

**STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:**

**CASE NO. 12404
ORDER NO. R-11394**

**APPLICATION OF HOME-STAKE OIL & GAS COMPANY FOR AN
UNORTHODOX OIL WELL LOCATION, LEA COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on May 4, 2000, at Santa Fe, New Mexico before Examiner David R. Catanach.

NOW, on this 7th day of June, 2000, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

- (1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.
- (2) The applicant, Home-Stake Oil & Gas Company ("Home-Stake"), seeks approval to drill its Mazingo Well No. 1 from a surface location 365 feet from the North line and 1593 feet from the East line (Unit B) of Section 27, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico to an unorthodox bottomhole location no closer than 150 feet from the North line and no closer than 1470 feet from the East line (Unit B) of Section 27 to test the Fusselman formation, South McCormack-Silurian Pool.
- (3) The NW/4 NE/4 of Section 27 is to be dedicated to the well forming a standard 40-acre oil spacing and proration unit.
- (4) The proposed well is located within one mile of the South McCormack-Silurian Pool, which is currently governed by Division Rule 104.B(1), which requires standard 40-acre spacing and proration units with wells to be located no closer than 330 feet to the outer boundary of the unit.

(5) The South McCormack-Silurian Pool is also subject to a special depth bracket allowable of 230 BOPD and 460 MCFGPD as established by Division Order No. R-11326 dated February 10, 2000.

(6) Ms. Natalie Kaplan, a royalty interest owner in the Home-Stake HSOG Well No. 2 (**API No. 30-025-34715**) located 450 feet from the South line and 940 feet from the East line (Unit P) of Section 22 and the Home-Stake Sarah Johnston Well No. 1 (**API No. 30-025-34497**) located 800 feet from the South line and 2040 feet from the East line (Unit O) of Section 22, both in Township 22 South, Range 37 East, NMPM, appeared at the hearing in opposition to the application.

(7) Both the HSOG Well No. 2 and the Sarah Johnston Well No. 1 are currently producing from the South McCormack-Silurian Pool.

(8) Home-Stake testified that the interest ownership within the S/2 SE/4 of Section 22 is common throughout, and the interest ownership within the N/2 NE/4 of Section 27 is also common throughout. The interest ownership is not common, however, between the S/2 SE/4 of Section 22 and the N/2 NE/4 of Section 27.

(9) Home-Stake presented geologic evidence that demonstrates:

- (a) the primary objective in the Mozingo Well No. 1 is the Fusselman formation;
- (b) utilizing 3-D seismic data, it has identified the presence and location of sealing faults within the NW/4 NE/4 of Section 27. Due to the location of these faults, only a portion of the NE/4 NW/4 NE/4 of Section 27 will be productive from the Fusselman formation;
- (c) the proposed Mozingo Well No. 1 is located within the same fault block as the HSOG Well No. 2, but in a different fault block from the Sarah Johnston Well No. 1; and
- (d) a well drilled at a standard location within the NW/4 NE/4 of Section 27 would be located in close proximity to the fault and at a structurally low position at or near an area of high water saturation within the Fusselman reservoir.

(10) Home-Stake's evidence further demonstrates that the proposed surface location and directional drilling for the Mozingo Well No. 1 is necessary due to numerous topographic considerations within the NW/4 NE/4 of Section 27.

(11) Home-Stake presented engineering evidence relating to drainage areas and ultimate recoveries for the HSOG Well No. 2 and the Mozingo Well No. 1, described as follows:

<u>Well Name</u>	<u>Drainage Area</u>	<u>Ultimate Recovery</u>
HSOG No. 2	20 acres	170,000 BO
Mozingo No. 1	10 acres	85,000 BO

(12) Home-Stake estimates that the Mozingo Well No. 1 will produce at an initial rate of approximately 150 BOPD.

(13) Home-Stake testified that the Mozingo Well No. 1 should not drain the SE/4 SE/4 of Section 22 and should therefore not reduce the ultimate recovery from the HSOG Well No. 2. Home-Stake did, however, suggest that it is appropriate to impose a production penalty on the Mozingo Well No. 1.

(14) Home-Stake proposed that the Mozingo Well No. 1 be assigned an allowable of 172 BOPD. This allowable was determined by reducing the top unit allowable for the South McCormack-Silurian Pool (230 BOPD) by a 25 percent production penalty.

(15) The evidence presented demonstrates that the proposed unorthodox bottomhole location for the Mozingo Well No. 1 is geologically justified and is necessary to recover the oil and gas reserves underlying the NW/4 NE/4 of Section 27.

(16) The evidence further demonstrates that drilling the Mozingo Well No. 1 to the proposed unorthodox bottomhole location may adversely affect the correlative rights of the interest owners in the SE/4 SE/4 of Section 22.

(17) The application of Home-Stake should be approved; however, to protect the correlative rights of affected interest owners in the SE/4 SE/4 of Section 22, a production penalty should be imposed on the Mozingo Well No. 1.

(18) The production penalty should be based upon the degree of encroachment towards the affected acreage in Section 22, calculated as follows:

$(330 \text{ feet (standard setback)} - 150 \text{ feet (proposed setback)}) / 330 \text{ feet} = 55 \text{ percent}$

(19) The Mozingo Well No. 1 should be assigned an allowable of 104 BOPD $(230 \text{ BOPD} \times .45)$ and 208 MCFGPD $(104 \text{ BOPD} \times 2000 \text{ SCF/Barrel of Oil})$ in the South McCormack-Silurian Pool.

(20) Home-Stake should be required to conduct a directional survey during or upon completion of directional drilling operations on the Mozingo Well No. 1. Home-Stake should notify the supervisor of the Division's Hobbs District Office of the date and time the directional survey is to be conducted in order that it may be witnessed. Home-Stake should submit copies of the directional survey to the Santa Fe and Hobbs offices of the Division upon completion.

(21) Upon application by Home-Stake, the production penalty imposed by this order may be administratively adjusted by the Division Director based upon the final bottomhole location of the Mozingo Well No. 1 and in accordance with the formula shown in Findings No. 18 and 19 above.

(22) Approval of the proposed unorthodox bottomhole location, subject to a production penalty, will afford the applicant the opportunity to recover the oil and gas reserves underlying the NW/4 NE/4 of Section 27 and will protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Home-Stake, is hereby authorized to drill its Mozingo Well No. 1 from a surface location 365 feet from the North line and 1593 feet from the East line (Unit B) of Section 27, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, to an unorthodox bottomhole location no closer than 150 feet from the North line and no closer than 1470 feet from the East line (Unit B) of Section 27 to test the Fusselman formation, South McCormack-Silurian Pool.

(2) The NW/4 NE/4 of Section 27 shall be dedicated to the well forming a standard 40-acre oil spacing and proration unit.

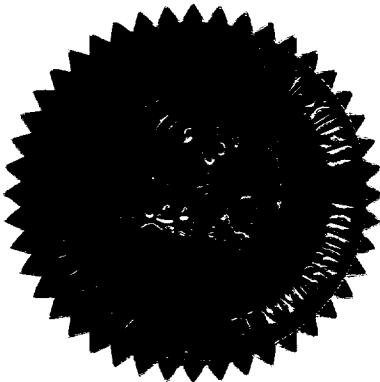
(3) Home-Stake shall conduct a directional survey during or upon completion of directional drilling operations on the Mozingo Well No. 1. Home-Stake shall notify the supervisor of the Division's Hobbs District Office of the date and time the directional survey is to be conducted in order that it may be witnessed. Home-Stake shall submit copies of the directional survey to the Santa Fe and Hobbs offices of the Division upon completion.

(4) The Mozingo Well No. 1 is hereby assessed a production penalty of 55 percent in the South McCormack-Silurian Pool. The well shall be allowed to produce at a rate not to exceed 104 BOPD and 208 MCFGPD.

(5) Upon application of Home-Stake, the production penalty imposed by this order may be administratively adjusted by the Division Director based upon the final bottomhole location of the Mozingo Well No. 1 in accordance with the formula shown in Findings No. 18 and 19 above.

(6) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



S E A L

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

Lori Wrotenbery
LORI WROTENBERY
Director