

Appeal from decision of the Utah State Office, Bureau of Land Management, rejecting simultaneous oil and gas lease application U-53557.

Affirmed.

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

Under 30 U.S.C. § 226(b) (1982), lands within the known geologic structure of a producing oil or gas field may be leased only by competitive bidding. 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 simultaneous oil and gas lease application for such lands must be rejected. The applicant has no vested rights to issuance of a lease.

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

An applicant for a simultaneous oil and gas lease who challenges a determination by BLM that land is within the known geologic structure of a producing oil or gas field has the burden of showing that the determination is in error.

APPEARANCES: R. K. O'Connell, Casper, Wyoming, pro se; W. P. Elliott, Jr., Esq., Office of the Regional Solicitor, Intermountain Region, Salt Lake City, Utah, for Bureau of Land Management.

OPINION BY ADMINISTRATIVE JUDGE ARNESS

R. K. O'Connell has appealed from a decision dated March 22, 1984, by the Utah State Office, Bureau of Land Management (BLM), rejecting his simultaneous oil and gas lease application U-53557. Appellant was the first-priority applicant for parcel UT 205 situated in secs. 1, 12, and 24, T. 20 S., R. 7 E., Salt Lake Meridian, Emery County, Utah. BLM rejected the application because it sought land which had been determined to be within the Greater Ferron known geologic structure (KGS) effective December 9, 1983, and could therefore be leased only by competitive bidding.

A memorandum from the BLM Deputy State Director, Mineral Resources, establishes the following statistical and geological analysis of the Ferron KGS in support of the determination that lease U-53557 should be included in the structure:

The Ferron KGS was established in 1963 based on gas production from two closed domal structures. The KGS was expanded in 1982 to include several new wells that were also producing gas from the Ferron Sandstone member of the Mancos Shale but were not related to any obvious structures. Continuing exploration by several operators has further extended the area of stratigraphically controlled production to the north. The recommended expansion includes [seven] wells producing from the Ferron:

* * * * *

Productive depths range from 1,949 to 3,418 feet. Initial rates of production vary from 44 to 1,175 MCFGPD. One well (SESE 6, T. 18 S., R. 8 E.,) had an initial production rate of 9 BOPD.

Exploration in the Miller Creek area has also demonstrated the presence of gas in the Ferron Sandstone and underlying Tununk Shale. [Three] wells tested 184 to 455 MCFGPD from depths of 390 to 880 feet:

* * * * *

Another well * * * tested 168 MCFGPD from the Dakota Formation (1,198 to 1,204 feet).

A small unnamed KGS in T. 18 S., R. 7 E. based on production from the Moenkopi Formation is included in the recommended expansion. Also, a well in SENW 15-17S-8E had oil shows in the Moenkopi. Another well in SESW 27-15S-9E produced a small amount of gas from the Manning Canyon Formation and some other wells in the area had gas shows in the Ferron Sandstone.

The Ferron Sandstone is composed of lenticular and discontinuous sands generally interpreted as marine bars and stream channels developed along a north-south trending shoreline. At any one location several sand lenses generally are present. These lenses are separated by shale and may have separate gas-water contacts. There are no pronounced structures north of the Ferron Structure; the Ferron strikes northeast-southwest and dips to the northwest. Some minor structural noses are present but appear to have little or no influence on gas occurrence. South of Miller Creek the gas is largely restricted to the uppermost sand lenses and entrapment results from complex stratigraphic changes within these sands.

(Memorandum dated Dec. 20, 1983). The memorandum also includes a map showing the KGS as expanded, the unnamed KGS, and the wells described in the memorandum.

With his statement of reasons for appeal, appellant has submitted a map originally published in 1961 in the Intermountain Association of Petroleum Geologists' A Symposium of the Oil and Gas Fields of Utah, depicting the parcel constituting lease U-53557 as being outside the Ferron KGS as originally designated. Appellant has also enclosed a second map published by the University of Utah in 1979, which includes more recent information showing wells and production data from the Ferron and Kaibab Pools, Ferron Field. With reference to that map, appellant states that the closest Ferron production is nearly 1 mile away from lease U-53557. Referring to a University of Utah publication, appellant asserts that the hydrocarbon accumulation of the Ferron Sandstone is due to stratigraphic changes as well as structural closure. Sandstone lenses are interpreted to be shoreline sands deposited in response to oscillations in sea levels. Appellant states: "These leases are discontinuous and have individually separated gas/water contacts, even on-structure." Finally, appellant asserts that only three off-structure wells have been productive to date, and contends that in view of the known changes in the stratigraphic and the lenticular nature of the sandstones "it is unrealistic to assume that production a mile or more away implies that U-53557 is part of the Greater Ferron Known Geologic Structure" (Statement of Reasons at 2).

In answer, BLM has submitted a statistical analysis from the Chief, Branch of Fluid Minerals, together with a recent map of the vicinity. The BLM answer explains pertinently:

Lease U-53557 lies on the flanks of the structure and is structurally equivalent to or higher than the productive well in NW NE Sec. 2, T. 20 S., R. 7 E. Two other wells structurally lower than lease U-53557 in Sec. 35, T.19S., R.7E. tested 50 to 100 MCFGPD. Based on structural considerations, lease U-53557 is presumptively productive and should be classified as KGS.

It has long been recognized that the Ferron Sandstone is not one homogeneous sand body but rather consists of lenticular bodies more or less separated by shale intervals. More than one sand may be productive at a given location (American Petrofina - English State No. 1-22, NESW Sec. 22, T.20S., R.7E. for example). The fact that individual sands are lenticular does not mean that production does not extend for considerable distances because of the numerous sand lenses present. As pointed out above more than one gas-bearing sand may be present at any location and whether or not a well is successful may largely depend on the drilling and completion techniques used. In other words, the various sand lenses are predominantly gas-bearing.

(Attachment to BLM answer dated June 12, 1984).

[1] Section 17(b) of the Mineral Leasing Act, as amended, 30 U.S.C. § 226(b) (1982), provides that public domain lands which are within the KGS of a producing oil or gas field "shall be leased * * * by competitive bidding." See also 43 CFR 3100.3-1. Where lands embraced in a noncompetitive oil and gas lease offer are designated as within a KGS prior to issuance of the lease, the lease offer must be rejected. R. C. Altrogge, 78 IBLA 24 (1983); 43 CFR 3112.5-2(b). The Department has no discretion to

issue a noncompetitive oil and gas lease for such lands. McDade v. Morton, 353 F. Supp. 1006 (D.D.C. 1973), aff'd, 494 F.2d 1156 (D.C. Cir. 1974); Frederick W. Lowey, 76 IBLA 195 (1983).

[2] Appellant has challenged the determination that parcel UT 205 is situated within a KGS. the burden of proving that the KGS determination is in error is on appellant. R. C. Altrogge, supra. 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 3100.0-5(a). A KGS designation recognizes the existence of a continuous entrapping structure on some part of which there is production. It does not indicate what is known of the productivity of the lands in a structure, nor does it predict future productivity. A KGS designation of certain land may be made on the basis of drill stem tests, not just completed producing wells, which indicate that a reservoir which extends under such lands is productive. Lloyd Chemical Sales, Inc., 82 IBLA 182 (1984).

Appellant argues that the closest Ferron production to parcel UT 205 is nearly 1 mile away and that the lenticular and discontinuous structure of the area does not support a presumption of productivity. In its justification for expanding the KGS, BLM has produced recent information derived from numerous recent wells, data concerning ranges of productive depths, and current knowledge concerning the Ferron formation which tends to show the lease parcel is properly made part of a KGS. Although the eastern limits of production have not been defined, the KGS determination in this case is reasonably based on recent pertinent geologic information and analysis. Appellant has failed to demonstrate error in the factual statistical analysis made by BLM, and failed to disprove BLM's determination that the land embraced in lease U-53557 is presumptively productive of oil and gas.

Accordingly, 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 Utah State Office is affirmed.

Franklin D. Arness
Administrative Judge

We concur:

Edward W. Stuebing
Administrative Judge

Will A. Irwin
Administrative Judge

