
* KEY ISSUES: Confiscation *
* Legal subdivision *
* 1st Well on tract *
* Reasonableness of location *
*
* FINAL ORDER: R37 exception GRANTED *

RULE 37 CASE NO. 0204251

APPLICATION OF BURK ROYALTY COMPANY FOR AN EXCEPTION TO
STATEWIDE RULE 37 FOR ITS WELL NO. 1, WATKINS CV LEASE, OAK HILL
(COTTON VALLEY), DIGGER (PETTIT) (NOW KNOWN AS THE OAK HILL, WEST
(PETTIT)), AND WILDCAT FIELDS, RUSK COUNTY, TEXAS

APPEARANCES:

APPLICANT:

Jon H. Bear
Alford Norris
Patrick Daugherty
Jim Hubley
Philip Whitworth, Attorney

REPRESENTING:

Burk Royalty Company

PROTESTANTS:

John Holley
Tom Gundersen
Mike Bellar
George C. Neale, Attorney

Sonat Exploration Company - Tyler

PROPOSAL FOR DECISION

PROCEDURAL HISTORY

NOTICE OF APPLICATION:

February 4, 1994

DATE OF HEARING:

April 5, 1994

TRANSCRIPT RECEIVED:

May 4, 1994

PFD CIRCULATED:

June 7, 1994

HEARD BY:

Jim McDougal, Hearings Examiner

Thomas H. Richter, P.E., Technical Examiner

STATEMENT OF THE CASE

This is the application of Burk Royalty Company (Burk) for an exception to Railroad Commission Statewide Rule 37 to drill Well No. 1 on the Watkins CV Lease in the Oak Hill (Cotton Valley), Wildcat, and Digger (Pettit) (now known as the Oak Hill, West (Pettit)) Fields. The proposed location for Well No. 1 is 445' from the west lease line and 825' from the south lease line. Field rules for the Oak Hill (Cotton Valley) Field are 933/1867/640-320-160; Wildcat and Digger (Pettit) (now known as the Oak Hill, West (Pettit)) are statewide. The April, 1994 Commission proration schedule shows that all wells in the Digger (Pettit) Field were transferred to the Oak Hill, West (Pettit) Field. By letter dated April 15, 1994, Burk requested that its application be amended to reflect that all wells in the Digger (Pettit) Field were transferred to the Oak Hill, West (Pettit) Field. Although this request was objected to by the protestant, the examiners find there to be no prejudice to protestant. The transfer of wells from the Digger (Pettit) to the Oak Hill, West (Pettit) Field was done to effect a name change on the field and protestant discovered the Oak Hill, West (Pettit) Field.

The application is protested by Sonat Exploration Company - Tyler (Sonat). Sonat operates adjacent offset tracts to the east of Burk Royalty Company's subject tract.

The examiners are of the opinion that Burk provided sufficient evidence to warrant the Commission granting it an exception to Statewide Rule 37 for the Oak Hill (Cotton Valley), Digger (Pettit) (now known as the Oak Hill, West (Pettit)), and Wildcat Fields.

DISCUSSION OF THE EVIDENCE

APPLICANT'S EVIDENCE

Burk Royalty Company presented evidence and testimony from two witnesses, to-wit: Mr. Jim Hubley, a Petroleum Landman, and Mr. Patrick Daugherty, a Geological Engineer.

Mr. Hubley presented five exhibits and testimony to establish that the subject tract consisted of forty (40) acres which took its present size and shape by virtue of a deed dated June 23, 1961. Mr. Hubley further testified that the subject tract has remained as a separate tract since 1961 and that the ownership in the subject tract has not been the same as or common to the ownership of any adjoining tract since the tract was originally subdivided and has not been unitized with any adjoining tract and accepted as a single tract for any Commission approved development or allowable purpose. Moreover, Mr. Hubley continued in his testimony, the subject tract had not been subdivided from a larger tract subsequent to the attachment of Commission density regulation to the field area. Mr. Hubley then presented a copy of the Railroad Commission Proration Schedule for the Oak Hill (Cotton Valley) Field to show that that field was discovered on November 17, 1976 and had field rules of 933/1867/640. Mr. Hubley then presented a copy of a Railroad Commission Proration

Schedule to prove that the Digger (Pettit) Field (now known as the Oak Hill, West (Pettit) Field) was discovered April 19, 1993 and was on statewide spacing and density rules.

Mr. Hubley concluded his testimony by saying that he had, either personally or had done under his supervision, performed the title search on the subject and surrounding tracts to establish the mineral ownership. This title search revealed that the proposed well was necessary to allow Burk's royalty owners to participate in production from the Oak Hill (Cotton Valley), Digger (Pettit) (now known as the Oak Hill, West (Pettit)), and Wildcat Fields, since they do not currently do so, nor are they recovering their fair share of recoverable reserves from any other well adjacent to or near the proposed well.

Burk next presented Mr. Patrick Daugherty, a Geological Engineer, who testified that Burk Royalty's tract is irregularly shaped in that there is a somewhat regular 28 acre tract and a very irregular 12 acre tract. The proposed drill site tract lies on the western edge of the Oak Hill (Cotton Valley) Field. This is a "step out" well. The closest well to the proposed well is Sonat's Vida Groom Well No. 1, which is approximately 1600' due east. The proposed Watkins "CV" Well No. 1 is located centrally in the 28 acre tract (see attached Burk Royalty Exhibit No. 1) which is 445' from the east and west line and 800' from the north line and 825' from the south line. Volumetric calculations for the 40 acre tract estimate original gas-in-place to be approximately 2.1 BCF of gas. Using a 70% recovery factor, the recoverable gas-in-place is approximately 1.5 BCF. This compares favorably to the review of 34 wells in the western part of the Oak Hill (Cotton Valley) Field which have an average recovery of 1.5 BCF of gas. Finally, Mr. Daugherty presented some photographs of the proposed drillsite. He testified the site was an environmentally-friendly site because a minimum amount of disturbance to the surrounding habitat would occur as a result of the proposed drilling. He concluded by stating that the proposed well will be the first well on the tract.

Burk did not present any calculations of recoverable reserves in the Digger (Pettit) (now known as the Oak Hill, West (Pettit)) Field.

PROTESTANT'S EVIDENCE

Sonat believes a well at the proposed location will drain hydrocarbons from its Vida Groom tract. Of particular concern is the size of the massive hydraulic fracture stimulation treatment that Burk Royalty will most likely use upon completion of the well. The fracture length and the propanant will extend across the common lease line. Sonat argued that if the Commission granted a permit at the proposed location, the permit should also contain a maximum fracture length condition.

Sonat believes a reasonable alternate location should be considered and approved. A reasonable alternate location would be based on the geometric center of the 40 acre lease. The southwest-northeast diagonal across the lease is 3100' in length, thus the geometric center would be at 1550' on the diagonal. The alternate location would be in the southwest part of the 28 acre tract. Sonat estimates the gas-in-place to be 1.9 BCF of gas. The recoverable gas-in-place based on a 2000

psi abandonment pressure of (56% recovery factor) is 1.07 BCF.

EXAMINERS' OPINION

The examiners are of the opinion that Burk Royalty Company presented sufficient evidence to warrant the Railroad Commission granting it an exception to Statewide Rule 37 to drill its Well No. 1 on the Watkins CV Lease into the Oak Hill (Cotton Valley), Digger (Pettit) (now known as the Oak Hill, West (Pettit)), and Wildcat Fields.

Burk Royalty Company established that the Oak Hill (Cotton Valley) and Digger (Pettit) (now known as the Oak Hill, West (Pettit)) tracts are a legal subdivision and that the mineral owners underneath the tracts are not recovering their fair share of hydrocarbons or their equivalent in kind from any surrounding tracts because none of Burk's royalty owners participate in production from either the Oak Hill (Cotton Valley) or Digger (Pettit) (now known as the Oak Hill, West (Pettit)) Fields.

Having proven that the tracts are a legal subdivision and that its mineral owners were not receiving their fair share of hydrocarbons or their equivalents in kind from any surrounding tracts, the only remaining issue is the reasonableness of the proposed location.

Burk Royalty's proposed location in the Oak Hill (Cotton Valley) Field is the most reasonable. Whether there is 1 BCF or 1.5 BCF of gas to be recovered is irrelevant. If the well is completed as a producer, (this is a "step out" well) the reserves would come from under more of its lease than at Sonat's alternate location. Massive fracture stimulation can be designed for specific length, however, in reality, it is unknown as to whether or not the length is obtained and it is not known as to what direction the fracture orientation will proceed. It is not known whether the shape of the resulting treatment will be radial or elliptical. Both parties agree with this. The evidence further supports that Sonat will not suffer net uncompensated drainage. Finally, this is the first well on the tract.

Although Burk did not present any calculation of recoverable reserves in the Digger (Pettit) (now known as the Oak Hill, West (Pettit)) Field, Burk did establish that its tract is a legal subdivision with regard to the Digger (Pettit) Field (now known as the Oak Hill, West (Pettit) Field) and that the proposed well would be the first well on the tract. Since it is a legal subdivision, the only remaining issue is reasonableness of the location. The examiners find that the proposed location is reasonable in the Digger (Pettit) Field (now known as the Oak Hill, West (Pettit) Field) because the location is at the center of the larger part of the tract.

FINDINGS OF FACT

1. At least 10 days' notice of this hearing was sent to the designated operator; all lessees of record for tracts that have no designated operator; and all owners of record of unleased mineral interests for each adjacent tract and each tract nearer to the proposed location than the prescribed minimum lease-line spacing distance.
2. The field rules for the Oak Hill (Cotton Valley) Field are 933' lease line spacing; 1867' between well spacing; and density patterns of 640/320/160. The Oak Hill (Cotton Valley) Field was discovered on November 17, 1976. Field rules for the Digger (Pettit) (now known as the Oak Hill, West (Pettit)) and Wildcat Fields are statewide.
3. The subject forty (40) acre tract took its present size and shape by virtue of a deed dated June 23, 1961 and has remained as such since that time.
4. The ownership in the subject tract has not been the same as or common to the ownership of any adjoining tract at any time since the tract was originally subdivided and has not been unitized with any adjoining tract and accepted as a single tract for any Commission approved development or allowable purpose.
5. The subject tract has not been subdivided from a larger tract subsequent to the attachment of Commission density regulation to the field area.
6. Recoverable gas-in-place underlying in the Burk Royalty tract in the Oak Hill (Cotton Valley) Field is in the range of 1 to 1.5 BCF of gas.
7. The proposed Watkins "CV" Well No. 1 is a "step out" well from the known western limits of the Oak Hill (Cotton Valley) Field. The subject well will be the first well completed in the Oak Hill (Cotton Valley) Field or Digger (Pettit) (now known as the Oak Hill, West (Pettit)) Field on the subject tract and its location is reasonable. The proposed well will be located 445' FWL and 825' FSL of the lease.
8. Owners of minerals underneath the subject tract are not participating in any production from adjoining tracts or tracts capable of draining the subject tract.

CONCLUSIONS OF LAW

1. Notice of this hearing was given to all persons entitled to notice.
2. The Railroad Commission of Texas has authority to decide this matter pursuant to authority granted it by the Texas Natural Resources Code, the Texas Administrative Procedure Act, and the Texas Administrative Code.
3. The subject tract is a legal subdivision as that term is used in Railroad Commission Statewide Rule 37.
4. The proposed location is a reasonable location to give the mineral owners an opportunity to recover their fair share of reserves underlying the tract in the Oak Hill (Cotton Valley) Field, Digger (Pettit) (now known as the Oak Hill, West (Pettit)) Field, and Wildcat Field, thereby preventing confiscation.

EXAMINERS' RECOMMENDATION

The examiners recommend to the Railroad Commission of Texas that it grant Burk Royalty Company's application for an exception to Railroad Commission of Texas Statewide Rule 37 to drill Well No. 1 on the Watkins CV Lease in the Oak Hill (Cotton Valley), Digger (Pettit) (now known as the Oak Hill, West (Pettit)), and Wildcat Fields.

Respectfully submitted,

Jim McDougal
Hearings Examiner

Thomas H. Richter, P.E.
Technical Examiner

JFM/ds