Appeal from a decision of the Wyoming State Office, Bureau of Land Management, rejecting simultaneous oil and gas lease application W-85668.

Affirmed.

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

Lands within a known geologic structure of a producing oil or gas field may be leased only after competitive bidding under the provisions of 30 U.S.C. § 226(b) (1982). Where lands are determined to be within such a structure after a simultaneous oil and gas lease drawing but prior to issuance of a lease, a noncompetitive lease application for such lands 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 that certain lands are within the known geologic structure of a producing oil or gas field has the burden of showing by a preponderance of the evidence that the determination is in error.
for parcel WY 357 on the May 1983 list of parcels available for simultaneous filings. The basis for the decision was that the lands embraced in parcel WY 357 were located within the known geologic structure (KGS) of a producing oil or gas field. 1/ BLM explained its rejection of the simultaneous noncompetitive oil and gas lease application as follows:

The District Manager of our Rawlins office advised in a memorandum dated May 17, 1984, that the lands in this offer are entirely within the Sherard Known Geological Structure which was effective January 4, 1984.

Therefore, your application is rejected under regulation 43 CFR 3112.5-2(b) which provides that an offer shall be rejected if the lands are determined to be within a Known Geological Structure of a producing oil and gas field prior to the time a lease is issued. Lands on a Known Geological Structure are leasable only by competitive bidding in accordance with regulation 43 CFR 3120.

Appellant's statement of reasons for appeal states the following objections to BLM's expansion of two undefined KGS's, Lamont and Sherard (aggregating a total of 1,015.53 acres), into one large KGS denominated the New Sherard KGS comprising 17,861.59 acres including the lands in parcel WY 357:

STRUCTURAL POSITION: The reported sample and electric log tops of the Frontier Formation in area wells show that the subject acreage lies structurally low to production. The contour map enclosed, by Carl E. Jenkins, depicts the geometry of the structure and fault zones in relationship to the acreage. The well information indicates that the greater part of the acreage lies below +4800'. The wells to the west in section 9 and 22 have a Frontier datum of +1677' and +3264' respectively, and verify the steep western flank of the anticline. The commercial hydrocarbons lie in Frontier sands localized by a small closure on the anticline and no well nearby has produced below +4821' (SESE section 14). The low structural position is not considered "presumptively productive" which is further substantiated below.

ABANDONED HOLES ON AND NEARBY ACREAGE: On July 7, 1929 P & R Corporation abandoned a 3073' Morrison test in the SWNENW of section 14, T 25 N, R 89 W. This well, drilled on the subject acreage, tested to a subsea elevation of +3472' and was determined to have no potential. P & R Corporation also abandoned a 3065' Morrison well in the N1/2SWNE of section 14 with a Frontier sample datum of +4886'. Both of the above mentioned wells indicated no Cretaceous potential on the immediate western flank of

1/ The applicant receiving first priority in the drawing for parcel WY 357, LaVada S. Jackson, was served with the same decision rejecting her application for the reason that the lands were entirely within a KGS. It appears from the record that no appeal was filed by the first-drawn applicant from rejection of her application.
the anticline. The more significant nearby test in the SWSE of section 14 was drilled to the Precambrian by Occidental Petroleum in 1965. The well reported a Frontier datum of +4816’ but was abandoned after 4 drill stem tests in the Frontier, Mowry, Muddy, and Tensleep formations.

FIELD INFORMATION: In July, 1978, independent Carl E. Jenkins prepared field data for the "Sherard, North" field in the Wyoming Geological Association's 1979 Field Symposium. The report enclosed discusses the discovery well, field data and reservoir data. The information in this report which supports arguments against the KGS classification of W-85668 is the productive area: less than 240 acres. The wells drilled below the small apex of the structure have been unsuccessful and indicate the production limits.

In an answer filed with the Board, counsel for BLM contends that the record shows BLM's determination to be supported by substantial evidence, and that BLM's determination should not be reversed where the record indicates that "BLM had a rational basis for the determination" citing Stephen M. Naslund, 79 IBLA 252, 254 (1984).

[1] Section 17 of the Mineral Leasing Act of 1920, as amended, 30 U.S.C. § 226(b) (1982), provides that "if the lands to be leased are within any known geological structure of a producing oil or gas field, they shall be leased to the highest responsible qualified bidder by competitive bidding **." See 43 CFR 3100.3-1; 43 CFR Subpart 3120 (concerning competitive leases). The regulation specifically governing simultaneous noncompetitive oil and gas lease applications provides:

If prior to the time a lease is issued, all or part of the lands in the offer are determined to be within a known geological structure of a producing oil or gas field, the offer shall be rejected in whole or in part as may be appropriate and the lease, if issued, shall include only those lands not within the known geological structure of a producing oil or gas field.

43 CFR 3112.5-2(b). It is well settled that a noncompetitive lease application for lands designated within a KGS must be rejected where lands embraced in that application are designated as within a KGS prior to issuance of the lease. See, e.g., Leonard Luning, 87 IBLA 123 (1985); John P. Brogan, 85 IBLA 379 (1985); Evelyn D. Ruckstuhl, 85 IBLA 69 (1985). This Department has no authority to issue a noncompetitive lease for lands within a KGS. McDonald v. Clark, 771 F.2d 460 (10th Cir. 1985); McDade v. Morton, 353 F. Supp. 1006 (D.D.C. 1973), aff’d, 494 F.2d 1156 (D.C. Cir. 1974).

[2] This Board has stated repeatedly that an applicant for an oil and gas lease who challenges a determination that certain lands are situated within the KGS of a producing oil and gas field has the burden of showing the determination is in error. Evelyn D. Ruckstuhl, supra; Reed International, 80 IBLA 145 (1984); R. C. Altrogge, 78 IBLA 24 (1983). The burden on appellant is to show by a preponderance of the evidence that the determination is erroneous. See Bender v. Clark, 744 F.2d 1424 (10th Cir. 1984).
The term "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." 43 CFR 3100.0-5(1). The Secretary of the Interior has historically delegated the responsibility for determining the existence and extent of a KGS to his technical expert in the field. When that expert makes a determination that lands qualify for a KGS, the Secretary is entitled to rely upon that reasoned opinion. Bruce Anderson, 63 IBLA 111 (1982). A KGS determination recognizes the existence of a continuous entrapping structure on some part of which there is production; however, it is not a guarantee that all lands included therein are productive. See, e.g., Robert G. Lynn, 61 IBLA 153 (1982).

In an undated memorandum, the District Manager, Rawlins, explained to the State Director, Wyoming, the reasons why the two previous KGS determinations were incorporated into one larger undefined KGS, to be known as the new Sherard KGS. One significant factor was the occurrence of two producing gas wells outside the previous KGS boundaries:

One consists of a new field (a Frontier discovery) completed in March 1, 1982 in Section 14, T. 25 N., R. 89 W. Farmer[s] Union Central Exchange is the operator of this 7-14 Federal well. Initial production was 1,826 MCFGPD ** *

The other gas well is the 43-32 Wold-Federal completed on March 11, 1983. This well occurs just outside the east boundary of the Sherard KGS in the SW 1/4, Section 32, T. 25 N., R. 88 W. This well was completed in both the Muddy and Dakota Formations. Initial production comprised 70 MCFGPD ** *

Appellant argues that the presence of abandoned wells on the acreage embraced in his simultaneous lease application, and on nearby acreage, militates against those lands being "presumptively productive" of oil and gas. In Evelyn D. Ruckstuhl, supra at 72, the appellant made a similar argument, and the Board responded that "evidence of producing wells in the area here in question is more indicative of the character of the area than the existence of dry holes * * *." Appellant points to the 1929 abandonment by P & R Corporation of a Morrison test in sec. 14, T. 25 N., R. 89 W., in support of his case. BLM responds that drilling and production techniques were crude in 1929 as compared with today's standards. To illustrate the impact of modern technology, BLM states that in 1982 Gulf Energy "re-entered a 1980 Tensleep oil well * * * and converted it to a gas well" fracturing "the Frontier and Dakota Formations" and obtaining a "commingled production of 815 MCFGPD." (Memorandum from District Manager, Rawlins, Wyoming, to Regional Solicitor, Rocky Mountain Region, dated Oct. 11, 1984).

As the answer filed on behalf of BLM explains, appellant's analysis rests primarily upon one geologic formation, the Frontier Formation. The BLM

2/ The narrative attached to the memorandum stated: "The producing Formations within the KGS's boundary include the Frontier, Muddy, Dakota, Lakota, and Tensleep."
answer and the supporting memorandum dated October 11, 1984, from the District Manager, Rawlins, to the Regional Solicitor, Rocky Mountain Region, show that the Frontier Formation is the uppermost in a "stratigraphic column" embracing, from the shallowest to the deepest formation, the Frontier, Mowry, Muddy, Dakota, Lakota, Morrison, Sundance, Nugget, and Tensleep Formations. Appellant asserts that available information indicates that the greater part of the new Sherard KGS lies below +4800' on the isopach map of the Frontier formation, and that the commercial hydrocarbons lie in Frontier sands "localized by a small closure on the anticline and no well nearby has produced below +4821'." BLM disputes the relevance of this assertion to defining the limits of the KGS, asserting that other formations, in addition to the Frontier, have produced hydrocarbons from the KGS. For example, the 1980 Tensleep Formation oil well in sec. 1, T. 25 N., R. 89 W., which Gulf Energy converted in 1982 into a gas well, produced gas from the Frontier and Dakota formations. Similarly, one of the wells cited by the BLM in support of the KGS expansion was productive from the Muddy and Dakota Formations. Thus, prior experience with Frontier Formation discoveries is not dispositive of the extent of the structure as it relates to production from other producing formations.

Based upon a review of the case file, pleadings, and documents submitted by the parties, we conclude appellant has failed to meet the burden of showing that the challenged KGS determination was in error.

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

C. Randall Grant, Jr.
Administrative Judge

We concur:

Franklin D. Arness
Administrative Judge

Bruce R. Harris
Administrative Judge

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