

**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. 13289  
Order No. R-12203**

**APPLICATION OF SAMSON RESOURCES COMPANY FOR SPECIAL POOL  
RULES FOR THE SOUTHEAST HAT MESA-DELAWARE POOL, LEA  
COUNTY, NEW MEXICO.**

**ORDER OF THE DIVISION**

**BY THE DIVISION:**

This case came on for hearing at 8:15 a.m. on June 24 and July 22, 2004, at Santa Fe, New Mexico, before Examiners David R. Catanach and Michael E. Stogner, respectively.

NOW, on this 2<sup>nd</sup> day of September, 2004, 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, Samson Resources Company ("Samson"), seeks to establish special pool rules, on a temporary basis, for the Southeast Hat Mesa-Delaware Pool, Lea County, New Mexico; including provisions for 160 acre spacing and proration units and designated well location requirements such that wells shall be located no closer than 660 feet to the outer boundary of the unit and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

(3) Pursuant to Division Rules 505(A) and 506(A), the proposed 160-acre spacing for the Southeast Hat Mesa-Delaware Pool will result in the assignment of a depth bracket allowable of 427 barrels of oil and 854 MCF of gas per day.

(4) The Southeast Hat Mesa-Delaware Pool was created by Division Order No. R-11886 dated January 17, 2003. The discovery well for the pool was the Samson Resources Company Minis "2" Federal Well No. 1 (API No. 30-025-34449) located 360 feet from the South line and 660 feet from the East line (Lot 16) of Irregular Section 2, Township 21 South, Range 32 East, NMPM, Lea County, New Mexico. The pool currently comprises Lots 9, 10, 15 and 16 of Irregular Section 2.

(5) The Southeast Hat Mesa-Delaware Pool is currently governed by Division Rule 104(B), 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.

(6) Pursuant to Division Rules 505.A. and 506.A., the Southeast Hat Mesa-Delaware Pool is currently subject to a depth bracket allowable of 187 barrels of oil per day and a limiting gas-oil ratio of 2,000 cubic feet of gas per barrel of oil.

(7) Pursuant to Division Rule 509.A., the Minis "2" Federal Well No. 1 was assigned a bonus discovery allowable of 39,465 barrels of oil by Order No. R-11886. The bonus discovery allowable was to be produced by the well over a two-year period at a rate of approximately 54 barrels per day. The current oil allowable for the Minis "2" Federal Well No. 1 is approximately 241 barrels of oil per day (187 BOPD depth bracket allowable + 54 BOPD discovery allowable.)

(8) The applicant presented evidence that demonstrates that:

- (a) the Minis "2" Federal Well No. 1 is currently the only well producing from the Southeast Hat Mesa-Delaware Pool;
- (b) the Minis "2" Federal Well No. 1 is currently capable of producing in excess of 241 barrels of oil per day, and is likely capable of producing the proposed depth bracket allowable of 427 barrels of oil per day; and
- (c) as of May 2004, the well has cumulatively produced approximately 166,798 barrels of oil and 65.6 MMCF of gas.

(9) Samson testified that no additional wells are planned at this time to further develop this Delaware reservoir.

(10) The applicant presented as evidence, the results of a reservoir simulation conducted on the Hat Mesa-Delaware Pool. The results of the simulation show that:

- (a) the subject reservoir is not rate sensitive;
- (b) based upon a producing rate of 427 barrels of oil per day, the Minis "2" Federal Well No. 1 will recover an additional 757,575 barrels of oil from this Delaware reservoir; and
- (c) the Minis "2" Federal Well No. 1 will ultimately recover 944,604 barrels of oil from this Delaware reservoir.

(11) Based upon volumetric calculations and the estimated ultimate recovery from the well as derived from the reservoir simulation, Samson has calculated that the Minis "2" Federal Well No. 1 will ultimately drain an area of approximately 216 acres.

(12) The evidence presented shows that the reservoir simulation and volumetric calculations presented by the applicant are based upon a number of assumptions; however, this preliminary data, and the production history of the well demonstrates that the Minis "2" Federal Well No. 1 should be capable of draining an area in excess of 40 acres.

(13) The preliminary engineering data further demonstrates that increasing the pool allowable to 427 barrels of oil per day should not result in the excessive waste of reservoir energy, and should not reduce the ultimate recovery of oil from this Delaware reservoir.

(14) Except for Samson, there are no additional division-designated operators, no additional mineral estate owners in existing spacing units with producing wells, or no additional division-designated operators of wells within the same formation within one mile of the pool boundaries.

(15) No operator and/or interest owner appeared at the hearing in opposition to the application.

(16) Temporary special pool rules that provide for 160-acre spacing and proration units, designated well location requirements such that wells shall be located no closer than 660 feet to the outer boundary of the spacing unit nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary should be established for the Southeast Hat Mesa-Delaware Pool.

(17) The applicant requested that the special pool rules for the Southeast Hat Mesa-Delaware Pool established by this order should remain in effect for a temporary period of eighteen months in order to provide the opportunity to obtain additional engineering data to support the permanent adoption of these rules.

(18) In order to facilitate the examination of additional engineering data that will be obtained, the special pool rules for the Southeast Hat Mesa-Delaware Pool should remain in effect for a temporary period of twelve months.

(19) This case should be reopened at an examiner hearing in September, 2005, at which time the operators in the Southeast Hat Mesa-Delaware Pool should appear to show cause why the temporary special pool rules established by this order should not be rescinded.

**IT IS THEREFORE ORDERED THAT:**

(1) Pursuant to the application of Samson Resources Company, temporary special pool rules for the Southeast Hat Mesa-Delaware Pool, which currently comprises Lots 9, 10, 15 and 16 of Irregular Section 2, Township 21 South, Range 32 East, NMPM, Lea County, New Mexico, are hereby established as follows:

**TEMPORARY SPECIAL POOL RULES  
FOR THE  
SOUTHEAST HAT MESA-DELAWARE POOL**

**RULE 1.** Each well completed in or recompleted in the Southeast Hat Mesa-Delaware Pool, or in the Delaware formation within one mile thereof and not nearer to or within the limits of another designated Delaware pool, shall be spaced, drilled, operated, and produced in accordance with the special rules hereinafter set forth.

**RULE 2.** Each well completed or recompleted in the Southeast Hat Mesa-Delaware Pool shall be located on a unit containing 160 acres, more or less, which consists of a single governmental quarter section.

**RULE 3.** The Director may grant an exception to the requirements of Rule 2 in accordance with the procedure set forth by Division Rule No. 104.D.(2).

**RULE 4.** Each well shall be located no closer than 660 feet to the outer boundary of the spacing unit, nor closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

**RULE 5.** The Director may grant an exception to the requirements of Rule 4 in accordance with the procedure set forth by Division Rule No. 104.F.

**RULE 6.** The allowable for a standard 160-acre proration unit shall be 427 barrels of oil per day. In the event there is more than one well on a 160-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion. The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 160 acres.

**RULE 7.** The limiting gas-oil ratio shall be 2,000 cubic feet of gas per barrel of oil.

**IT IS FURTHER ORDERED THAT:**

(2) The location of all wells presently drilling to, or completed in, the Southeast Hat Mesa-Delaware Pool, or in the Delaware formation within one mile thereof, are hereby approved. The operator of any well having an unorthodox location shall notify the Division's Hobbs District Office, in writing, of the name and location of the well within 30 days from the date of this order.

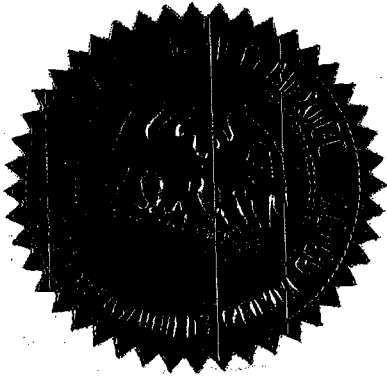
(3) Existing wells in the Southeast Hat Mesa-Delaware Pool shall have dedicated thereto 160 acres in accordance with the foregoing pool rules; or, existing wells may have non-standard spacing and proration units established by the Division and dedicated thereto.

Failure to file new Form C-102 with the Division dedicating 160 acres to a well, or to obtain a non-standard unit approved by the Division within 60 days from the date of this order, shall subject the well to cancellation of allowable until a non-standard unit has been approved.

(4) This case shall be reopened at an examiner hearing in September, 2005, at which time the operators in the Southeast Hat Mesa-Delaware Pool shall appear and present evidence to show cause why the temporary special pool rules established by this order should not be rescinded.

(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.



SEAL

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

A handwritten signature in cursive script, reading "Mark E. Fesmire".

MARK E. FESMIRE  
Director