

OIL CONSERVATION DIVISION
Amoco Production Company (USA)

SANTA FE
Post Office Box 68
Hobbs, New Mexico 88240

S. J. Okerson
District Superintendent

December 10, 1982

File: SJ0-1700-WF

Re: Application to Wellbore Commingle
McQuatters Well No. 5
660' FNL x 330' FWL
Section 12, T-21-S, R-36-E
Blinebry and Drinkard Oil Pools
Lea County, New Mexico

State of New Mexico
Energy and Minerals Department
Oil Conservation Division
P. O. Box 2088
Santa Fe, NM 87501

Attention: Mr. Joe D. Ramey

Gentlemen:

Reference our letter dated October 4, 1982, File: SJ0-986.5-1333-WF, concerning our application to wellbore commingle the McQuatters No. 5.

Per telephone conversation December 2, 1982, between Mike Stogner of your office and Charles Herring of this office, we submit the following supplemental data:

1. Permission to dually complete this well was granted by the State of New Mexico on August 1, 1980, by Administrative Order No. MC-2692. Attached is a copy of this order.
2. The bottom hole pressure estimates of 1,000 psi., as previously reported, were approximations. The following method using ISIP's (Instantaneous Shut In Pressures) and PI's (Productivity Indices) may be more accurate.

To justify the assumption of using ISIP's as representative of the original reservoir pressure, the following two cases from nearby wells are presented:

- a) State "C" Tract 11 No. 8
Unit W, Section 2, T-21-S, R-36-E
Hardy Blinebry Pool

Pressure Test

Date: 4/2/79
 SI Time: 119 Hrs.
 Depth: 6230'
 Pressure: 2254 PSI

Acid Job

Date: 3/23/79
 ISIP: 2200 PSI

- b) State "C" Tract 11 No. 3
 Unit R, Section 2, T-21-S, R-36-E
 Hardy Blinebry Pool

Pressure Test

Date: 5/23/69
 SI Time: 103 Hrs.
 Depth: 5826'
 Pressure: 2272 PSI

Acid Job

Date: 5/15/69
 ISIP: 2050 PSI

We, therefore, feel that the ISIP during an acid treatment roughly approximates the reservoir pressure.

Values for PI's are assumed based on the performance of the wells:

Blinebry: 0.01 BOPD/PSI
 Drinkard: 0.001 BOPD/PSI

From acid jobs performed on the McQuatters No. 5 we know:

<u>Date</u>	<u>Horizon</u>	<u>ISIP (Pi)</u>
2/29/80	Blinebry	1900 PSI
5/7/80	Drinkard	2490 PSI

Then the estimated current reservoir pressures are calculated as follows:

$$PI \text{ (BOPD/PSI)} = \frac{Q \text{ (BOPD)}}{P_i - P_c}$$

Where: PI = Productivity Index (BOPD/PSI)
 Q = Average Production Rate (BOPD)
 Pi = Initial Reservoir Pressure (PSI)
 Pc = Current Reservoir Pressure (PSI)

Blinebry

Q = 8.21 BOPD
 Pi = 1900 PSI
 PI = 0.01 BOPD/PSI

$$\text{Then } P_c = P_i - \frac{Q}{PI} = 1,900 - \frac{8.21}{0.01} = \underline{\underline{1,079 \text{ PSI}}}$$

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Drinkard

Q = 1.01 BOPD
Pi = 2490 PSI
PI = 0.001 BOPD/PSI

$$\text{Then } P_c = P_i - \frac{Q}{PI} = 2,490 - \frac{1.01}{0.001} = \underline{\underline{1480 \text{ PSI}}}$$

If any additional information is needed, contact Charles M. Herring at
(505) 393-1781.

Yours very truly,



Attachment



BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

HOBBS
DISTRICT

AUG 15 1980

OIL CONSERVATION DIVISION
SANTA FE

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87501
(505) 827-2434

August 1, 1980

Amoco Production Company
P. O. Box 68
Hobbs, New Mexico 88240

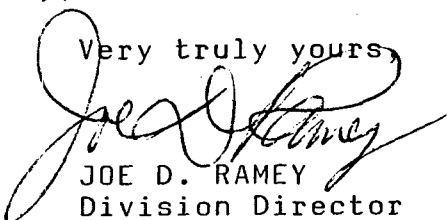
Re: Administrative Order No.
MC-2692

Gentlemen:

Enclosed herewith please find Administrative Order
No. MC-2692 for the following described well:

McQuatters Well No. 5 located in
Unit D of Section 12, Township
21 South, Range 36 East, NMPM,
Lea County, New Mexico.

Very truly yours,


JOE D. RAMEY
Division Director

JDR/CU/og

cc: Oil Conservation Division
Box 1980
Hobbs, New Mexico

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Rule 112-A Amoco Production Company made application to the New Mexico Oil Conservation Division on July 11, 1980, for permission to dually complete its McQuatters Well No. 5 located in Unit D of Section 12, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico, in such a manner as to permit production of oil from the Hardy-Blinbry Pool and from the Hardy-Drinkard Pool.

Now, on this 1st day of August, 1980, the Division Director finds:

- (1) That application has been filed under the provisions or Rule 112-A of the Division's Rules and Regulations;
- (2) That satisfactory information has been provided that all operators of offset acreage have been duly notified;
- (3) That no objections have been received within the waiting period as prescribed by said rule;
- (4) That the proposed dual completion will not cause waste nor impair correlative rights; and
- (5) That the mechanics of the proposed dual completion are feasible and consonant with good conservation practices.

IT IS THEREFORE ORDERED:

That the applicant herein, Amoco Production Company, be and the same is hereby authorized to dually complete its McQuatters Well No. 5 located in Unit D of Section 12, Township 21 South, Range 36 East, NMPM, Lea County, New Mexico, in such a manner as to permit production of oil from the Hardy-Blinbry Pool and from the Hardy-Drinkard Pool through parallel strings of tubing.

PROVIDED HOWEVER, That applicant shall complete, operate, and produce said well in accordance with the provisions of Rule 112-A.

PROVIDED FURTHER, That applicant shall take packer-leakage tests upon completion and annually thereafter.

IT IS FURTHER ORDERED: That jurisdiction of this cause 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


JOE D. RAMEY
Division Director

SEAL