
* KEY ISSUES: CONFISCATION *
* Adjacent secondary recovery project *
* Oil not recoverable by existing wells *
* *
* FINAL ORDER: R37 GRANTED *

Rule 37 Case No. 0211820
District 8A

**APPLICATION OF CANDLERIDGE OIL, INC., FOR AN EXCEPTION TO STATEWIDE
RULE 37 TO DRILL ITS WELL NO. 1, SANDERS-HODGE "A" UNIT, LEVELLAND
FIELD, HOCKLEY COUNTY, TEXAS**

APPEARANCES:

REPRESENTING:

APPLICANT -

William Osborn, Attorney
George Jackson

Candleridge Oil, Inc.

PROTESTANT -

Ana Maria Marsland, Attorney
Richard A. Josefy
Robert N. Goon

Texaco E&P, Inc.

PROCEDURAL HISTORY

Application Filed:	March 7, 1996
Notice of Hearing:	March 29, 1996
Hearing Held:	May 3, 1996
PFD Circulated	September 13, 1996
Heard by:	Colin K. Lineberry, Hearings Examiner Margaret Allen Technical Examiner

STATEMENT OF THE CASE

Candleridge Oil, Inc. ("Candleridge" or "applicant") seeks an exception to Statewide Rule 37 to drill its proposed Well No. 1 on the Sanders-Hodge "A" Unit for the Levelland Field. The application is protested by Texaco E&P, Inc., ("Texaco" or "protestant"). The Levelland field rules mandate spacing of 440 feet from unit lines and 880 feet between wells, with 42.5 acre regular units and optional units of 21.25 acres.

The applied-for location is regular as to between-well spacing but is only 100 feet from the nearest unit line. Accordingly, an exception to the Levelland Field Rules pursuant to Statewide Rule 37 is necessary. The Sanders-Hodge "A" Unit contains 21.25 contiguous acres and the proposed well will be the only well on the unit producing from the Levelland Field.

The hearing in this docket on May 3, 1996, was consolidated with Rule 37 Case No. 0211519, which was the application of Texaco for an exception to rule 37 for its Ira P. DeLoache Lease Well No. 85 in the Levelland Field. Candleridge protested Texaco's application but was deemed to be unaffected based on the evidence presented at the hearing. Rule 37 Case 0211519 was approved administratively on May 20, 1996.

UNCONTROVERTED EVIDENCE

The relative locations of the wells proposed by Texaco and Candleridge and the nearby existing wells are illustrated on Exhibit A to this Proposal for Decision. Exhibit A is a portion of Candleridge's Exhibit 1 annotated to highlight the location of Texaco's applied-for Well No. 85 and Candleridge's applied-for Well No. 1.

Candleridge operates six small leases on the northern end of the very large Levelland Field. Texaco operates much larger leases, including the Ira P. DeLoache Lease, adjacent and to the southwest of Candleridge's acreage. The Ira P. DeLoache lease has 45 producing wells and 32 injection wells. Immediately to the east of the Ira P. DeLoache Lease is Texaco's Montgomery Estate-Davies Lease which has 73 producing wells and 48 injection wells. The injection pattern on Texaco's two leases is approximately a forty acre line drive wherein rows of injection wells alternate with rows of producing wells. Texaco's application for its Ira P. DeLoache Well No. 85 required a Rule 37 exception because the proposed well was closer than 440' to Texaco's Montgomery Estate-Davies Lease. Well 85 needed to be placed 175' from the Montgomery Estate-Davies Lease in order to complete Texaco's pattern flood.

The productive San Andres reservoir is porous and permeable and Texaco has been successfully water flooding the DeLoache Lease for some time. Prior to the administrative grant of Texaco's Rule 37 exception for Well No. 85, Texaco presented evidence that when it drilled two previous producing wells to fill in holes in the waterflood pattern, those wells had no effect on the production of their direct offset producing wells. The direct offset producing wells are only 900 - 1000' away from the infill producing wells. Texaco testified that its proposed Well No. 85 "would

have no impact of its two immediate offsets." Texaco's witnesses testified that Well No. 85 will recover 129,000 BO from a 45' thick pay section and that this "129,000 BO ... would not be recovered by any other well due to the nature of the flood."

Candleridge's property is approximately 2900' north of Well No. 85 and there are four producing wells between the proposed location of Texaco's proposed Well No. 85 and Candleridge's acreage. In 1994, Candleridge's predecessor, S.K. Rogers Oil, converted four producing wells, the Hodge Estate No. 2, the Hodge "A" No. 1-A, and the Sanders Nos. 2 and 4 to injection.

APPLICANT CANDLERIDGE'S EVIDENCE AND POSITION

Candleridge protested Texaco's Rule 37 application after receiving notice as an offset operator. Candleridge did not present evidence to contradict Texaco's case but took the position that the Commission should not grant Texaco's Rule 37 application without granting the application of Candleridge for a Rule 37. The examiners ruled on May 20, 1996, that Candleridge was unaffected by Texaco's proposed Well No. 85 and Candleridge did not contest the examiners' ruling.

Candleridge's injection wells are located to compliment Texaco's waterflood pattern as Candleridge hoped to make a co-operative lease-line waterflood arrangement with Texaco. Candleridge is now receiving response to its waterflood in its producing wells but, due to the absence of a co-operative waterflood agreement with Texaco, Candleridge is losing a large part of the benefit of the waterflood. The injection wells are pushing a substantial volume of oil off Candleridge's leases and onto Texaco's property.

Two of Candleridge's injection wells, the Sanders No. 2 and Hodge "A" No. 1A, are located 2200 feet apart and 440 feet north of the common lease line with Texaco. The square formed by lines between the two wells and the lease line covers about 22 acres. If the proposed well is not drilled any remaining oil within this square will be pushed to Texaco's acreage and will not be recovered by Candleridge.

Texaco's Well Nos. 25 and 27 are producing wells just to the south of the common lease line with Candleridge. They are on the pattern lines of Texaco's injection wells. Candleridge's injection wells are on the same pattern lines and extend the pattern established by Texaco's wells. Candleridge anticipated that Texaco would convert these two producing wells to injection which would, complete the pattern, facilitate the waterflood and thereby protect correlative rights across the lease line. Candleridge offered Texaco the same type of cooperative development agreement that Texaco has with its southern boundary offset operator but Texaco declined the offer. Candleridge claims that oil under the entire 72 acres between 440' and the lease line of its property cannot be recovered without a co-operative lease line waterflood pattern or lease line producing wells.

Candleridge assumed the same reservoir parameters as Texaco in its original application with the exception of reservoir thickness. Texaco assumed a reservoir thickness of 45 feet around its proposed No. 85, while Candleridge has assumed only 18 feet of net pay around its proposed well. Candleridge then calculated that about 70,000 barrels of oil were recoverable from the square

between the injection wells and the lease lines by both primary and secondary efforts. The water injected into the Candleridge Sanders No. 2 and Hodge "A" No. 1A has already swept the oil from about 8.9 of the acres in the square, which leaves 42,000 (70,000 - 28,000) barrels of recoverable oil in this square that Candleridge believes only its proposed Sanders-Hodge "A" Unit No. 1 can recover.

Candleridge believes that the oil which its injection wells are sweeping off its lease will be only partially recovered by Texaco's wells. About half of the oil swept off the lease will be unrecovered by either party unless the injection pattern is completed.

Texaco and the predecessor operator to Candleridge, S.K. Rogers had been discussing a co-operative lease-line injection program but Texaco had indicated in late 1993 that it would wait to decide on the agreement. Rogers made another offer for a lease-line injection agreement to Texaco by a letter written in January of 1995. There is no evidence of a written response from Texaco.

PROTESTANT TEXACO'S EVIDENCE AND POSITION

If Candleridge's proposed location is drilled only 100 feet from Texaco's lease, and the producing well has an assumed square drainage area of 21.25 acres, then about 8 of those acres would be under lease to Texaco. According to Texaco, Candleridge could recover some of the reserves being pushed by the Candleridge's two injection wells by drilling in between the two injection wells at a distance of 440 feet from Texaco's lease. This location would be regular with respect to lease lines and Texaco agreed to waive any objection to a Rule 37 exception based on between well spacing.

Texaco also pointed out that Candleridge chose to convert to injection two of its producing wells that are closest to Texaco's leases. Texaco's witnesses testified that if Texaco had been in Candleridge's position and not had a co-operative lease-line agreement in writing, it would have protected its lease-line rather than maintaining the same waterflood pattern as an offset operator. Texaco's witnesses also testified that if they were protecting a waterflood lease from confiscation they would have drilled an additional five wells and used a five-spot injection pattern which maintained lease-line producing wells.

EXAMINERS' OPINION

Exceptions to Statewide Rule 37 may be granted to prevent waste or to protect correlative rights/prevent confiscation. An applicant seeking an exception to Rule 37 based on waste must establish three elements: 1) that unusual conditions, different from conditions in adjacent parts of the field, exist under the tract for which the exception is sought; 2) that, as a result of these conditions, hydrocarbons will be recovered by the well for which a permit is sought that would not be recovered by any existing well or by additional wells drilled at regular locations; and, 3) that the volume of otherwise unrecoverable hydrocarbons is substantial. The evidence of both parties indicates that a substantial volume of oil being swept by Candleridge's injection wells cannot be

recovered by any regularly located well. Applicant Candleridge did not, however, present any evidence of an unusual condition which would authorize granting an exception based on waste.

To obtain an exception to Statewide Rule 37 to protect correlative rights, the applicant must show that: 1) It is not possible for the applicant to recover its fair share of minerals under its tract from regular locations; and, 2) that the proposed irregular location is reasonable. Because Candleridge's Sanders-Hodge "A" Unit was formed after field rules were established, the size and shape of the pooled unit are not being considered in determining whether confiscation is occurring. *See* Tex. R.R. Comm'n, 16 TEX. ADMIN. CODE § 3.37(g)(1) (West Jan. 1, 1996) [Statewide rule 37(g)(1)].

Candleridge's evidence that, unless the application is granted, Candleridge's injection wells will sweep an additional 42,000 barrels of oil off of tracts operated by Candleridge and onto Texaco's lease was unrefuted. Texaco has deviated from its established line-drive pattern and has not converted any of its producing wells along its common lease-lines with Candleridge to injection. Texaco's six producing "border guard" wells along the lease-lines between Candleridge and Texaco insure that Texaco's injection wells will not sweep any significant volume of oil from Texaco's leases onto Candleridge's leases. A well located at a regular location 440 feet from lease-lines would be directly between the two injection wells and the same distance from the Texaco lease-line as the two injection wells and, as a result, would only recover a small fraction of the oil being swept onto Texaco's lease.

The proposed location is reasonable. Texaco's "border guard" producing wells will capture the secondary oil being swept by Texaco's injection wells before it reaches Candleridge's leases and/or the proposed well location. Further, Texaco's evidence regarding its own Rule 37 application suggests that a well at the location proposed by Candleridge will not interfere with the production of Texaco's existing wells and will recover oil that cannot be recovered by existing Texaco wells. Texaco's witnesses testified that all or the great majority of the production to be recovered by Texaco's applied-for Well No. 85 would not be recovered by any other well. The producing wells nearest Well No. 85 are only about 900 feet from Well 85 yet Texaco expects the production from these wells to be unaffected by Well No. 85. Candleridge's applied-for location is more than 900 feet from the nearest Texaco producing wells. Texaco's evidence that its well will recover oil that would not be recovered by any adjacent producing well indicates that the applied-for Candleridge well on the adjacent lease will similarly recover oil that would not be recovered by any existing well.

Texaco's own evidence indicates that a well at the location proposed by Candleridge will recover little, if any, oil from Texaco's tract. Conversely, it is undisputed that a well at the applied-for location would recover a substantial volume of "secondary" oil from the Candleridge leases that would otherwise be swept off the leases.

The examiners recommend adoption of the following proposed findings of fact and conclusions of law:

FINDINGS OF FACT

1. Notice of the hearing was given at least 10 days prior to the hearing to all designated operators, lessees of record for tracts that have no designated operator, and owners of record of unleased mineral interests for each adjacent tract and each tract nearer to the well than the prescribed minimum lease-line spacing distance.
2. Candleridge Oil, Inc., ("applicant") has applied on Form W-1 for a permit to drill Well No. 1 on the Sanders-Hodge "A" Unit. Applicant proposes to drill its well at a location 100 feet from the south line and 962 feet from the east line of the unit, and -0- feet from the east line and 100 feet from the south line of the Reeves CSL, Lge 78, Lab 9 Survey (A-201). Applicant has applied to drill its proposed well for the Levelland Field.
3. The Levelland Field has field rules requiring spacing of 440 feet from unit lines and 880 feet between wells. The field rules further specify a density pattern of 42.5 acres per well with options of 21.25 acres per well.
4. Applicant's Sanders-Hodge "A" Unit is a tract containing 21.25 acres.
5. The volume of remaining primary recoverable reserves in the Levelland Field under the applicant's Sanders-Hodge "A" Unit and the surrounding tracts is insignificant.
6. There is a line pattern of injection and producing wells that extends from the adjoining lease onto applicant's Sanders-Hodge "A" Unit.
7. Applicant's existing injection wells in the line pattern will sweep approximately 42,000 barrels of oil off of applicant's leases.
8. The injection wells on tracts adjacent to applicant's Sanders-Hodge "A" Unit will not sweep oil from other tracts onto the leases operated by applicant.
9. A well at the applied-for location will recover approximately 42,000 barrels of oil which no existing Candleridge well could recover.
10. A well a regular distance from the lease-line between the applicant's leases and the adjoining leases operated by Texaco would recover substantially less than 42,000 barrels of oil.
11. A well at the applied-for location will not interfere with existing producing wells on adjacent leases operated by protestant Texaco.

CONCLUSIONS OF LAW

1. Proper notice of hearing was timely given to all persons legally entitled to notice.

2. All things have occurred or have been done that are necessary to give the Commission jurisdiction to decide this matter.
3. An exception pursuant to Statewide Rule 37 to the Levelland Field rules regarding well spacing is necessary to permit drilling the applied-for well.
4. Approval of the requested permit to drill a well at the proposed location is necessary to give the owners of the Sanders-Hodge "A" Unit a reasonable opportunity to recover their fair share of oil underlying their leases from the Levelland Field.
5. The applied-for location is reasonable.
6. An exception to Statewide Rule 37 is necessary to prevent confiscation of oil from the Levelland Field currently in place under the Sanders-Hodge "A" Unit.

RECOMMENDATION

The examiners recommend that the subject application be approved in accordance with the attached final order.

Respectfully submitted,

Colin K. Lineberry
Hearings Examiner

Margaret A. Allen
Technical Examiner