had been enacted after \textit{Acker}. It had been argued that the Act rendered the surface destruction test unnecessary.

**B. Return to the Ordinary and Natural Language Test**

1. \textit{Moser v. U.S. Steel Corp.}

In 1983, the Texas Supreme Court in \textit{Moser v. U.S. Steel Corp.}, acknowledged the title uncertainty created by the fact-intensive surface destruction test and abandoned it as the standard for determining the intention of the parties to the severance document.\textsuperscript{58} In \textit{Moser}, the surface owners filed suit to quiet title to uranium deposits discovered on a 6.77 acre tract of land.\textsuperscript{59} The severance document executed in 1949 reserved to the mineral owner:

\begin{quote}
[A]ll 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.\textsuperscript{60}
\end{quote}

The lower court applied the surface destruction test, and the jury concluded that no reasonable method of mining the uranium was available in 1949 that would have resulted in destruction of the surface. The mineral owner prevailed. The court of appeals affirmed, holding as a matter of law that ISL mining was the only reasonable method for mining uranium at the time of trial.\textsuperscript{61}

The Texas Supreme Court opined that thirteen years of using the surface destruction test “has resulted in title uncertainty.”\textsuperscript{62} The court held that “title to uranium is held by the owner of the mineral estate as a matter of law.”\textsuperscript{63} The court announced a return to the “ordinary and natural meaning” test for interpreting the term “other minerals.”\textsuperscript{64} While \textit{Moser} was an abandonment of the surface destruction test approach of \textit{Acker} and \textit{Reed I} and \textit{II}, the court refused to abrogate its previous decisions. In withdrawing its opinion dated June 8, 1983, the court on June 27, 1984 determined that the ordinary and natural meaning test would only be applied prospectively from June 8, 1983, the date of the original \textit{Moser} opinion. The surface destruction test would still be used to interpret a severance of “other minerals” executed prior to \textit{Moser}.\textsuperscript{65} The prospective application of \textit{Moser} and the ordinary and natural meaning test has resulted in the fragmentation of Texas land title law and perpetuated the confusion about who owns these substances: the mineral owner or the surface owner?

Under \textit{Moser}, title to a substance determined to be a mineral “within the ordinary and natural meaning of the word” is owned by the owner of the mineral estate as a matter of law.\textsuperscript{66} The court concluded that \textit{Moser} applies to any substance not previously considered and classified as a matter of law in previous decisions. In addition, the court specifically held that uranium is a mineral as a matter of law under the ordinary and natural meaning test, although the rule is applicable prospectively only.\textsuperscript{67}

\textit{Moser} also imposes strict liability for surface destruction on those mineral estate owners

\begin{footnotes}
\item[57] \textit{TEX. NAT. RES. CODE ANN.} § 131.001 (Vernon 2008).
\item[58] \textit{Moser v. U.S. Steel Corp.}, 676 S.W.2d 99 (Tex. 1984).
\item[59] \textit{Id.} at 100.
\item[60] \textit{Id.} at 101.
\item[61] \textit{Id.} at 102.
\item[62] \textit{Moser}, 676 S.W.2d at 101.
\item[63] \textit{Id.}
\item[64] \textit{Id.}
\item[65] \textit{Id.} at 103.
\item[66] \textit{Moser}, 676 S.W.2d at 101.
\item[67] \textit{Id.} at 102.
\end{footnotes}
who receive title to a substance through a grant of “other minerals” rather than through a specific reference.68 Strict liability is not imposed upon the mineral owner who acquires its interest through a specific reference to the substance in the severance document. In those instances, the mineral owner’s liability is restricted to negligently inflicted damage to, or excessive use of, the surface estate. The court reasoned that the parties presumably contemplated such surface destruction at the time of the grant or reservation.69

C. New Life for the Surface Destruction Test

1. Friedman v. Texaco, Inc.

Friedman owned 694 acres in fee simple and executed a lease of oil, gas and other minerals to Magnolia Petroleum in 1939.70 Twenty years later, Friedman conveyed the surface estate to Martin and reserved all of the “the oil, gas and other minerals, in and under said tract of land.” Martin, the surface owner, later executed a lease to Texaco, which specifically granted Texaco the right to produce uranium.71

In Friedman, title to uranium was determined to remain with the surface estate pursuant to the surface destruction test, because extraction of the uranium “could” be accomplished through surface destructive strip mining methods.72

The Friedman court affirmed its earlier ruling in Moser that the ordinary and natural meaning test applies only to severances of “other minerals” which occur after June 8, 1983. Friedman, however, went one step further. The court held that, not only would the surface destruction test remain the standard for interpreting general conveyances of oil, gas and other minerals as outlined in Reed II, but that the surface destruction test would also be applied to any severance that predated the Acker opinion. Thus, the surface destruction test remains the standard for determining title to unnamed substances as to any severance executed prior to June 8, 1983. Under all post-Moser severances, title to uranium will belong to the mineral estate owner as a matter of law, while title to unnamed substances severed after June 8, 1983 will be governed by the ordinary and natural meaning test.73

2. Plainsman Trading Co. v. Crews

Despite the Moser court’s effort to minimize application of the surface destruction test when determining rights to unnamed substances in conveyances of “other minerals,” ten years later in Plainsman Trading Co. v. Crews,74 the Supreme Court applied the surface destruction test to determine the rights of a non-possessory royalty interest (“NPRI”) holder to uranium production proceeds, where those rights were acquired prior to the severance of the mineral estate.75

In 1949, the property at issue in Plainsman was conveyed in fee simple with a reservation by the grantor of an NPRI interest in the land. Fourteen years later on March 14, 1963, a deed was executed conveying the surface estate and an undivided one half interest in the minerals to Crews. On August 27, 1987, Crews executed a mineral lease which expressly gave the lessee the right to produce uranium from the property.76 Plainsman, owner of the other undivided one-half mineral estate, and the NPRI holder filed a declaratory judgment action to determine

68 Id.
69 Id. at 103.
70 Friedman v. Texaco, Inc., 691 S.W.2d 586 (Tex. 1985).
71 Id. at 587.
72 Id. at 589.
73 Id.
74 Plainsman Trading Co. v. Crews, 898 S.W.2d 786, 788 (Tex. 1995).
75 Id.
76 Id.
ownership to the uranium which Crews’ mineral lessee intended to extract.  

The issue in *Plainsman* was whether a non-participating royalty interest created prior to June 8, 1983, while the grantor was the fee simple titleholder, is extinguished once the surface owner has succeeded to the ownership to near surface uranium. The NPRI owner argued that surface destruction is irrelevant because the non-participating royalty interest is a non-possessory interest, which precludes the interest holder from producing the minerals himself and “merely entitles [the] owner to a share of the production proceeds, free of the expenses of exploration and production.”

The court upheld the lower court’s application of the surface destruction test, vesting title in the uranium to the surface owner. But the majority further concluded that the holder of the NPRI had no interest in the surface owner’s uranium because a non-participating royalty interest is carved out of the mineral estate. As pointed out in the dissenting opinion, the traditional conflict between a surface owner’s rights and a mineral owner’s right to reasonable use of the surface for purposes of mineral production is not at issue in the case. A non-possessory interest has no implied right to surface access. More important, the royalty owner was granted the non-possessory interest in 1949, before the mineral estate was severed in 1963.

The decision in *Plainsman* is significant for several reasons. First, the court concluded that Rule 277 of the Texas Rules of Civil Procedure mandates the broad form submission of issues to a jury and upheld the submission of broad jury instructions concerning the application of the surface destruction test. In *Plainsman*, the jury was asked:

> Do you find from a preponderance of the evidence that the uranium located on the Tom Crews Ranch is located within 200 feet or less of the surface and that any reasonable method of extracting and producing the uranium under the Tom Crews Ranch available on March 14, 1963 or at any time thereafter would consume, deplete or destroy the surface of the Tom Crews Ranch?

The jury instruction further stated that the surface would be consumed, depleted or destroyed if “use of the surface soil is affected to such a degree that the utility of such land surface for farming, grazing, timber production or other beneficial use is destroyed or substantially impaired.”

---

77 *Plainsman*, 898 S.W.2d at 788.
76 Id.
79 Id. at 789.
80 Id. at 788.
81 Id. But see Ernest E. Smith, *Recent Developments in Conveying & Reserving Mineral Interests*, B-14 Sept. 1987 (arguing that “the surface destruction test should not be used in construing a grant or reservation of royalty in oil, gas and other minerals, regardless of date,” because “such a person has no right to authorize mining or to interfere with surface use”). Ernest Smith further argues that the “ordinary and natural meaning test should be used in construing grants and reservations of royalties and other nonparticipating interests, irrespective of the date of the instruments creating them.” Id.
82 *See Plainsman*, 898 S.W.2d at 792 (Gammage, J., dissenting) (contending that application of a rule of general intent—the surface destruction test—is not warranted in a conveyance of a royalty interest because royalty owners have no implied right to use the surface estate); see also Martin v. Schneider, 622 S.W.2d 620, 622 (Tex. App.—Corpus Christi 1981, writ ref’d n.r.e.) (refusing to apply the surface destruction test to royalty interests conveyed by the surface owner because the underlying policy of protecting the surface estate is not furthered).
83 *Plainsman Trading Co.*, 898 S.W.2d at 790–92.
84 Id. at 790.
85 Id.
court upheld this broad jury instruction, which was specifically at issue on appeal.\textsuperscript{86} In essence, the surface owner’s burden of satisfying the surface destruction test has been made easier by \textit{Plainsman}. The surface owner need only show that the surface need not be destroyed completely but only “substantially impaired.”

\textbf{VI. PROBLEMS WITH APPLYING THE SURFACE DESTRUCTION TEST TO URANIUM}

The \textit{Plainsman} decision highlights the inherent problem in applying the surface destruction test as enunciated in \textit{Reed II} to uranium. As noted earlier, uranium can be extracted by both surface destructive and non-surface destructive methods (e.g., ISL methods). Because \textit{Reed II} changed the test announced in \textit{Acker} and \textit{Reed I} from “must” be extracted using surface destructive methods to “could be extracted,” the fact that a mineral estate lessee intends to use nondestructive in situ leaching methods to produce uranium is not conclusive to a determination of ownership under the surface destruction test.\textsuperscript{87} In \textit{Plainsman}, evidence was presented at trial that solution mining rather than open pit mining would be used to extract the uranium.\textsuperscript{86} Nonetheless, the court applied the pre-\textit{Moser} rules since the mineral estate was severed in 1963. \textit{Friedman} confirmed that the surface destruction test applies retrospectively, even to severance documents executed prior to the \textit{Acker} decision.\textsuperscript{89}

Having two separate tests for determining ownership to uranium and other unnamed substances has resulted in uncertainty for surface owners, legal practitioners and mineral owners and their lessees. When determining which estate owns title to hard minerals under the natural and ordinary meaning test, the outcome will favor the owner of the mineral estate. Conversely, when the \textit{Reed II} surface destruction test is applied to a conveyance of “other minerals,” the surface owner has an increased chance of establishing title by submitting these issues of fact to a jury under the surface destruction test.

This fragmentation of Texas mineral title law has had the greatest impact upon mineral estate owners and lessees who are interested in exploring and extracting in situ uranium deposits. Lessees interested in producing uranium must be aware that mineral estates severed prior to the \textit{Moser} decision may not contain rights to uranium deposits even if ISL methods of extraction are proposed.

\textsuperscript{86} Id. (reasoning that the “substantially impaired” language was permissible because it was used in \textit{Acker}). It is important to note that \textit{Reed II} was an attempt to clarify the surface destruction test described in \textit{Acker} and \textit{Reed I}. In \textit{Reed II}, however, the court plainly states: “The test now is whether any reasonable method ... will consume, deplete or destroy the surface.” \textit{Reed II}, 597 S.W.2d at 747. The “substantially impaired” language is not used.

\textsuperscript{87} See, e.g., Martin v. Schneider, 622 S.W.2d 620, 622 (Tex. App.—Corpus Christi 1981, writ ref’d n.r.e.), \textit{disapproved of by} Plainsman Trading Co. v. Crews, 898 S.W.2d 786, 791 (Tex. 1995). (observing the following facts were applicable to a determination of ownership of uranium under the surface destruction test: “(1) Uranium ore deposits are found below the land in question at an average depth of 55 to 66 feet, with the shallowest deposit at 20 feet. (2) Two methods of extraction are available, both of which have been employed on appellants’ land since 1979. The solution, or in-situ method, entails no destruction or depletion of the surface.

\textsuperscript{88} Plainsman Trading Co. v. Crews, 898 S.W.2d 786, 791 (Tex. 1995).

\textsuperscript{89} Friedman v. Texaco, Inc., 691 S.W.2d 586, 589 (Tex. 1985).
A. Land Patents—An Exception to the Surface Destruction Test

Schwarz v. State

There is one notable exception. If the State of Texas issued a patent that reserves “all of the minerals,” the Texas Supreme Court has held that the State of Texas “has always claimed all of the substances commonly classified as ‘minerals’ and only gives away those substances by an express release or conveyance.” Surface destruction is irrelevant.

It is as Justice Ray stated in his concurring opinion in Schwarz: “The ill-begotten journey begun by the court fourteen years ago in Acker v. Guinn, has now come nearly full circle. Its wake is a trail of irreconcilable cases.”

VII. DETERMINING WHICH RULES APPLY TODAY

Although the court has repeatedly stated that certainty and stability in land titles are important, title examiners are not provided definitive rules from which the title to uranium and other hard minerals may be determined through an analysis of the provisions of the recorded documents. Rather, title may be determined through evidence obtained outside of the record, including facts which may not be known to the title examiner.

A. “Other Minerals” Instruments Executed Before June 8, 1983

If the general term “and other minerals” is used in an instrument executed prior to June 8, 1983, ownership of uranium and other hard mineral deposits located “at” the surface will be owned by the surface owner as a matter of law. The ownership of substances which are located “near” the surface will be determined by the surface destruction test announced in Reed II. Title will be determined on a case-by-case basis. If any reasonable method of extraction would consume, deplete or destroy the surface, the court presumes that the contracting parties intended to exclude these unnamed substances from the mineral grant or reservation, and they will be owned by the surface owner.

Furthermore, in the event the severance document predates June 8, 1983 and the substance is located deeper than two hundred feet, it is the belief of this author that the application of the Reed II surface destructive test may be utilized by the surface owner in order to determine title to the unnamed substance. However, the possibility that these substances which are located at depths greater than 200 feet may be economically extracted using surface destructive extraction methods is debatable.

B. “Other Minerals” Instruments Executed After June 8, 1983

Any conveyance or reservation of “other minerals” executed after June 8, 1983, conveys or reserves the uranium to the mineral owner as a matter of law pursuant to Moser. Title to other hard mineral substances will vest according to the ordinary and natural meaning test discussed in Moser. This rule will also apply in cases of pre-1983 severance documents, where the interest has merged into the fee after June 8, 1983.

Under the post-Moser rules, a mineral lessee taking under a general conveyance is not permitted to make use of the surface to the extent allowed by the “reasonable use” and “accommodation” doctrines. The mineral estate owner is subject to strict liability for surface damages regardless of

91 Schwarz, 703 S.W.2d at 191–92 (Ray, J., concurring) (citation omitted).
the necessity or reasonableness of the surface use.

VIII. CONCLUSION

In Reed II, the Texas Supreme Court said of the surface destruction test: “It might result in the ownership of the substance on adjacent tracts being different depending upon the testimony of experts as to the state of the art at the date of the instrument.”93 Despite the court’s attempt to avoid this undesired result through its reformulation of the surface destruction test in Reed II, this is precisely what has happened. Until the Texas Supreme Court adopts a uniform approach for analyzing “other minerals” language in mineral documents regardless of the date of execution, title uncertainty is inevitable with respect to title to uranium and other hard minerals.

Where the severing document is specific as to the identification of the substance to be conveyed or reserved, the court will enforce the terms of the document. Where the severing document is silent as to intent, such as using the term “and other minerals,” the title examiner must determine the date of the severance document. If the severance document is dated before June 8, 1983, the substance will not be granted to nor reserved by the mineral owner if the substance is (i) at the surface; (ii) near the surface (200 feet) and at the date of the severance or at any time until the date of suit, any reasonable method of extraction would consume, destroy or deplete the surface. That substance shall be vested in the surface owner at all depths where it is found.

Where the severance document is executed on June 8, 1983 or thereafter, the natural and ordinary meaning of the substance will be given effect although the instrument refers to the substance only as “and other minerals.” In that event, uranium will be deemed to be a mineral as a matter of law.94 This rule also applies where the severance document predates June 8, 1983, but the mineral and surface estates later merge and are conveyed or reserved after June 8, 1983.95

The title examiner should not take the risk of determining title to these substances, but should advise the client according to the rules set out in Reed II and Moser. When the client asks for a definite answer to the question, “Whose uranium is it?,” you can say, “Uranium – Myranium.”

For an excellent discussion of these concepts, please see Laura Burney’s article, “Oil, Gas, and Other Minerals” Clauses in Texas: Who’s on First?.96

---

93 Reed II, 597 S.W.2d at 747 (critiquing the surface destruction test as outlined in Reed I).


95 Friedman v. Texaco, Inc., 691 S.W.2d 586, 589 (Tex. 1985).