

B

MARATHON
BOLACK #4-1

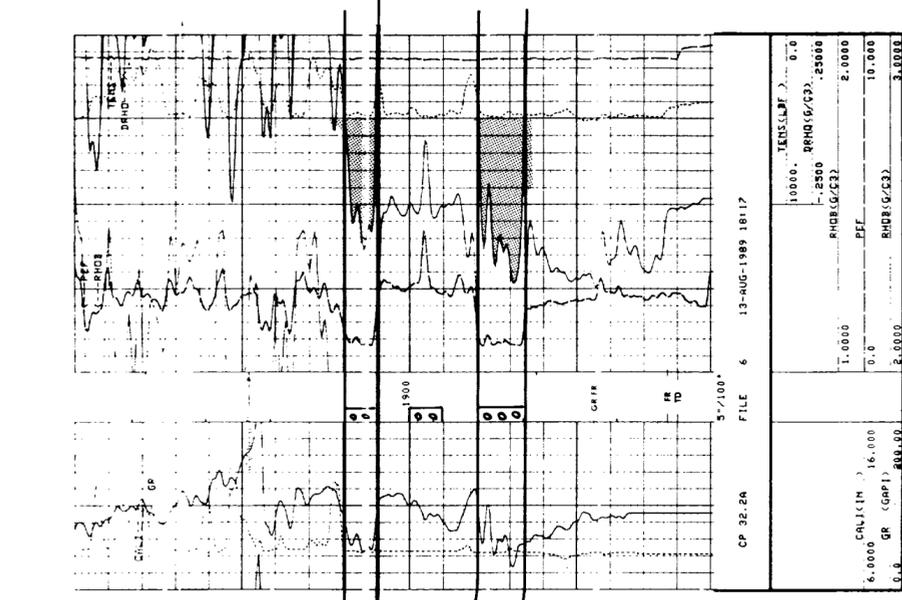
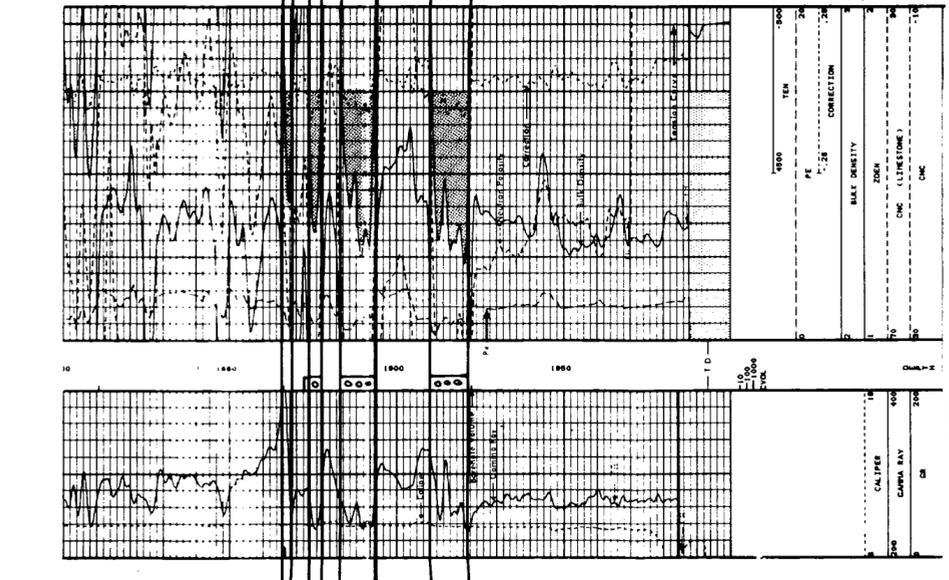
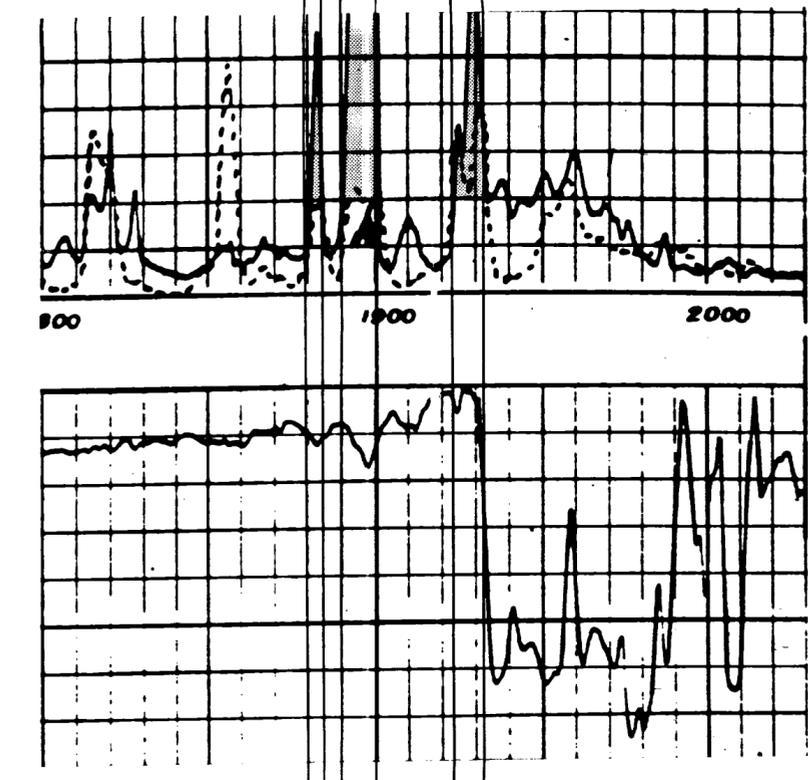
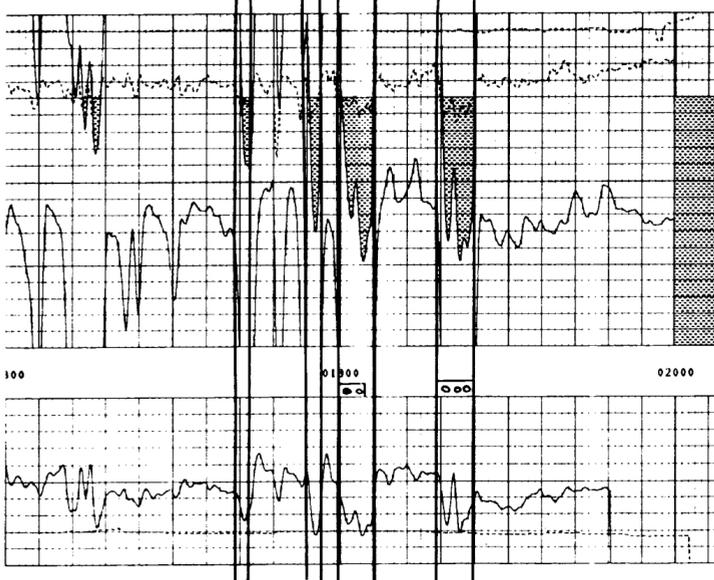
PROPOSED
MARATHON
BOLACK #9-3

FRONTIER
BOLACK #6

MARATHON
BOLACK #9-1

MARATHON
SCHWERTFEGER #15-6

B'



IP 469 MCFD
1ST PROD. 12/90
AS OF 3/93
DAILY RATE 442 MCFD
CUMULATIVE 330 MMCF

Before the
OIL CONSERVATION DIVISION
Santa Fe, New Mexico
Case No. 1078 Exhibit No. 7
Submitted by: Marathon Oil Company
Hearing Date: May 29, 1993

PICTURED CLIFFS
PRODUCER

IP 66 MCFD
1ST PROD. 1/91
AS OF 3/93
DAILY RATE 34 MCFD
CUMULATIVE 69 MMCF

IP 65 MCFD
1ST PROD. 2/90
AS OF 3/93
DAILY RATE 229 MCFD
CUMULATIVE 200 MMCF

MARATHON OIL COMPANY
MID-CONTINENT REGION

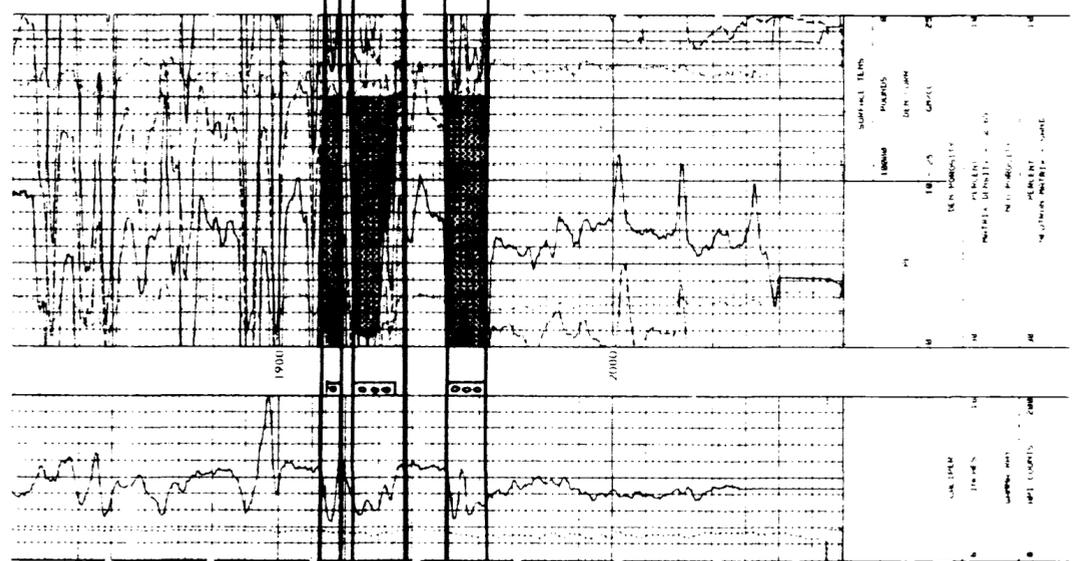
**STRATIGRAPHIC
CROSS SECTION**

B - B'

FRUITLAND COAL

C

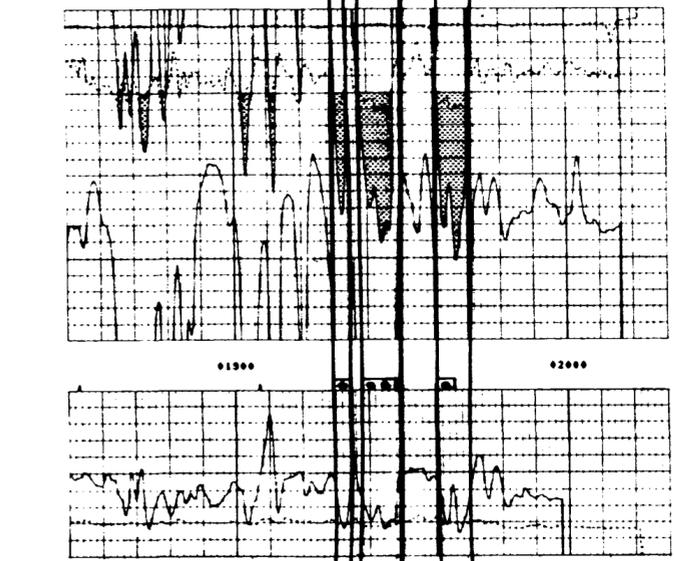
MARATHON
BOLACK #4-2



IP 34 MCFD
1st. PROD. 4/93
AS OF 6/93
DAILY RATE 713 MCFD
CUMMULATIVE 41 MMCF

PROPOSED
MARATHON
BOLACK #9-4

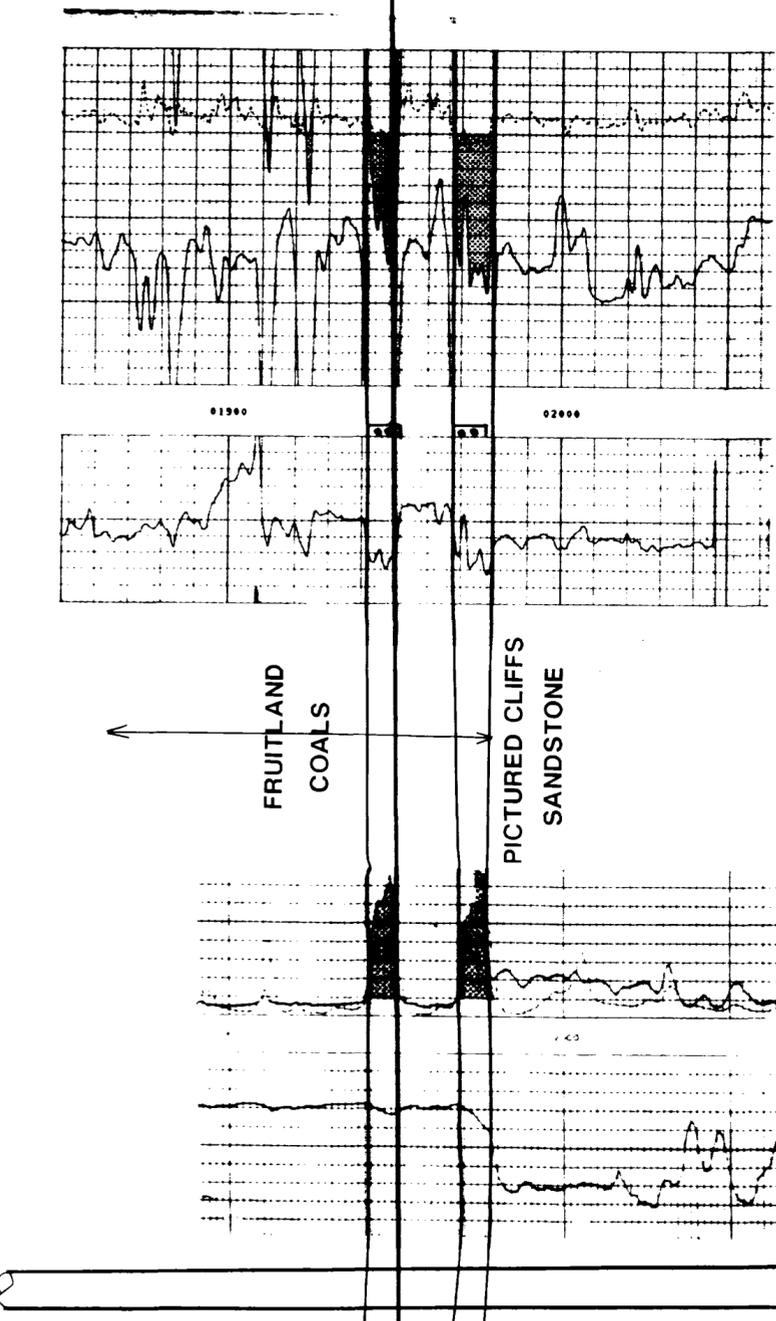
EL PASO
FRONTIER #1-B



IP 170 MCFD
1st. PROD. 1/91
AS OF 3/93
DAILY RATE 57 MCFD
CUMMULATIVE 41 MMCF

MARATHON
BOLACK #16-2

C'



IP 271 MCFD
1st. PROD. 1/91
AS OF 3/93
DAILY RATE 542 MCFD
CUMMULATIVE 420 MMCF

DAKOTA PRODUCER

Before the
OIL CONSERVATION DIVISION
Santa Fe New Mexico
Case No. 2000 Exhibit No. 8
Submitted by: Marathon Oil Company
Hearing Date: Sept 29, 1993

**STRATIGRAPHIC
CROSS SECTION
C - C'**

FRUITLAND COAL

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:

**APPLICATION OF MARATHON OIL COMPANY
FOR AN UNORTHODOX COAL GAS WELL LOCATION,
SAN JUAN COUNTY, NEW MEXICO.**

Case No. 10780

**APPLICATION OF MARATHON OIL COMPANY
FOR AN UNORTHODOX COAL GAS WELL LOCATION,
SAN JUAN COUNTY, NEW MEXICO.**

Case No. 10781

**APPLICATION OF MARATHON OIL COMPANY
FOR AN UNORTHODOX COAL GAS WELL LOCATION,
SAN JUAN COUNTY, NEW MEXICO.**

Case No. 10782

Order No. R-9987

ORDER OF THE DIVISION

BY THE DIVISION:

All three causes came on for hearing at 8:15 a.m. on July 29, 1993, at Santa Fe, New Mexico, before Examiner Michael E. Stogner. However, Case No. 10781 was reopened at the October 7, 1993 hearing before Examiner David R. Catanach.

NOW, on this 13th day of October, 1993, 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) At the time of the July 29, 1993 hearing Case Nos. 10780 through 10782 were consolidated for the purpose of presenting testimony.
- (3) Case No. 10781 was reopened at the October 7, 1993 Examiner Hearing for purposes of notification.

(4) The applicant in each of the three following cases is Marathon Oil Company and due to the similarity, close proximity, and nature of each, a single directive issued by the Division is deemed appropriate:

- (a) in Case No. 10780 the applicant seeks approval to drill its Bolack "9" Well No. 3 at an unorthodox coal gas well location 790 feet from the North line and 1710 feet from the West line (Unit C) of Section 9, Township 27 North, Range 11 West, NMPM, Basin-Fruitland Coal (Gas) Pool, San Juan County, New Mexico, as a replacement well for its Bolack "9" Well No. 1 located at a standard coal gas well location 1877 feet from the South line and 796 feet from the West line (Unit L) of said Section 9, in the existing 320-acre standard gas spacing and proration unit comprising the W/2 of said Section 9;
- (b) in Case No. 10781 the applicant seeks approval to drill its Schwerdtfeger "17" Well No. 2 at an unorthodox coal gas well location 1605 feet from the South line and 1135 feet from the East line (Unit I) of Section 17, Township 27 North, Range 11 West, NMPM, Basin-Fruitland Coal (Gas) Pool, San Juan County, New Mexico, as a replacement well for its Schwerdtfeger "17" Well No. 1 located at a standard coal gas well location 790 feet from the North line and 1845 feet from the East line (Unit B) of said Section 17, in the existing 320-acre standard gas spacing and proration unit comprising the E/2 of said Section 17; and,
- (c) in Case No. 10782 the applicant seeks approval to drill its Bolack "9" Well No. 4 at an unorthodox coal gas well location 1700 feet from the South line and 1100 feet from the East line (Unit I) of Section 9, Township 27 North, Range 11 West, NMPM, Basin-Fruitland Coal (Gas) Pool, San Juan County, New Mexico, as a replacement well for its Bolack "9" Well

No. 2 located at a standard coal gas well location 790 feet from the North line and 1625 feet from the East line (Unit B) of said Section 9, in the existing 320-acre standard gas spacing and proration unit comprising the E/2 of said Section 9.

(5) The three aforementioned units are all located within the Basin-Fruitland Coal (Gas) Pool and are therefore subject to the Special Rules and Regulations for said pool, as promulgated by Division Order No. R-8768, as amended, which require that wells be located in either the NE/4 or SW/4 of a governmental section and no 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) Evidence in this case and records show that the three above-described existing wells were all drilled by Marathon Oil Company in the last half of 1990 and completed by setting 5-1/2 inch casing and sand fracturing the Fruitland Coal interval:

- (a) on initial gauge the Bolack "9" Well No. 1 produced at 66 MCFPD. In January, 1991 a wellhead compressor was placed on the well and connected to sales. Production increased to a rate of 120 MCFPD over the succeeding six month period. By August, 1992 however the well had declined to 90 MCFPD and was acidized and placed on gas-lift to remove produced water. In April, 1993, the well had declined to 36 MCFPD and a second fracture stimulation was performed. No increase in production has been observed and the well is currently at its economic limit;
- (b) initially the Schwerdtfeger "17" Well No. 1 produced no measurable volumes of gas. A second sand fracture treatment was performed in January, 1991 and a pumping unit was installed for testing, rates of 15 MCFPD were measured and the well was shut-in. In October, 1992 a third test was unsuccessful and the well was shut-in for the final time; and,

- (c) on initial gauge the Bolack "9" Well No. 2 produced a volume of gas "too small to measure". In January, 1991 a wellhead compressor was placed on the well and connected to sales. Production increased to a rate of 150 MCFPD over the first three months. By June, 1992, however, the well had declined to 40 MCFPD and was temporarily shut-in. In September, 1992, the well was acidized and placed on gas-lift at a rate of 30 MCFPD. In April, 1993 the well was evaluated for re-stimulation, Marathon decided not to refracture the well due to the previous unsuccessful results on the Bolack "9" Well No. 1 and the Schwerdtfeger "17" Well No. 1. In June, 1993 the well was shut-in due to uneconomic production.

(7) Evidence presented by the applicant indicates that most of the immediate offsetting area surrounding the three units is currently being developed within the Basin-Fruitland Coal (Gas) Pool, of this development only one coal gas well appears to be off-pattern. The S/2 of Section 10, Township 27 North, Range 11 West, NMPM, San Juan County, New Mexico is dedicated to the R & G Drilling Company Schlosser Well No. 16 located at an unorthodox off-pattern location in Unit P (Division Administrative Order NSL-3150, dated September 1, 1992).

(8) Further evidence indicates many of these offsetting wells have commercial coal gas production even though the completion techniques used were similar to those described in Finding Paragraph No. (6) above.

(9) Evidence indicates the presence of Basin-Fruitland Coal gas reserves in commercial quantities remaining in the three subject units.

(10) The applicant is attempting to obtain commercial production from said units by placing wells on the opposing off-pattern quarter sections.

(11) The applicant proposes to utilize the three above-described existing wells as observation wells in the Basin-Fruitland Coal (Gas) Pool should this matter be authorized.

(12) The proposed replacement wells are all "standard" as to the footage requirements.

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

(14) In order to allow the applicant the opportunity to produce its just and equitable share of gas reserves in the Basin-Fruitland Coal (Gas) Pool underlying all of Section 9 and the E/2 of Section 17, both in Township 27 North, Range 11 West, NMPM, San Juan County, New Mexico, thereby preventing waste and protecting correlative rights, the three subject applications should be approved.

IT IS THEREFORE ORDERED THAT:

(1) The applicant in Case Nos. 10780, 10781, and 10782, Marathon Oil Company, is hereby authorized:

- (a) to drill its Bolack "9" Well No. 3 at an unorthodox coal gas well location 790 feet from the North line and 1710 feet from the West line (Unit C) of Section 9, Township 27 North, Range 11 West, NMPM, Basin-Fruitland Coal (Gas) Pool, San Juan County, New Mexico, as a replacement well for its Bolack "9" Well No. 1 located at a standard coal gas well location 1877 feet from the South line and 796 feet from the West line (Unit L) of said Section 9, in the existing 320-acre standard gas spacing and proration unit comprising the W/2 of said Section 9;
- (b) to drill its Schwerdtfeger "17" Well No. 2 at an unorthodox coal gas well location 1605 feet from the South line and 1135 feet from the East line (Unit I) of Section 17, Township 27 North, Range 11 West, NMPM, Basin-Fruitland Coal (Gas) Pool, San Juan County, New Mexico, as a replacement well for its Schwerdtfeger "17" Well No. 1 located at a standard coal gas well location 790 feet from the North line and 1845 feet from the East line (Unit B) of said Section 17, in the existing 320-acre standard gas spacing and proration unit comprising the E/2 of said Section 17; and,

(c) to drill its Bolack "9" Well No. 4 at an unorthodox coal gas well location 1700 feet from the South line and 1100 feet from the East line (Unit I) of Section 9, Township 27 North, Range 11 West, NMPM, Basin-Fruitland Coal (Gas) Pool, San Juan County, New Mexico, as a replacement well for its Bolack "9" Well No. 2 located at a standard coal gas well location 790 feet from the North line and 1625 feet from the East line (Unit B) of said Section 9, in the existing 320-acre standard gas spacing and proration unit comprising the E/2 of said Section 9.

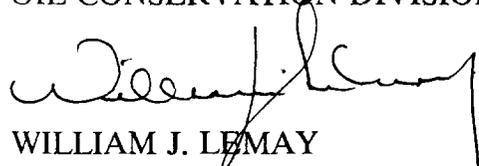
(2) Subsequent to the drilling and completing of the proposed replacement well on its respective spacing unit, the operator shall not be allowed to utilize the original well on that unit as a producing well in the Basin-Fruitland Coal (Gas) Pool.

(3) Jurisdiction of these causes 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