

**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. 11772
Order No. R-10810**

**APPLICATION OF RICHARDSON OPERATING
COMPANY FOR DOWNHOLE COMMINGLING
AND AN UNORTHODOX COAL GAS WELL
LOCATION, SAN JUAN COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on May 15, 1997, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 3rd day of June, 1997, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

FINDS THAT:

- (1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.
- (2) The applicant, Richardson Operating Company, seeks approval to drill its Bushman "6" Federal Well No. 1 at an unorthodox coal gas well location 1041 feet from the South line and 1136 feet from the East line (Unit P) of Section 6, Township 29 North, Range 14 West, NMPM, San Juan County, New Mexico.
- (3) The applicant further seeks authority to downhole commingle the Pictured Cliffs/Fruitland Sand and Fruitland Coal formations, Twin Mounds Fruitland Sand-Pictured Cliffs and Basin-Fruitland Coal Gas Pools, within the aforesaid Bushman "6" Federal Well No. 1.
- (4) The E/2 and SE/4 of Section 6 are to be dedicated to the subject well, respectively, in the Basin-Fruitland Coal and Twin Mounds Fruitland Sand-Pictured Cliffs Gas Pools, thereby forming standard 320-acre and 160-acre gas spacing and proration units for said pools.

(5) The subject well is located within both the Twin Mounds Fruitland Sand-Pictured Cliffs Gas Pool and the Basin-Fruitland Coal Gas Pool. The subject well is standard with respect to the setback requirements for both pools, however, the well is unorthodox with respect to the quarter section location requirements as set forth within the Special Rules and Regulations for the Basin-Fruitland Coal Gas Pool as promulgated by Division Order No. R-8768, as amended, which require wells to be located within the NE/4 or SW/4 of a single governmental section.

(6) According to applicant's evidence and testimony, the E/2 of Section 6 is located either within or in close proximity to the city limits of Kirtland, New Mexico.

(7) Applicant's evidence further indicates that there exists a housing development within the NE/4 of Section 6. Applicant testified that it has attempted to locate its proposed well at a standard location within the NE/4 of Section 6, but has received strong opposition from residents within this area.

(8) Applicant contends that the SE/4 of Section 6 is a better quarter section in which to locate its well for the following reasons:

- a) the SE/4 is substantially less populated than the NE/4;
- b) its proposed well location is within a depression which is out of view of residents in this area;
- c) it has reached a drilling surface damage agreement with the surface owner at its proposed location;
- d) the economics of this prospect will not support the additional costs to directionally drill the subject well from a surface location within the SE/4 to a standard bottomhole location within the NE/4;
- d) the proposed "off-pattern" development of the Basin Fruitland Coal Gas Pool should not have an adverse affect on future development inasmuch as the Fruitland Coal formation in this area is expected to be marginally productive, therefore additional future development of this reservoir within this area of the San Juan Basin should be very limited.

(9) No other offset operator and/or interest owner appeared at the hearing in opposition to the proposed unorthodox coal gas well location.

(10) Approval of the proposed unorthodox coal gas well location will afford the applicant the opportunity to produce its just and equitable share of the gas in the Basin-Fruitland Coal Gas Pool, will prevent the economic loss caused by the drilling of unnecessary wells, avoid the augmentation of risk arising from the drilling of an excessive number of wells and will otherwise prevent waste and protect correlative rights.

(11) Applicant's evidence further indicates that the proposed downhole commingling is necessary in order to recover marginal reserves within both the Fruitland Sand/Pictured Cliffs and Fruitland Coal formations.

(12) The data currently available indicates that the proposed Bushman "6" Federal Well No. 1 qualifies for downhole commingling pursuant to Division Rule No. 303.C.

(13) The applicant proposes to allocate production from the Bushman "6" Federal Well No. 1 utilizing: a) initial flow rate data from the Basin-Fruitland Coal Gas Pool; b) initial flow rate data from the commingled stream; c) calculated decline rate from the Pictured Cliffs/Fruitland Sand formations; d) calculated Pictured Cliffs/Fruitland Sand production rate using the formula $Q_{PC} = Q_{PCi} \cdot e^{(-Dt)}$, where t is any time in months; e) calculated production rate from the Fruitland Coal formation utilizing total production rate minus calculated Pictured Cliffs/Fruitland Sand production rate.

(14) Applicant's proposed method of allocation is fair, reasonable and should be adopted.

(15) The applicant should consult with the supervisor of the Division's Aztec District Office upon completion and testing of the well in order to properly determine and initialize the allocation method.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Richardson Operating Company, is hereby authorized to drill its Bushman "6" Federal Well No. 1 at an unorthodox coal gas well location 1041 feet from the South line and 1136 feet from the East line (Unit P) of Section 6, Township 29 North, Range 14 West, NMPM, San Juan County, New Mexico.

(2) The applicant is further authorized to downhole commingle the Twin Mounds Fruitland Sand-Pictured Cliffs and Basin-Fruitland Coal Gas Pools within the aforesaid Bushman "6" Federal Well No. 1.

(3) The E/2 and SE/4 of Section 6 shall be dedicated to the subject well, respectively, in the Basin-Fruitland Coal and Twin Mounds Fruitland Sand-Pictured Cliffs Gas Pools, thereby forming standard 320-acre and 160-acre gas spacing and proration units for said pools.

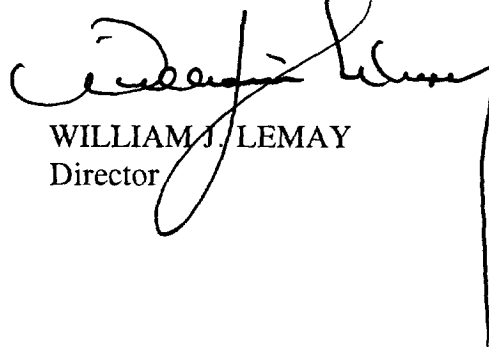
(4) The applicant shall allocate production from the Bushman "6" Federal Well No. 1 utilizing: a) initial flow rate data from the Basin-Fruitland Coal Gas Pool; b) initial flow rate data from the commingled stream; c) calculated decline rate from the Pictured Cliffs/Fruitland Sand formations; d) calculated Pictured Cliffs/Fruitland Sand production rate using the formula $Q_{PC} = Q_{PCi} \cdot e^{(-Dt)}$, where t is any time in months; e) calculated production rate from the Fruitland Coal formation utilizing total production rate minus calculated Pictured Cliffs/Fruitland Sand production rate;

(5) The applicant shall consult with the supervisor of the Division's Aztec District Office upon completion and testing of the well in order to properly determine and initialize the allocation method.

(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.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


WILLIAM J. LEMAY
Director

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