SUPREME COURT OF THE UNITED STATES

No. 98–830

AMOCO PRODUCTION COMPANY, ON BEHALF OF ITSELF AND THE CLASS IT REPRESENTS, PETITIONER *v.* SOUTHERN UTE INDIAN TRIBE ET AL.

ON WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE TENTH CIRCUIT

[June 7, 1999]

JUSTICE KENNEDY delivered the opinion of the Court.

Land patents issued pursuant to the Coal Lands Acts of 1909 and 1910 conveyed to the patentee the land and everything in it, except the "coal," which was reserved to the United States. Coal Lands Act of 1909 (1909 Act), 35 Stat. 844, 30 U. S. C. §81; Coal Lands Act of 1910 (1910 Act), ch. 318, 36 Stat. 583, 30 U. S. C. §§83–85. The United States Court of Appeals for the Tenth Circuit determined that the reservation of "coal" includes gas found within the coal formation, commonly referred to as coalbed methane gas (CBM gas). See 151 F. 3d 1251, 1256 (1998) (en banc). We granted certiorari, 525 U. S. ___ (1999), and now reverse.

I

During the second half of the nineteenth century, Congress sought to encourage the settlement of the West by providing land in fee simple absolute to homesteaders who entered and cultivated tracts of a designated size for a period of years. See, *e.g.*, 1862 Homestead Act, 12 Stat. 392; 1877 Desert Land Act, ch. 107, 19 Stat. 377, as amended, 43 U. S. C. §§ 321–323. Public lands classified

as valuable for coal were exempted from entry under the general land-grant statutes and instead were made available for purchase under the 1864 Coal Lands Act, ch. 205, §1, 13 Stat. 343, and the 1873 Coal Lands Act, ch. 279, §1, 17 Stat. 607, which set a maximum limit of 160 acres on individual entry and minimum prices of $10 to $20 an acre. Lands purchased under these early Coal Lands Acts– like lands patented under the Homestead Acts– were conveyed to the entryman in fee simple absolute, with no reservation of any part of the coal or mineral estate to the United States. The coal mined from the lands purchased under the Coal Lands Acts and from other reserves fueled the Industrial Revolution.

At the turn of the twentieth century, however, a coal famine struck the West. See Hearings on Coal Lands and Coal-Land Laws of the United States before the House Committee on Public Lands, 59th Cong., 2d Sess., 11–13 (1906) (testimony of Edgar E. Clark, Interstate Commerce Commissioner). At the same time, evidence of widespread fraud in the administration of federal coal lands came to light. Lacking the resources to make an independent assessment of the coal content of each individual land tract, the Department of the Interior in classifying public lands had relied for the most part on the affidavits of entrymen. *Watt* v. *Western Nuclear, Inc.*, 462 U. S. 36, 48, and n. 9 (1983). Railroads and other coal interests had exploited the system to avoid paying for coal lands and to evade acreage restrictions by convincing individuals to falsify affidavits, acquire lands for homesteading, and then turn the land over to them. C. Mayer & G. Riley, Public Domain, Private Dominion 117–118 (1985).

In 1906, President Theodore Roosevelt responded to the perceived crisis by withdrawing 64 million acres of public land thought to contain coal from disposition under the public land laws. *Western Nuclear*, 462 U. S., at 48–49. As a result, even homesteaders who had entered and

worked the land in good faith lost the opportunity to make it their own unless they could prove to the land office that the land was not valuable for coal.

President Roosevelt's order outraged homesteaders and western interests, and Congress struggled for the next three years to construct a compromise that would reconcile the competing interests of protecting settlers and managing federal coal lands for the public good. President Roosevelt and others urged Congress to begin issuing limited patents that would sever the surface and mineral estates and allow for separate disposal of each. See *id.*, at 49 (quoting Special Message to Congress, Jan. 22, 1909, 15 Messages and Papers of the Presidents 7266). Although various bills were introduced in Congress that would have severed the estates– some of which would have reserved "natural gas" as well as "coal" to the United States– none was enacted. See 41 Cong. Rec. 630 (1907) (bill by Rep. Volstead "reserving coal, lignite, petroleum, and natural-gas deposits from disposal . . . under existing land laws"); *id.*, at 1483–1484 (bill by Sen. La Follette providing for the sale of surface lands, but "reserving from entry and sale the mineral rights to coal and other materials mined for fuel, oil, gas, or asphalt"); *id.*, at 1788 (bill by Sen. Nelson "to provide for the reservation of the coal, lignite, oil, and natural gas in the public lands").

Finally, Congress passed the Coal Lands Act of 1909, which authorized the Federal Government, for the first time, to issue limited land patents. In contrast to the broad reservations of mineral rights proposed in the failed bills, however, the 1909 Act provided for only a narrow reservation. The Act authorized issuance of patents to individuals who had already made good-faith agricultural entries onto tracts later identified as coal lands, but the issuance was to be subject to "a reservation to the United States of all coal in said lands, and the right to prospect for, mine, and remove the same." 30 U. S. C. §81. The Act

also permitted the patentee to "mine coal for use on the land for domestic purposes prior to the disposal by the United States of the coal deposit." *Ibid*. A similar Act in 1910 opened the remaining coal lands to new entry under the homestead laws, subject to the same reservation of coal to the United States. 30 U. S. C. §§83–85.

Among the lands patented to settlers under the 1909 and 1910 Acts were former reservation lands of the Southern Ute Indian Tribe, which the Tribe had ceded to the United States in 1880 in return for certain allotted lands provided for their settlement. Act of June 15, 1880, ch. 223, 21 Stat. 199. In 1938, the United States restored to the Tribe, in trust, title to the ceded reservation lands still owned by the United States, including the reserved coal in lands patented under the 1909 and 1910 Acts. As a result, the Tribe now has equitable title to the coal in lands within its reservation settled by homesteaders under the 1909 and 1910 Acts.

We are advised that over 20 million acres of land were patented under the 1909 and 1910 Acts and that the lands– including those lands in which the Tribe owns the coal– contain large quantities of CBM gas. Brief for Montana et al. as *Amici Curiae* 2. At the time the Acts were passed, CBM gas had long been considered a dangerous waste product of coal mining. By the 1970's, however, it was apparent that CBM gas could be a significant energy resource, see Duel & Kimm, Coalbed Gas: A Source of Natural Gas, Oil & Gas J., June 16, 1975, p. 47, and, in the shadow of the Arab oil embargo, the Federal Government began to encourage the immediate production of CBM gas through grants, see 42 U. S. C. §§5901–5915 (1994 ed. and Supp. III), and substantial tax credits, see 26 U. S. C. §29 (1994 ed. and Supp. III).

Commercial development of CBM gas was hampered, however, by uncertainty over its ownership. "In order to expedite the development of this energy source," the So-

licitor of the Department of the Interior issued a 1981 opinion concluding that the reservation of coal to the United States in the 1909 and 1910 Acts did not encompass CBM gas. See *Ownership of and Right to Extract Coalbed Gas in Federal Coal Deposits*, 88 Interior Dec. 538, 539. In reliance on the Solicitor's 1981 opinion, oil and gas companies entered into leases to produce CBM gas with individual landowners holding title under 1909 and 1910 Act patents to some 200,000 acres in which the Tribe owns the coal.

In 1991, the Tribe brought suit in Federal District Court against petitioners, the royalty owners and producers under the oil and gas leases covering that land, and the federal agencies and officials responsible for the administration of lands held in trust for the Tribe. The Tribe sought, *inter alia*, a declaration that Congress' reservation of coal in the 1909 and 1910 Acts extended to CBM gas, so that the Tribe– not the successors in interest of the land patentees– owned the CBM gas.

The District Court granted summary judgment for the defendants, holding that the plain meaning of "coal" is the "solid rock substance" used as fuel, which does not include CBM gas. 874 F. Supp. 1142, 1154 (Colo. 1995). On appeal, a panel of the Court of Appeals reversed. 119 F. 3d 816, 819 (CA10 1997). The court then granted rehearing en banc on the question whether the term "coal" in the 1909 and 1910 Acts "unambiguously excludes or includes CBM." 151 F. 3d, at 1256. Over a dissenting opinion by Judge Tacha, joined by two other judges, the en banc court agreed with the panel. *Ibid*. The court held that the term "coal" was ambiguous. *Ibid*. It invoked the interpretive canon that ambiguities in land grants should be resolved in favor of the sovereign and concluded that the coal reservation encompassed CBM gas. *Ibid*.

The United States did not petition for, or participate in, the rehearing en banc. Instead, it filed a supplemental

brief explaining that the Solicitor of the Interior was reconsidering the 1981 Solicitor's opinion in light of the panel's decision. Brief for Federal Respondents 14, n. 8. On the day the Government's response to petitioners' certiorari petition was due, see *id.*, at 47, n. 37, the Solicitor of the Interior withdrew the 1981 opinion in a one-line order, see Addendum to Brief for Federal Respondents in Opposition 1a. The United States now supports the Tribe's position that CBM gas is coal reserved by the 1909 and 1910 Acts.

II

We begin our discussion as the parties did, with a brief overview of the chemistry and composition of coal. Coal is a heterogeneous, noncrystalline sedimentary rock composed primarily of carbonaceous materials. See, *e. g.*, Gorbaty & Larsen, Coal Structure and Reactivity, in 3 Encyclopedia of Physical Science and Technology 437 (R. Meyers ed., 2d ed. 1992). It is formed over millions of years from decaying plant material that settles on the bottom of swamps and is converted by microbiological processes into peat. Van Krevelen, Coal 90 (3d ed. 1993). Over time, the resulting peat beds are buried by sedimentary deposits. *Id.*, at 91. As the beds sink deeper and deeper into the earth's crust, the peat is transformed by chemical reactions which increase the carbon content of the fossilized plant material. *Ibid*. The process in which peat transforms into coal is referred to as coalification. *Ibid*.

The coalification process generates methane and other gases. R. Rogers, Coalbed Methane: Principles and Practice 148 (1994). Because coal is porous, some of that gas is retained in the coal. CBM gas exists in the coal in three basic states: as free gas; as gas dissolved in the water in coal; and as gas "adsorped" on the solid surface of the coal, that is, held to the surface by weak forces called van der

Waals forces. *Id.*, at 16–17, 117. These are the same three states or conditions in which gas is stored in other rock formations. Because of the large surface area of coal pores, however, a much higher proportion of the gas is adsorped on the surface of coal than is adsorped in other rock. *Id.*, at 16–17. When pressure on the coalbed is decreased, the gas in the coal formation escapes. As a result, CBM gas is released from coal as the coal is mined and brought to the surface.

III

While the modern science of coal provides a useful backdrop for our discussion and is consistent with our ultimate disposition, it does not answer the question presented to us. The question is not whether, given what scientists know today, it makes sense to regard CBM gas as a constituent of coal but whether Congress so regarded it in 1909 and 1910. In interpreting statutory mineral reservations like the one at issue here, we have emphasized that Congress "was dealing with a practical subject in a practical way" and that it intended the terms of the reservation to be understood in "their ordinary and popular sense." *Burke* v. *Southern Pacific R. Co.*, 234 U. S. 669, 679 (1914) (rejecting "scientific test" for determining whether a reservation of "mineral lands" included "petroleum lands"); see also *Perrin* v. *United States* 444 U. S. 37, 42 (1979) ("[U]nless otherwise defined, words will be interpreted as taking their ordinary, contemporary, common meaning" at the time Congress enacted the statute). We are persuaded that the common conception of coal at the time Congress passed the 1909 and 1910 Acts was the solid rock substance that was the country's primary energy resource.

A

At the time the Acts were passed, most dictionaries defined coal as the solid fuel resource. For example, one

contemporary dictionary defined coal as a "solid and more or less distinctly stratified mineral, varying in color from dark-brown to black, brittle, combustible, and used as fuel, not fusible without decomposition and very insoluble." 2 Century Dictionary and Cyclopedia 1067 (1906). See also American Dictionary of the English Language 244 (N. Webster 1889) (defining "coal" as a "black, or brownish black, solid, combustible substance, consisting, like charcoal, mainly of carbon, but more compact"); 2 New English Dictionary on Historical Principles 549 (J. Murray ed. 1893) (defining coal as a "mineral, solid, hard, opaque, black, or blackish, found in seams or strata in the earth, and largely used as fuel"); Webster's New International Dictionary of the English Language 424 (W. Harris & F. Allen eds. 1916) (defining coal as a "black, or brownish black, solid, combustible mineral substance").

In contrast, dictionaries of the day defined CBM gas—then called "marsh gas," "methane," or "fire-damp"— as a distinct substance, a gas "contained in" or "given off by" coal, but not as coal itself. See, *e. g.*, 3 Century Dictionary and Cyclopedia 2229 (1906) (defining "fire-damp" as "[t]he gas contained in coal, often given off by it in large quantities, and exploding, on ignition, when mixed with atmospheric air"; noting that "[f]ire-damp is a source of great danger to life in coal-mines").

As these dictionary definitions suggest, the common understanding of coal in 1909 and 1910 would not have encompassed CBM gas, both because it is a gas rather than a solid mineral and because it was understood as a distinct substance that escaped from coal as the coal was mined, rather than as a part of the coal itself.

B

As a practical matter, moreover, it is clear that, by reserving coal in the 1909 and 1910 Act patents, Congress intended to reserve only the solid rock fuel that was

mined, shipped throughout the country, and then burned to power the Nation's railroads, ships, and factories. Cf. *Leo Sheep Co.* v. *United States*, 440 U. S. 668, 682 (1979) (public land statutes should be interpreted in light of "the condition of the country when the acts were passed" (internal quotation marks omitted)). In contrast to natural gas, which was not yet an important source of fuel at the turn of the century, coal was the primary energy for the Industrial Revolution. See, *e. g.*, D. Yergin, The Prize 543 (1991). See also Brief for Federal Respondents 30 (recognizing that the three primary sources of energy in the United States at the turn of the century were coal, oil, and wood, and that natural gas– even from conventional reservoirs– was not yet an important energy resource).

As the history recounted in Part I, *supra*, establishes, Congress passed the 1909 and 1910 Acts to address concerns over the short supply, mismanagement, and fraudulent acquisition of this solid rock fuel resource. Rejecting broader proposals, Congress chose a narrow reservation of the resource that would address the exigencies of the crisis at hand without unduly burdening the rights of homesteaders or impeding the settlement of the West.

It is evident that Congress viewed CBM gas not as part of the solid fuel resource it was attempting to conserve and manage but as a dangerous waste product, which escaped from coal as the coal was mined. Congress was well aware by 1909 that the natural gas found in coal formations was released during coal mining and posed a serious threat to mine safety. Explosions in coal mines sparked by CBM gas occurred with distressing frequency in the late nineteenth and early twentieth centuries. Brief for National Mining Association as *Amicus Curiae* 7. Congress was also well aware that the CBM gas needed to be vented to the greatest extent possible. Almost 20 years prior to the passage of the 1909 and 1910 Acts, Congress had enacted

the first federal coal-mine-safety law which, among other provisions, prescribed specific ventilation standards for coal mines of a certain depth "so as to dilute and render harmless . . . the noxious or poisonous gases." 1891 Territorial Mine Inspection Act, §6, 26 Stat. 1105. See also 3 Century Dictionary and Cyclopedia, supra, at 2229 (explaining the dangers associated with fire-damp).

That CBM gas was considered a dangerous waste product which escaped from coal, rather than part of the valuable coal fuel itself, is also confirmed by the fact that coal companies venting the gas to prevent its accumulation in the mines made no attempt to capture or preserve it. The more gas that escaped from the coal once it was brought to the surface, the better it was for the mining companies because it decreased the risk of a dangerous gas buildup during transport and storage. Cf. E. Moore, Coal: Its Properties, Analysis, Classification, Geology, Extraction, Uses and Distribution 308 (1922) (noting that the presence of gases such as methane in the coal increases the risk of spontaneous combustion of the coal during storage).

(The fact that CBM gas was known to escape naturally from coal distinguishes it from the "producer gas" that was generated from coal in the 1800's. Brief for Federal Respondents 30. Producer gas was produced by "destructive distillation, that is, by heating the coal to a temperature where it decomposed chemically." App. at 531 (reproducing Perry, The Gasification of Coal, Scientific American 230, (Mar. 1974)). The natural escape of CBM gas from the coal also distinguishes CBM gas from other "volatile matter," expelled when coal is heated, or liquid "coal extracts," which "can be extracted though the use of appropriate solvents." Brief for Federal Respondents 26–27. The United States' expressed concern that if the coal reservation does not encompass CBM gas it does not encompass these "components" of coal, see *ibid.*, is un-

founded.)

There is some evidence of limited and sporadic exploitation of CBM gas as a fuel prior to the passage of the 1909 and 1910 Acts. See, *e.g.*, E. Craig & M. Myers, Ownership of Methane Gas in Coalbeds, 24 Rocky Mt. Min. L. Inst. 767, 768 (1978) ("As early as 1746, methane was being drained from an English coal mine through pipes and used for heating"); see also *United States Steel Corp*. v. *Hoge*, 503 Pa. 140, 146, 468 A. 2d 1380, 1383 (1983) (noting that as early as 1900, "certain wells were drilled [into coalbeds in Pennsylvania, which] produced coalbed gas"). It seems unlikely, though, that Congress considered this limited drilling for CBM gas. To the extent Congress had an awareness of it, there is every reason to think it viewed the extraction of CBM gas as drilling for natural gas, not mining coal.

That distinction is significant because the question before us is not whether Congress would have thought that CBM gas had some fuel value, but whether Congress considered it part of the coal fuel. When it enacted the 1909 and 1910 Acts, Congress did not reserve all minerals or energy resources in the lands. It reserved only coal, and then only in lands that were specifically identified as valuable for coal. It chose not to reserve oil, natural gas, or any other known or potential energy resources.

The limited nature of the 1909 and 1910 Act reservations is confirmed by subsequent congressional enactments. When Congress wanted to reserve gas rights that might yield valuable fuel, it did so in explicit terms. In 1912, for example, Congress enacted a statute that reserved "oil and gas" in Utah lands. Act of Aug. 24, 1912, 37 Stat. 496. In addition, both the 1912 Act and a later Act passed in 1914 continued the tradition begun in the 1909 and 1910 Acts of reserving only those minerals enumerated in the statute. See *ibid.;* Act of July 17, 1914, 38 Stat. 509, as amended, 30 U. S. C. §§121–123 (providing

that "lands withdrawn or classified as phosphate, nitrate, potash, oil, gas or asphaltic minerals, or which are valuable for those deposits" could be patented, subject to a reservation to the United States of "the deposits on account of which the lands so patented were withdrawn or classified or reported as valuable"). It was not until 1916 that Congress passed a public lands act containing a general reservation of valuable minerals in the lands. See Stock-Raising Homestead Act, ch. 9, 39 Stat. 862, as amended, 43 U. S. C. §299 (reserving "all the coal and other minerals in the lands" in all lands patented under the Act). See also *Western Nuclear*, 462 U. S., at 49 ("Unlike the preceding statutes containing mineral reservations, the [1916 Stock-Raising Homestead Act] was not limited to lands classified as mineral in character, and it did not reserve only specifically identified minerals").

C

Respondents contend that Congress did not reserve the solid coal but convey the CBM gas because the resulting split estate would be impractical and would make mining the coal difficult because the miners would have to capture and preserve the CBM gas that escaped during mining. See, *e.g.*, Brief for Respondent Southern Ute Indian Tribe 46; see also *id.*, at 25–26 (emphasizing that the reservation includes the right to "mine" the coal, "indicating that Congress reserved all rights needed to develop the underlying coal" including the right to vent CBM gas during mining). We doubt Congress would have given much consideration to these problems, however, because– as noted above– it does not appear to have given consideration to the possibility that CBM gas would one day be a profitable energy source developed on a large scale.

It may be true, nonetheless, that the right to mine the coal implies the right to release gas incident to coal mining where it is necessary and reasonable to do so. The right to

dissipate the CBM gas where reasonable and necessary to mine the coal does not, however, imply the ownership of the gas in the first instance. Rather, it simply reflects the established common-law right of the owner of one mineral estate to use, and even damage, a neighboring estate as necessary and reasonable to the extraction of his own minerals. See, *e.g.*, *Williams* v. *Gibson*, 84 Ala. 228, 4 So. 350 (1888); Rocky Mountain Mineral Foundation, 6 American Law of Mining §200.04 (2d ed. 1997). Given that split estates were already common at the time the 1909 and 1910 Acts were passed, see, *e.g.*, *Chartiers Block Coal Co.* v. *Mellon*, 152 Pa. 286, 25 A. 597 (1893), and that the common law has proved adequate to the task of resolving the resulting conflicts between estates, there is no reason to think that the prospect of a split estate would have deterred Congress from reserving only the coal.

Were a case to arise in which there are two commercially valuable estates and one is to be damaged in the course of extracting the other, a dispute might result, but it could be resolved in the ordinary course of negotiation or adjudication. That is not the issue before us, however. The question is one of ownership, not of damage or injury.

In all events, even were we to construe the coal reservation to encompass CBM gas, a split estate would result. The United States concedes (and the Tribe does not dispute) that once the gas originating in the coal formation migrates to surrounding rock formations it belongs to the natural gas, rather than the coal, estate. See Brief for Federal Respondents 35; Brief for Respondent Southern Ute Indian Tribe 3, n. 4. Natural gas from other sources may also exist in the lands at issue. Including the CBM gas in the coal reservation would, therefore, create a split gas estate that would be at least as difficult to administer as a split coal/CBM gas estate. If CBM gas were reserved with the coal estate, those developing the natural gas resources in the land would have to allocate the gas be-

tween the natural gas and coal estates based on some assessment of how much had migrated outside the coal itself. There is no reason to think Congress would have been more concerned about the creation of a split coal/CBM gas estate than the creation of a split gas estate.

Because we conclude that the most natural interpretation of "coal" as used in the 1909 and 1910 Acts does not encompass CBM gas, we need not consider the applicability of the canon that ambiguities in land grants are construed in favor of the sovereign or the competing canons relied on by petitioners.

The judgment of the Court of Appeals is reversed.

It is so ordered.

JUSTICE BREYER took no part in the consideration or decision of this case.