

Key Issues:

R37 Granted/Denied

RULE 37 CASE NO. 0221326

**APPLICATION OF ZINN PETROLEUM FOR AN EXCEPTION TO STATEWIDE
RULE 37 TO DRILL WELL NO. 5, DUNCAN LEASE, SPANISH CAMP (YEGUA 7200)
AND WILDCAT FIELDS, WHARTON COUNTY, TEXAS.**

APPEARANCES:

FOR APPLICANT:

Phil Patman (Attorney)

Scott Becker (Geologist)

APPLICANT:

Zinn Petroleum Co.

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FOR PROTESTANTS:

Michael Hershey

PROTESTANTS:

Michael Hershey

PROPOSAL FOR DECISION

PROCEDURAL HISTORY

APPLICATION FILED:

May 6, 1999

NOTICE OF HEARING:

May 11, 1999

DATE CASE HEARD:

May 28, 1999

HEARD BY:

Marshall Enquist, Hearings Examiner
Thomas H. Richter, P.E., Technical
Examiner

TRANSCRIPT DATE:

June 14, 1999

PFD CIRCULATION DATE:

July 23, 1999

STATEMENT OF THE CASE

Zinn Petroleum Co. ("Zinn") seeks an exception to Statewide Rule 37 to drill its proposed Well No. 5 on the 875 acre Duncan Lease in the Spanish Camp (Yegua 7200) and Wildcat Fields, Wharton County. The application is protested by Michael Hershey ("Hershey"), who is both a surface owner and mineral interest owner at the proposed location. The Spanish Camp (Yegua 7200) Field requires spacing of 660 feet from leaselines and 2640 feet between wells on 320 acre units. The only existing well in this field is the Wofford Duncan No. 1 on the offset lease to the south.

The applied-for well has a surface location 150 feet NNE of the southwesterly line of the subject lease (see Attachment I).

DISCUSSION OF THE EVIDENCE

APPLICANT'S EVIDENCE

The applicant, Zinn, presented one witness and eleven exhibits. The proposed exception location is near the high point of a structure that Zinn describes as a four-way closure, with dip to the north, east and west (see Attachment II). The structure is bound on the south side by a small buried fault with about 25 feet of throw. The fault does not appear on 3-D seismic, nor does any well in the area cut the fault. The existence of the fault is inferred from the different depths at which the gas-water contact was found in two nearby wells, the Wofford Duncan No. 1 and the Greenhill Spade Ranch No. 2. The Wofford Duncan No. 1, about 1800 feet to the west, had a gas-water contact at 7116' subsea. The Greenhill Spade Ranch No. 2, about 1000 feet to the southeast, had a gas-water contact at 7131' subsea. Zinn believes the difference, 15 feet, is accounted for by a fault.

The purpose of the proposed location is to drill as high as possible on the structure. Maximizing elevation is necessary because of the underlying water encroachment. This reservoir mechanism is substantiated by the production history of the Wofford Duncan Well No. 1. The Wofford Duncan Well No. 1 currently produces 100 MCF of gas per day and 100 barrels of water per day. Zinn calculates that the structure has a remaining gas column of 25 feet. Because of the water encroachment, a well drilled at a regular location will recover 0.772 BCF of gas, but a well drilled at the exception location will recover 1.272 BCF of gas. Thus, if the exception location is not granted, 0.5 BCF of gas will not be recovered.

PROTESTANT'S EVIDENCE

The protestant, Hershey, testified on his own behalf and offered one exhibit, consisting of several photographs of nearby wells and the surrounding landscape. Hershey attacked Zinn's technical case by noting that Zinn has drilled only dry holes or poor wells in this area and thus their expertise cannot be relied on.

Hershey also suggests that Zinn cannot prove its case based on either waste or confiscation.

The Wofford Duncan No. 1 is about to water out and the Greenhill Spade Ranch No. 2 is plugged. Neither of these wells will drain the alleged structure, therefore there can be no confiscation by other wells. Hershey stated that after Zinn's lease expires, he or others will reform the local boundaries and drill a well themselves, thus any gas present will not be lost or wasted.

Finally, the protestant asks that the Commission balance the need for the proposed location with the presence of an irrigation canal only 155 feet away. Hershey believes the proposed location will unnecessarily endanger the water supply used locally for rice farming.

EXAMINERS' OPINION

Exceptions to Statewide Rule 37 may be granted to prevent waste or to protect correlative rights/prevent confiscation. The applicant based its case on prevention of waste and protection of correlative rights.

To obtain an exception to Statewide Rule 37 to protect correlative rights, the applicant must show: 1.) that it is not possible for the applicant to recover its fair share by placing the well at any regular location; and 2.) that the proposed irregular location is reasonable.

Zinn is entitled to recover the reserves beneath its own lease, but is not entitled to recover the reserves beneath adjacent leases or unleased lands. Zinn's volume estimates are based on the recoverable reserves in the reservoir as a whole, including the portion of the reservoir that is off the Duncan Lease. In the absence of any reserve determination estimating Zinn's fair share of the hydrocarbons under its own lease, Zinn cannot prove its right to an exception based on protection of correlative rights.

An applicant seeking an exception based on waste must establish three elements: 1.) unusual conditions, different from conditions in adjacent parts of the field, exist under the tract for which the exception is sought; 2.) as a result of the unusual conditions, hydrocarbons will be recovered by the well for which the permit is sought that would not have been recovered by any existing well or by additional wells drilled at regular locations; and 3.) that the volume of otherwise unrecoverable reserves is substantial.

The unusual condition this application presents is the presence of a structural high in a field with a water drive, on the upthrown side of a buried fault very near the lease line. Nearby wells have either watered out or are plugged. A well drilled at a regular location will recover reserves (0.772 BCF) from approximately 15 feet of the remaining gas column, but, due to the strong water drive, will not be able to recover the reserves in the upper portion of the gas column. A well drilled at the proposed location will recover 1.272 BCF. Wells drilled at regular locations on the offset lease to the south would either be separated from the structure by the buried fault or so far downstructure as to be in an inferior position to even a regular well on Zinn's Duncan Lease. Thus, 0.5 BCF of gas, a substantial quantity, will not be recovered absent the grant of an exception location. Zinn is entitled to a Rule 37 exception based on prevention of waste.

Based on the record in this docket, the examiners recommend adoption of the following Findings of Fact and Conclusions of Law.

FINDINGS OF FACT

1. Notice of hearing was given on May 11, 1999 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. All things necessary to the Commission attaining jurisdiction over the subject matter and the parties in this hearing have been performed or have occurred.
3. The applicant, Zinn Petroleum Co., seeks an exception to Statewide Rule 37 to drill Well No. 5 on the Duncan Lease. Applicant proposes to drill its well at a location 1300 feet FNWL and 150 feet FSWL of the unit, and 2100 feet FN'LY NWL and 150 feet FN'LY SWL of the survey. Applicant has applied for completion of its proposed well in the Spanish Camp (Yegua 7200), having spacing rules of 660 feet to leaselines, and 2640 feet between-well spacing on 320 acre units, and the Wildcat Fields, having spacing rules of 467 feet to leaselines and 1200 feet between wells, on 40 acre units.
4. Applicant's Duncan Lease is a tract of regular size and shape, containing 875 acres.
5. Applicant's primary objective is the Spanish Camp (Yegua 7200) Field. Applicant would not drill the proposed well with the Wildcat Field as the sole objective.
6. The structural high and buried fault on the southern edge of the Duncan Lease, in combination with the reservoir water drive, create geological conditions that are unusual and distinguishable from conditions under the remainder of the field and offsetting tracts.
7. As a result of the unusual conditions, the applied-for well, the Duncan No. 5, will recover gas that cannot be recovered by any existing well or by a future well in a regular location.
8. The amount of otherwise unrecoverable gas that will be recovered from the Spanish Camp (Yegua 7200) Field by the Duncan No. 5 is a substantial amount, calculated to be 0.5 BCF. Without the applied-for exception, these reserves cannot be recovered.
9. The mineral interest owners of the Duncan Lease do not have an interest in, and cannot receive their fair share of Spanish Camp (Yegua 7200) Field reserves from wells on offset tracts.

CONCLUSIONS OF LAW

1. Proper notice was timely given to all parties legally entitled to notice.
2. All things have occurred and have been done to give the Commission jurisdiction to decide this matter.
3. Approval of the applied-for permit is necessary to prevent waste of a substantial amount of hydrocarbons within the Spanish Camp (Yegua 7200) Field.
4. An exception to the lease-line spacing requirements is necessary to permit drilling the applied-for well.

RECOMMENDATION

The examiners recommend that Applicant's request for an exception to Statewide Rule 37 for its Duncan Lease, Well No. 5, as to the Spanish Camp (7200) and Wildcat Fields, Wharton County, Texas, be granted.

Respectfully submitted,

Marshall F. Enquist
Hearings Examiner

Thomas H. Richter, P.E.
Technical Examiner

MFE