

**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. 12424
ORDER NO. R-11402**

**APPLICATION OF MURCHISON OIL & GAS, INC. FOR AN UNORTHODOX
SECOND INFILL GAS WELL LOCATION AND SIMULTANEOUS DEDICATION,
EDDY COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on June 1, 2000, at Santa Fe, New Mexico, before Examiner Mark W. Ashley.

NOW, on this 16th day of June, 2000, the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised,

FINDS THAT:

- (1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.
- (2) The applicant, Murchison Oil & Gas, Inc. ("Murchison"), seeks exceptions to Rules 2.B and 4 of the "*Special Rules and Regulations for the White City-Pennsylvanian Gas Pool*," as promulgated by Division Order No. R-2429-A, as amended, in order to drill its proposed Black River Federal Com. Well No. 1 at an unorthodox gas well location 1650 feet from the South line and 660 feet from the West line (Unit L) of Section 34, Township 24 South, Range 26 East, as a second infill gas well on its existing standard 640-acre gas spacing and proration unit comprising all of Section 34 in the White City-Pennsylvanian Gas Pool.
- (3) The subject unit is currently dedicated to the applicant's: (i) Strong Federal Com. Well No. 1 (API No. 30-015-22153), located at a standard gas well location 1650 feet from the South and East lines (Unit J) of Section 34; and (ii) Strong Federal Com. Well No. 1-E (API No. 30-015-24094), located at a standard gas well location 1650 feet from the North and West lines (Unit F) of Section 34.

(4) The applicant further seeks to simultaneously dedicate all of Section 34 in the White City-Pennsylvanian Gas Pool to its Black River Federal Com. Well No. 1 and its existing Strong Federal Com. Well No. 1 and Strong Federal Com. Well No. 1-E.

(5) By Order No. R-1857, dated January 20, 1961 and made effective February 1, 1961, the Division created and defined the White City-Pennsylvanian Gas Pool for the production of gas from the entire Pennsylvanian formation.

(6) The White City-Pennsylvanian Gas Pool is governed by "*Special Rules and Regulations for the White City Pennsylvanian Gas Pool*," as promulgated by Division Order No. R-2429-A, as amended, which provide:

- (a) for 640-acre spacing and proration units (Rule 2.A);
- (b) that wells be located no closer than 1650 feet to the outer boundary of the spacing unit and no closer than 330 feet to any governmental quarter-quarter section line (Rule 4);
- (c) that no more than two producible wells be allowed at any one time on a single spacing unit (Rule 2.B); and
- (d) for an exception to the two-well limit for good cause (Rule 2.C).

(7) The applicant presented geologic evidence indicating that:

- (a) primary production from the White City-Pennsylvanian Gas Pool in this area is from the Middle Morrow Clastics; and
- (b) a well at the proposed unorthodox location will encounter the Middle Morrow Clastics at a structurally higher location than a well at a standard location.

(8) The applicant presented engineering evidence indicating that:

- (a) the proposed unorthodox location moves the Black River Federal Com. Well No. 1 away from the existing Strong Federal Com. Well No. 1 and Strong Federal Com. Well No. 1-E wells, thus minimizing potential drainage or pressure interference;

- (b) the Strong Federal Com. Well No. 1 has produced 1.6 BCF since 1977;
- (c) the Strong Federal Com. Well No. 1-E has produced 3.2 BCF since 1983;
- (d) volumetric gas reserve calculations in Section 34 for the Middle Morrow Clastics are as follows:

Original Gas In Place	19.0 BCF
Recoverable Gas (75 % Recovery Factor)	14.3 BCF
Cumulative Gas Production	4.8 BCF;

- (e) based on volumetric calculations, the Strong Federal Com. Well No. 1 and Strong Federal Com. Well No. 1-E are not draining the reserves underlying the subject unit; and
- (f) a second infill gas well is required to further drain the remaining reserves underlying the subject unit.

(9) The geologic and engineering evidence presented in this case demonstrates that the drilling of the Black River Federal Com. Well No. 1 at an unorthodox gas well location as a second infill gas well on an existing 640-acre gas spacing and proration unit in the White City-Pennsylvanian Gas Pool is necessary to effectively and efficiently recover the remaining gas reserves underlying Section 34, which will not otherwise be recovered by the existing Strong Federal Com. Well No. 1 and Strong Federal Com. Well No. 1-E.

(10) No affected party appeared at the hearing in opposition to this application.

(11) Approval of the application will afford the operator the opportunity to produce the remaining gas reserves underlying Section 34, which may otherwise not be recovered, and will otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Murchison Oil & Gas, Inc., is hereby authorized to drill its Black River Federal Com. Well No. 1, as a second infill gas well on its existing 640-acre gas spacing and proration unit, to test the Morrow formation in the White City-Pennsylvanian Gas Pool at an unorthodox gas well location 1650 feet from the South line and 660 feet from

the West line (Unit L) of Section 34, Township 24 South, Range 26 East, NMPM, Eddy County, New Mexico.

(2) The applicant is further authorized to simultaneously dedicate all of Section 34 in the White City-Pennsylvanian Gas Pool to its Black River Federal Com. Well No. 1 and its existing Strong Federal Com. Well No. 1 (API No. 30-015-22153), located at a standard gas well location 1650 feet from the South and East lines (Unit J) of Section 34, and Strong Federal Com. Well No. 1-E (API No. 30-015-24094), located at a standard gas well location 1650 feet from the North and West lines (Unit F) of Section 34.

(3) Jurisdiction of this case is 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.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

LORI WROTENBERY
Director

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