Appeal from a decision of the Wyoming State Office, Bureau of Land Management, rejecting oil and gas lease offer W-85691.

Affirmed.

1. Oil and Gas Leases: Known Geologic Structure -- Oil and Gas Leases: Noncompetitive Leases

Under 30 U.S.C. § 226(b) (1982), land within a known geological structure of a producing oil or gas field may only be leased by competitive bidding, and where land is determined to be within such a structure while a noncompetitive lease offer is pending, the offer must be rejected.

2. Oil and Gas Leases: Applications: Generally -- Oil and Gas Leases: Known Geologic Structure -- Oil and Gas Leases: Noncompetitive Leases

An applicant for a noncompetitive oil and gas lease who challenges a determination by the Bureau of Land Management that land is within a known geological structure of a producing oil or gas field must show by a preponderance of the evidence that the determination is in error.

3. Estoppel

Estoppel will not lie against the United States where there is no evidence of affirmative misrepresentation or concealment of material fact by the Government.

Sherbourne Partnership appeals a decision of the Wyoming State Office, Bureau of Land Management (BLM), rejecting oil and gas lease offer W-85691. Appellant was the first-drawn applicant for parcel WY 380, listed on the May 1983 Notice of Land Available for Oil and Gas Filings. This parcel encompassed the W 1/2 sec. 10, T. 21 N., R. 91 W., Sixth Principal Meridian, in Sweetwater County, Wyoming.

On August 22, 1983, BLM sent appellant three copies of the offer to lease for this land and requested they be signed, dated, and returned with the first year's rental of $320. On August 29, 1983, BLM received appellant's rental and executed lease and stipulation forms for this lease. On August 13, 1984, BLM issued its decision rejecting appellant's executed offer pursuant to 43 CFR 3112.5-2(b), stating that the land described in the offer was entirely within the Washakie Basin undefined Known Geological Structure (KGS), effective June 14, 1984.

In its statement of reasons appellant challenges the definition of KGS allegedly used by BLM. Appellant argues the KGS determination itself is technically unfounded, and because BLM held appellant's executed lease forms without action for 11 months until after the KGS designation was made, BLM should be estopped from invoking the KGS determination as a basis for rejecting the lease offer. Appellant also claims the decision is arbitrary and capricious, erroneous in fact, and a denial of due process. Appellant requests a hearing and oral argument.

Appellant also argues that the BLM determination was based upon insufficient well control data for the affected area and that BLM erred because there is insufficient production data to demonstrate a presumption that the lands are capable of producing oil or gas in commercial quantities. In support of the contention appellant submitted an affidavit prepared by its consulting geologist which contains his analysis of the data obtained from tests run on wells drilled in the area, concluding that because of "tite" reservoir rocks found in the wells, the land is not within a KGS (Exh. B to SOR). As a part of its response to BLM's answer, appellant submitted a second affidavit in which its expert geologist states:

VIII.

With the lenticularity of the Upper Sandstone in mind the two large lobate-shaped [sic] bodies that trend just slightly east of north through the subject area, as Isopached by the BLM, are more probably large areas in which small lenticular bodies of sand may be found and other areas where no sand deposition whatsoever is present. Even within those areas containing Upper Almond Sandstones, many areas will have no effective porosity or permeability.

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One reason that the area as mapped by the BLM may be too large is that the BLM used a density porosity minimum of 6%. It is my opinion that a more realistic cut-off in clayfilled-shaly sands would be 10-12% density porosity. It is my opinion that a minimum porosity of 6% would not produce any hydrocarbons.

BLM responded and submitted an explanation of the technical data used in making the KGS determination. BLM noted that three geologic horizons underlying the tract have potential oil and gas reserves. These horizons were identified as the Lewis, Almond, and Ericson, with the Almond formation being the primary formation used by BLM to delimit the KGS. BLM found the tract lies essentially on a geologic trend between a discovery 3 miles to the northeast (2-12 Federal) and a well with noncommercial shows 3 1/2 miles to the southwest (Buck Draw #1). BLM noted the 80 percent success rate in the Washakie Basin, which does not count abandoned wells with evidence of free gas. In its reply to appellant's supplemental brief, BLM addresses appellant's technical arguments as follows:

The continuity of the Upper Almond is real, and it can be easily demonstrated. Hundreds of well logs were used in this study as well as numerous resultant cross-sections from the logs. Lower sands in the Almond Fm [Formation] and the Ericson Fm may be discontinuous in nature, but this fact does not distract [sic] from the Basin's prolific productivity potential. The lenticularity or discontinuity of a specific sand is not important in a stratigraphic province, but rather it is the large number of stacked and interfingering potential reservoir sands found throughout the Basin.

The continuity of the Upper Almond sand can be easily demonstrated via isopachous maps. The large lobate nature of this north-northeast trending sand has also appeared in the literature (e.g., McPeek, 1981, AAPG vol. 65, p. 1078).

The density porosity of 6% was chosen in the study to represent a conservative lower porosity limit. In addition, numerous wells in the basin produce from the Upper Almond sand with this porosity or less.

A KGS is defined as "technically the trap in which an accumulation of oil or gas has been discovered by drilling and determined to be productive, the limits of which include all acreage that is presumptively productive." 43 CFR 3100.05(1) [sic]. A KGS can be extended to the limits of the trap, however, in this case the limits of the stratigraphic trap represented by the Washakie Basin covers a much broader geographic area than does the Washakie Basin KGS. This difference in size results from the parameter chosen to define the KGS.
border. The density porosity of 6% was chosen to represent the zero-foot isopach line on the net effective reservoir map. The zero-foot net effective reservoir isopachous line outlines the limits of the Upper Almond Fm stratigraphic trap. Each well spacing unit (i.e., 640 acres) cut by the zero-foot isopach line was included within the KGS boundary. Therefore, the net effective reservoir is herein defined as a thickness of sand that has sufficient porosity to be presumptively productive for oil or gas. The conservative nature of this definition is obvious since a zero-foot isopach line could have been established using 0% porosity. In addition, the net effective reservoir limits are being worked up for middle and lower Almond Fm sands as well as for sands with the Lewis Shale and Ericson Fm. (BLM Reply to Supplemental Brief, pp. 1-3).

[1] Section 17(b) of the Mineral Leasing Act of 1920 specified that public lands within a known geological structure of a producing oil or gas field may be leased only to the highest responsible qualified bidder after competitive bidding. 30 U.S.C. § 226(b)(1) (1982); 43 CFR 3120.1(a). Noncompetitive leases may issue to the first-qualified offeror for other public domain lands. 30 U.S.C. § 226(c) (1982); 43 CFR 3100.3-1. If lands included in a noncompetitive lease offer are designated as within a KGS at any time before lease issuance, the noncompetitive lease offer must be rejected as to those lands. 43 CFR 3110.3(a); 43 CFR 3112.5-2(b). McDade v. Morton, 353 F. Supp. 1006 (D.D.C. 1973), aff'd, 494 F.2d 1156 (D.C. Cir. 1974); Harry S. Hills, 71 IBLA 302 (1983); Richard J. DiMarco, 53 IBLA 130 (1981), aff'd, DiMarco v. Watt, Civ. No. 81-2243 (D.D.C. Mar. 25, 1982). Such rejection is not an attempt to thwart noncompetitive lease applicants. It is the only course of action available to BLM if a KGS designation is properly made.

[2] In 43 CFR 3100.0-5(1) "Known Geological Structure" is defined as: "technically the trap in which an accumulation of oil or gas has been discovered by drilling and determined to be productive, the limits of which include all acreage that is presumptively productive."

It is important to keep in mind that if BLM includes land in a KGS it does not necessarily mean that the land is currently producing or conclusively known to be productive of oil or gas. When BLM includes land in KGS, it does not predict future productivity. Land may properly be included in a KGS based upon geologic evidence indicating that a producing deposit extends under the land such that the land is considered to be "presumptively productive." Charles J. Frank, 90 IBLA 33 (1985); Thomas Bohr, Jr., 89 IBLA 384 (1985).

An oil and gas lease applicant challenging a KGS determination has the burden of showing by a preponderance of the evidence that the determination is in error. Bender v. Clark, 744 F.2d 1424 (10th Cir. 1984). In this case, the BLM geological data and supporting information substantiate the KGS determination. BLM has submitted evidence to show productive formations extend under this tract, and that a well on this tract would be likely to show positive results in at least one of the three target formations. After an examination of the evidence submitted and the briefs filed by the parties, we conclude appellant has not shown by a preponderance of the evidence that

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BLM erred in its determination that the land is at least "presumptively productive" for oil or gas within the meaning of 43 CFR 3100.0-5(1). 1/ Appellant and its expert witness have demonstrated that there is room for differences of opinion regarding the exact location of the KGS boundary. However, they have not demonstrated to our satisfaction that their interpretation of the data is likely to be more correct than that made by BLM. In view of this finding, the Board finds a hearing unnecessary.

[3] Appellant claims the Government should be estopped from denying appellant a lease, even if the parcel were properly found to be within a KGS. However, BLM does not obligate itself to issue a lease by soliciting applications in the simultaneous system, by sending lease forms to an offeror for signature, or upon receipt of signed offer forms. It is only upon execution by BLM that the lease becomes effective. Norma Richardson, 86 IBLA 168 (1985). As this Board stated in Evelyn D. Ruckstuhl, 85 IBLA 69 at 72-3 (1985), "A drawing does not vest in a lease applicant a right, contractual or otherwise, to an oil and gas lease, but merely establishes the priority of filing. R. K. O'Connell, 85 IBLA 29 (1985); Joseph A. Talladira, [83 IBLA 256 (1984)]; McDade v. Morton, supra at 1010." See also Schraier v. Hickel, 419 F.2d 633, 666 (D.C. Cir. 1969). Furthermore, as this Board noted in Frederick W. Lowey, 76 IBLA 195 (1983), absent a showing of affirmative misrepresentation or concealment of material fact by the Government, there can be no estoppel against the United States. United States v. Ruby Co., 588 F.2d 697, 703-4 (9th Cir. 1978). There is no indication in the record of any concealment of the process BLM used or any irregularity in the KGS determination.

Further, the authority of the United States to enforce a public interest such as the interest created by the Mineral Leasing Act is not lost by official delays in the performance of that duty. 43 CFR 1810.3; Bob F. Abernathy, 71 IBLA 149 (1983).

Therefore, pursuant to the authority delegated to the Board of Land Appeals by the Secretary of the Interior, 43 CFR 4.1, the decision of the Wyoming State Office is affirmed.

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R. W. Mullen
Administrative Judge

We concur:

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James L. Burski                        Will A. Irwin
Administrative Judge                  Administrative Judge

1/ This Board has previously examined technical challenges to the Washakie Basin KGS and sustained the determination. Thomas Bohr, supra; Mary Lee H. Picou, 88 IBLA 356 (1985).