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. 11865 Order No. R-10960

APPLICATION OF THOMPSON ENGINEERING & PRODUCTION CORPORATION FOR AN UNORTHODOX GAS WELL LOCATION AND DOWNHOLE COMMINGLING, SAN JUAN COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

<u>BY THE DIVISION</u>:

This cause came on for hearing at 8:15 a.m. on December 4, 1997, and January 8, 1998, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 16th day of February, 1998, 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, Thompson Engineering & Production Corporation (Thompson), seeks approval of an unorthodox coal gas well location for its existing Blancett Well No. 2R located 790 feet from the South line and 830 feet from the East line (Unit P) of Section 13, Township 30 North, Range 12 West, NMPM, San Juan County, New Mexico. The applicant further seeks authority to downhole commingle Basin-Fruitland Coal and Aztec-Pictured Cliffs Gas Pool production within the aforesaid Blancett No. 2R.

- (3) The applicant presented evidence and testimony in this case which indicates that:
 - a) Thompson's Blancett Well No. 2, located 840 feet from the South line and 1650 feet from the East line (Unit O) of Section 13, was originally drilled as an Aztec-Pictured Cliffs Gas Pool producing well in 1953. Thompson plugged and abandoned the well in 1996 due to marginal production from that zone;

- b) in 1995 Thompson drilled the subject Blancett Well No. 2R as a replacement well for the Blancett Well No. 2. The well is located at a standard gas well location for the Aztec-Pictured Cliffs Gas Pool and is currently dedicated to a standard 160-acre gas spacing and proration unit for that pool comprising the SE/4 of Section 13; and,
- c) the Blancett Well No. 2R is currently producing from the Aztec-Pictured Cliffs Gas Pool at a marginal rate of approximately 50 MCF gas per day.

(4) The applicant proposes to complete the Blancett Well No. 2R in the Basin-Fruitland Coal Gas Pool and downhole commingle such production with existing Aztec-Pictured Cliffs Gas Pool production within the wellbore.

(5) The proposed well is located within the Basin-Fruitland Coal Gas Pool which is currently governed by special rules and regulations as promulgated by Division Order No. R-8768, as amended, which require wells to be located in either the NE/4 or SW/4 of a single governmental section no closer than 790 feet from the outer boundary of the proration unit nor closer than 130 feet from any quarter section line nor closer than 10 feet from any quarter-quarter section line or subdivision inner boundary.

(6) The Blancett Well No. 2R is standard with respect to the setback requirements but is unorthodox with respect to the quarter section location.

(7) Maralex Resources Inc. (Maralex), the affected offset operator to the east and south of the Blancett Well No. 2R, appeared at the hearing in opposition to the application. The evidence and testimony presented indicates that Maralex currently operates the following described Basin-Fruitland Coal Gas Pool wells in Section 18, Township 30 North, Range 11 West, NMPM:

Well Name	Well Location	Dedicated <u>Acreage</u>
Scott No. 1	1880' FSL & 1650' FWL (K) Section 18	S/2
Brimhall 30-11-18 No. 2	955' FNL & 895' FEL (A) Section 18	N/2

(8) In addition, Maralex testified that it currently owns an interest in the following described Basin-Fruitland Coal Gas Pool wells located in Sections 19 and 30, Township 30 North, Range 11 West, NMPM:

Well Name	Well Location	Dedicated <u>Acreage</u>
Flora Vista "19" No. 2	833' FSL & 1465' FWL (N) Section 19	S/2
Campbell 30-11-30 No. 1	1073' FNL & 887' FEL (A) Section 30	N/2
Apperson 30-11-30 No. 2	1708' FSL & 1808' FWL (K) Section 30	S/2

(9) In support of its proposed unorthodox coal gas well location and downhole commingling, the applicant presented geologic and engineering evidence and testimony which indicates that:

- a) due to the high decline rate in the Pictured Cliffs interval, the Blancett No. 2R will soon become uneconomic to produce as a single Pictured Cliffs completion;
- b) the cost of recompleting the Blancett No. 2R to the Basin-Fruitland Coal Gas Pool is approximately one-third the cost of drilling a new well within the E/2 of Section 13 to produce the coal gas reserves;
- c) the proposed recompletion and downhole commingling will allow the recovery of additional gas reserves from the Aztec-Pictured Cliffs Gas Pool within the Blancett No. 2R which may otherwise not be recovered, thereby preventing waste;
- d) due to topographic considerations within the E/2 of Section 13, namely the presence of the Animas River and associated flood plain, and the presence of a 200-acre farm within the NE/4 of Section 13, it will be difficult to locate a Basin-Fruitland Coal Gas Pool well at a standard "on pattern" location within the NE/4;
- e) there exists the possibility of drilling a Basin-Fruitland Coal Gas Pool well in this area which would be uneconomic, as evidenced by the unsuccessful Basin-Fruitland Coal Gas Pool completion within the SG Interests I Ltd. Cecil Cast Well No. 1, located in Unit G of Section 19; and,
- f) the Blancett No. 2R qualifies for downhole commingling pursuant to the requirements of Rule No. 303.C. of the Division Rules and Regulations and Division Form C-107-A;

(10) Maralex proposed that Thompson's application be denied, or in the alternative, that the Blancett No. 2R be assessed a production penalty in the Basin-Fruitland Coal Gas Pool. In support of its request, Maralex presented geologic and engineering evidence and testimony which indicates that:

a) a well drilled at a standard location within the NE/4 of Section 13 in the Basin-Fruitland Coal Gas Pool would encounter a thicker coal section than would be present within the Blancett No. 2R wellbore; b) the initial and current producing rates of the affected offset wells which Maralex operates, and the initial and current producing rates of the affected offset wells in which Maralex owns an interest are described as follows:

Well Name	Initial Producing Rate	Current Producing Rate
Scott No. 1	30 MCF/D	490 MCF/D
Brimhall 30-11-18 No. 2	20 MCF/D	570 MCF/D
Apperson 30-11-30 No. 2	60 MCF/D	270 MCF/D
Campbell 30-11-30 No. 1	40 MCF/D	230 MCF/D
Flora Vista "19" No. 2	40 MCF/D	230 MCF/D

- c) the inclining producing rates in the wells described above are a result of the de-watering process that has occurred within these wells over a period of several years;
- d) if the application is approved, Thompson will gain an unfair advantage over Maralex for the following reasons:
 - i) the Blancett No. 2R will be located in the wrong quarter section for a well completed in the Basin-Fruitland Coal Gas Pool; and,
 - ii) the initial producing rate of the Blancett No. 2R in the Basin-Fruitland Coal Gas Pool will likely be higher than the initial producing rates exhibited by the affected offset wells due to the substantial reservoir de-watering which has already occurred in this area.

(11) Maralex proposed that the Blancett No. 2R be assessed a production penalty of 71.5% (28.5% allowable) in the Basin-Fruitland Coal Gas Pool. Its proposed production penalty is based upon the encroachment towards its acreage described as follows:

Blancett No. 2R location:	790' FSL & 830' FEL
Nearest standard well location:	2770' FSL
Proposed Production Penalty:	(2770' - 790') / 2770' = 71.5%

(12) Upon consideration of the evidence and testimony presented by both parties in this case, the Division finds that:

- a) there are recoverable coal gas reserves within the E/2 of Section 13 in the Basin-Fruitland Coal Gas Pool which the applicant has the right to recover;
- b) a standard or non-standard "on pattern" well location within the NE/4 of Section 13 appears to be geologically favorable to a well in the SE/4 of Section 13 in terms of coal thickness within the Fruitland Coal reservoir;
- c) Thompson is not precluded, due to topographic considerations, from drilling a Fruitland Coal gas well at a standard or non-standard "on pattern" well location within the NE/4 of Section 13 in order to recover the coal gas reserves underlying the E/2;
- d) the chances of drilling an economic Fruitland Coal gas well in this area are good as evidenced by the fact that of the six Basin-Fruitland Coal Gas Pool wells that have been drilled in this immediate area, only one appears to have encountered non-commercial gas production;
- e) approval of the subject application may disrupt "on pattern" Fruitland Coal development within several offsetting sections that have yet to be developed in the Fruitland Coal reservoir;
- approval of the subject application will provide the applicant an unfair advantage over Maralex in terms of competing for Fruitland Coal gas reserves underlying Sections 13, 18, 19 and 24;
- g) the assessment of a Fruitland Coal production penalty against the Blancett No. 2R, which would likely be substantial, will be extremely difficult to enforce and monitor, especially in a downhole commingled configured wellbore.

(13) The application of Thompson Engineering & Production Corporation for approval of an unorthodox Basin-Fruitland Coal Gas Pool well location for its Blancett No. 2R should be <u>denied</u>.

(14) The application of Thompson Engineering & Production Corporation for approval to downhole commingle Basin-Fruitland Coal and Aztec-Pictured Cliffs Gas Pool production within the Blancett No. 2R should be <u>denied</u>.

IT IS THEREFORE ORDERED THAT:

(1) The application of Thompson Engineering & Production Corporation for approval of an unorthodox coal gas well location for its existing Blancett Well No. 2R located 790 feet from the South line and 830 feet from the East line (Unit P) of Section 13, Township 30 North, Range 12 West, NMPM, San Juan County, New Mexico, and for authority to downhole commingle Basin-Fruitland Coal and Aztec-Pictured Cliffs Gas Pool production within the aforesaid Blancett No. 2R is hereby <u>denied</u>.

(2) 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

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