
 * **KEY ISSUES: WASTE** *
 * **BETWEEN-WELL SPACING** *
 * **REPLACEMENT WELL FOR A FAILED** *
 * **DRAINHOLE IN A DUAL DRAINHOLE** *
 * **HORIZONTAL WELL** *
 * **AUSTIN CHALK** *
 * **FINAL ORDER: R37 EXCEPTION GRANTED** *

OIL & GAS DOCKET No. 108,914
PROPOSAL FOR DECISION

AN APPLICATION BY UNION PACIFIC RESOURCES COMPANY FOR AN
 EXCEPTION TO STATEWIDE RULE 37 FOR ITS ROY KARISCH WELL NO.
 3, GIDDINGS (AUSTIN CHALK-3) FIELD, FAYETTE COUNTY, TEXAS

APPLICANT: Union Pacific Resources Company
 FOR APPLICANT: Glenn Johnson, Mark Schumacher, J.R. Carter, Jr.

PROTESTANT: Stephen A. Williams
 FOR PROTESTANT: Robert Boyce

HEARINGS EXAMINER: Dwight Martin
 TECHNICAL EXAMINER: Doug Johnson, P.E.

PROCEDURAL HISTORY

APPLICATION FILED: 8-22-91	TRANSCRIPT DATE: 11-8-91
HEARING NOTICE DATE: 9-12-91	PFD CIRCULATION DATE: 1-6-92
HEARING DATE: 10-10-91	CURRENT STATUS: Protested

STATEMENT OF THE CASE

Applicant seeks a spacing exception to Statewide Rule 37 to prevent waste. Applicant received a regular permit (No. 389324) in July of 1991 under Statewide Rule 86 to drill a dual-drainhole horizontal well (Well No. 1) on the tract, but was unable to kick out of the vertical section to commence the second drainhole. Applicant now wishes to drill a second well (Well No. 3) from the existing drilling pad to replace the failed drainhole. Applicant's spacing problem is that in order for the second well to drain the oil intended to be drained by the failed drainhole, its penetration point must be 108 feet away from the penetration point of the existing well, while the required between-well spacing is 1200 feet. No part of any of the Applicant's proposed or completed drainholes has ever been an irregular distance from Protestant's tract.

DISCUSSION OF THE EVIDENCE

Applicant's evidence indicates that the proposed Well No. 3 is intended to replace the failed second drainhole of the originally permitted dual drainhole well, which was entirely regular. The proposed drainhole orientation and location for the new well differ very slightly from the orientation and location of the failed drainhole; the change was made to ensure an optimal allocation of drainage areas between the proposed well and other neighboring wells completed after the failure of the second drainhole of Well No. 1, thereby minimizing the amount of oil left unrecovered. Applicant's geologist testified that a well at any regular location would leave in place at least 25,000 barrels of oil which could not be recovered by any existing well on or off the tract or by any future well drilled at a regular location on or off the tract. Protestant did not put on a case, and confined himself to urging that leaving oil unrecovered does not amount to legal waste.

EXAMINERS' OPINION

The application should be granted to prevent the waste at least 25,000 barrels of oil. The pattern of drainage of the formation by surrounding wells will leave an undrained area which can be most efficiently drained by a well at the proposed location and which cannot be drained by any existing or future regularly located well, whether on or off tract.

PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

Findings of Fact

1. On July 30, 1991, Applicant was administratively granted Permit No. 389,324 to drill a dual-drainhole horizontal well (Well No. 1) on the Roy Karisch Lease, in the Giddings (Austin Chalk-3) and the Giddings (Austin Chalk-Gas) Fields, Fayette County, Texas.
2. Both the surface location and the drainhole location were regular.
3. Drainhole No. 1 was successfully completed; drainhole No. 2 could not be drilled owing to mechanical problems.
4. Applicant filed a Form W-1 on August 22, 1991 requesting permission to drill another well (Well No. 3) from the same drilling pad used to drill Well No. 1; it requires an exception to Tex. R.R. Comm'n, 16 TEX. ADMIN. CODE § 3.37 (Statewide Rule 37) because it will penetrate the productive formation approximately 108 feet from the penetration point of Well No. 1; field rules require a between-well spacing of 1200 feet. The proposed Well No. 3 is intended to replace the failed drainhole No. 2 of Well No. 1; its drainhole location is substantially similar thereto.

5. Notice of this application was sent to all designated operators, mineral lessees of record for tracts without designated operators, and owners of unleased mineral interests of each adjacent tract.

6. Stephen A. Williams, the owner of the unleased tract to the northwest of the Applicant's tract, protested the application.

7. The locations of both the failed drainhole No. 2 of Well no. 1 and the proposed drainhole of Well No. 3 are entirely regular as to the Williams tract.

8. The orientation of the existing drainhole in Well No. 1 is South 19 degrees 57 minutes East; the orientation of the drainhole in proposed Well No. 3 is North 18 degrees 44 minutes West.

9. The average orientation of the fracture lines in the producing formation in the vicinity of Applicant's tract is North 67 degrees 30 minutes East.

10. Drainage from horizontal wells in the Austin Chalk-3 Field occurs along fracture lines, and on Applicant's tract, will occur for a distance of 2000 feet on either side of the drainhole.

11. The plan view of the idealized drainage area of a horizontal well in the Austin Chalk-3 Field is either a rectangle (when the drainhole is normal to the fracture lines) or a parallelogram (when the drainhole intersects the fractures at an oblique angle).

12. The plan views of the idealized drainage areas of the existing Well No.1, located to the immediate southeast of the proposed location, and the Karisch Unit No. 1 well to the immediate northeast, operated by The Pines, Inc., are both very nearly rectangular, because their drainholes each intersect the fracture lines at an angle of about 87 degrees. The plan view of the drainage area of Applicant's Roy Karisch No. 2 Well, which was being drilled at the date of the hearing and which is located to the immediate southwest, is less rectangular because the drainhole intersects the fracture lines at an angle of about 74 degrees. Thus, there remains an undrained area bounded by the drainage areas of the three planned or existing wells on the northeast, the southeast, and the southwest, and by Protestant's unleased tract on the northwest. This undrained area is a roughly rectangular four-sided figure which Applicant wishes to drain with its proposed well, and provides the unusual condition justifying the waste exception. The drainage area of the proposed well will slightly overlap the drainage area of the Applicant's Roy Karisch Well No. 2 to the southwest; it will approach very closely (but will not overlap) the drainage areas of Applicant's existing Well No. 1 to the southeast and the well operated by The Pines, Inc. to northeast.

13. In order to observe the well spacing requirement of 1200 feet, a regular drainhole on Applicant's tract, drilled normal to the fracture orientation, would have to be about 1200 feet shorter than the failed second drainhole it is intended to replace. Such a drainhole would leave a roughly rectangular area about 1300 feet by 4000 feet in the center of Applicant's drilling unit undrained and unable to be drained by any existing well on or off the tract or any future well drilled at a regular location on

or off the tract.

14. The 1200 foot spacing requirement for a regular drainhole might also be met by drilling a drainhole to intersect the fractures at an oblique angle, but the resulting drainage area would take the shape of a parallelogram rather than a rectangle, and would fit poorly into the remaining area undrained by the three surrounding wells; a significant portion of the productive formation underlying Applicant's tract would not be drained by such a drainhole or by any existing or future well drilled at a regular location on or off the tract.

15. A drainhole at any regular location on Applicant's tract would leave in place at least 25,000 barrels of oil, and would require the construction of a new drilling pad at a cost of \$50,000.00.

16. The oil which would be left undrained by a well at any regular location would not economically support the drilling of a future well.

17. The drainage which will be suffered by the Protestant if the proposed exception location is granted will be less than the drainage that would have been suffered if the second drainhole had been successfully drilled, and would be insignificant in any case.

18. There is no evidence that Protestant has leased his property or undertaken any other steps to allow oil to be produced from under his land.

Conclusions of Law

1. Timely and legally sufficient notice of this application was given to all persons legally entitled thereto.

2. Applicant properly filed a Form W-1 for the proposed well.

3. The Railroad Commission has jurisdiction over the Applicant, the Protestant, and the subject matter of the application.

4. Applicant is entitled to a well-spacing exception to the provisions of Statewide Rule 37 to overcome the unusual drainage pattern existing in the formation and prevent the waste of a substantial amount of oil.

5. The proposed location is reasonable in that it will minimize the amount of oil left unrecovered.

6. The Protestant will suffer no legally cognizable harm if a permit is granted for the proposed location.

RECOMMENDATION

The examiners recommend approval of the application as set forth in the attached Final Order.

Respectfully submitted,

Doug Johnson, P.E.
TECHNICAL EXAMINER

Dwight Martin
HEARINGS EXAMINER

DATE: January 6, 1992

RULE 37 CASE NO. 108,914

NOTICE TO THE PARTIES

The attached document is a Proposal for Decision and recommended Final Order issued by the examiner(s) in this case. Under Section 1.141 of the Commission's General Rules of Practice and Procedure, we are required to circulate the document to each party or its authorized representative. This is only a proposal and is not to be interpreted as a final decision unless an official order adopting the proposal is signed and issued by the Commission.

Under Section 1.142 of the General Rules of Practice and Procedure (16 T.A.C. §1.142), you have the right to file a written statement disagreeing with the proposal and setting out your reasons for this position. This document is referred to as "Exceptions" and must be filed with the Docket Services Section of the Legal Division (Room 12-125) within 15 days of the date above. You have the right to respond in writing to any exceptions filed by another party. This document is referred to as "Replies to Exceptions" and must be filed with the Docket Services Section of the Legal Division (Room 12-125) within 10 days after the deadline for filing exceptions.

In addition to written exceptions and replies, the parties may file with the Commission a one page summary of the case. The summary shall be filed with the Commission **at the time exceptions are due**. The summary is specifically limited to one page and shall contain only information of record or argument based on the record. The summary shall not be submitted in reduced print. If the summary contains any material not of record, has reduced print, or exceeds one page (8-1/2" x 11"), the examiner(s) will reject the summary and it will not be submitted to the Commissioners for their review.

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The summary shall contain the name of the party, the status of the party, the name and docket number of the case, the issue(s), the key facts, the legal principles involved (including proposed conclusions of law), and the action requested. (See enclosed form.)

In view of the due dates stated above, all parties are reminded that pleadings are considered filed only upon **actual receipt by the Docket Services Section of the Legal Division** (Room 12-125). Furthermore, each pleading must be served upon all Parties of Record and a statement certifying such and giving complete names and addresses must be included. Exceptions and replies may not be filed by telephonic document transfer. Unless otherwise directed by the examiner(s), nine copies of exceptions, replies and summaries shall be submitted to the Commission.

The proposal for decision, and all exceptions and replies will be submitted to the Commissioners for their consideration at one of their regularly scheduled conferences. The agenda for the scheduled conferences will be published in the Texas Register and posted in the office of the Secretary of State. The conferences are open meetings; you may attend and listen to the presentation of the case.

If you find regular mail delivery unsatisfactory, you may supply the Commission with a charge account number for an expedited or overnight delivery service. The Commission would thereafter utilize that delivery service, billed to your account, for transmittal of proposals for decision and orders.

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Doug Johnson, P. E.
Technical Examiner

RRC - District 3

CASE SUMMARY

PREPARED BY:

STATUS:

EXAMINER(S):

DOCKET NO./CASE NAME:

ISSUE(S):

KEY FACTS:

LEGAL PRINCIPLES INVOLVED:

ACTION REQUESTED: