

BEFORE THE INDUSTRIAL COMMISSION
OF THE STATE OF NORTH DAKOTA

CASE NO. 7531
ORDER NO. 8850

IN THE MATTER OF A HEARING CALLED
ON A MOTION OF THE COMMISSION TO
CONSIDER ELIMINATING THE INTERWELL
DISTANCE AND AMENDING THE SURFACE
CASING, GAS-OIL RATIO, AND BOTTOM
HOLE PRESSURE TESTING REQUIREMENTS
FOR ALL SECONDARY RECOVERY PROJECTS
AND POOLS LOCATED IN THE FOLLOWING
FIELDS WITHIN BOTTINEAU COUNTY,
NORTH DAKOTA: ANTLEER, BAUMANN
DRAIN, CIMBEL, ELMS, GLENBURN, GREAT
NORTHERN, HAAS, HARAM, HULSE COULEE,
KANE, KANU, KUROKI, LANDA, LANSFORD,
LEONARD, LESJE, MOHALL, MOUNTROSE,
NEWBURG, NORTH HAAS, NORTH ROTH,
NORTH SOURIS, NORTH WESTHOPE,
NORTHEAST LANDA, PRESCOTT, REFUGE,
RENVILLE, ROTH, RUSSELL, SCANDIA,
SCOTIA, SERGIS, SHERMAN, SOURIS,
SOUTH ANTLEER CREEK, SOUTH LANDA,
SOUTH STARBUCK, SOUTH WESTHOPE,
SOUTHWEST HAAS, SOUTHWEST LANDA,
SOUTHWEST STARBUCK, SPRING COULEE,
STARBUCK, STINSON, WAYNE, WEST ROTH,
WHEATON, WILEY AND ZION.

ORDER OF THE COMMISSION

THE COMMISSION FINDS:

(1) This cause came on for hearing at 9:00 a.m. on the 20th day of December, 2000. Order No. 8797, dated January 4, 2001, continued this matter for 60 days or until further order of the Commission.

(2) Special field rules are currently in effect for the Antler Midale Unit, Antler-Madison Pool, Baumann Drain Madison Unit, Baumann Drain-Madison Pool, Cimbels-Madison Pool, Elms-Madison Pool, Glenburn-Madison Pool, Great Northern-Madison Pool, Haas Madison Unit, Haas-Madison Pool, Haram-Madison Pool, Hulse Coulee-Madison Pool, Kane-Madison Pool, Kanu-Madison Pool, Kuroki Midale Unit, Kuroki-Madison Pool, Landa-Madison Unit, Landa-Madison and Spearfish Pools, Lansford-Madison Pool, Leonard-Spearfish/Madison Pool, Lesje-Madison Pool, Mohall-Madison Pool, Mountrose-Madison Pool, Newburg Spearfish/Charles Unit, Newburg-Spearfish/Charles Pool, North Haas-Madison Pool, North Roth-Spearfish Pool, North Souris-Madison Pool, North Westhope Madison Unit, North Westhope-Madison Pool, Northeast Landa-Spearfish/Madison Pool, Prescott-Madison Pool, Refuge-Madison Pool, Renville-Madison Pool, Roth-Spearfish/Madison Pool, Russell-Spearfish/Madison Pool, Scandia-Spearfish/Madison Pool, Scotia Madison Unit, Scotia-Madison Pool, Sergis-Madison Pool, Sherman-Madison Pool, Souris-Madison and Spearfish/Madison Pools, South Antler Creek Madison Unit, South Antler Creek-Madison Pool, South Landa Madison Unit, South Landa-Madison Pool, South Starbuck Madison Unit, South Starbuck-Madison and Spearfish Pools, South Westhope-Spearfish/Charles Unit, South Westhope-Madison and Spearfish/Charles Pools, Southwest Haas-

Madison Pool, Southwest Landa-Madison Pool, Southwest Starbuck-Madison and Spearfish Pools, Spring Coulee-Madison Pool, Starbuck-Madison Pool, Stinson-Madison Pool, Wayne-Madison Pool, West Roth-Madison Pool, Wheaton-Madison Pool, Wiley Glenburn Unit, Wiley-Madison Pool and Zion-Spearfish/Madison Pool in Bottineau County, North Dakota. Said rules require the following:

- (a) Surface casing is not required to be set at a point deep enough to protect the fresh waters found within the Fox Hills Formation.
- (b) All wells drilled must maintain an interwell setback from any well permitted to or producing from each respective pool.
- (c) Semiannual gas-oil ratio tests must be conducted.
- (d) Annual reservoir pressure tests must be conducted.

(3) Potable waters are located within the Fox Hills Formation and sufficient surface casing should be set to protect such waters.

(4) An interwell setback prevents operators from drilling a well at an optimum location in the reservoir. A well drilled at an optimum location may produce oil that might otherwise not be produced, therefore, the interwell setback should be eliminated.

(5) Semiannual gas-oil ratio tests are a financial burden on operators and should be required annually only when the gas is not being marketed, although additional tests conducted by the operator may provide valuable information and should be submitted to the Commission.

(6) Annual reservoir pressure tests on existing wells are a financial burden on operators and should be required only when a new well is completed in the pool, although additional tests conducted by the operator may provide valuable information and should be submitted to the Commission.

(7) There were no objections to this case.

(8) The aforementioned protection of potable waters and relief from certain field rules will prevent waste, avoid the drilling of unnecessary wells, and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) Commission orders establishing special field rules for the aforementioned pools in paragraph (2) above are hereby amended to provide for the following:

- (a) Surface casing shall be set and cemented at a point not less than 50 feet below the base of the Fox Hills Formation.
- (b) No interwell setback shall be required to a well permitted to or producing from any respective pool.
- (c) The gas-oil ratio of all wells not connected to a gas gathering system shall be measured annually during the month of May. The reservoir pressure shall be measured within 45 days in all wells hereinafter completed in any pool. Drill stem test pressures are acceptable for determining reservoir pressure. Pressure measurements shall be made at or adjusted to its respective subsea datum after the well has been

shut in for a minimum of 48 hours. All gas-oil ratio and reservoir pressure determinations shall be made by methods approved by the Director and reported to the Director within 15 days following the end of the month in which they are determined. The Director is authorized to waive these requirements if the necessity therefor can be demonstrated to his satisfaction. All additional gas-oil ratio and reservoir pressure determinations conducted on any well, but not specifically required herein, shall be reported to the Director within 15 days following the end of the month in which they are determined.

(2) Paragraph (9) of Commission Order No. 8574, which sets forth the gas-oil ratio and reservoir pressure requirements for the Saddle Butte-Stonewall Pool, shall remain in full force and effect until further order of the Commission.

(3) This order shall remain in full force and effect until further order of the Commission.

Dated this 15th day of February, 2001.

INDUSTRIAL COMMISSION
STATE OF NORTH DAKOTA

/s/ John Hoeven, Governor

/s/ Wayne Stenehjem, Attorney General

/s/ Roger Johnson, Commissioner of Agriculture