## OIL CONSERVATION COMMISSION P. O. BOX 2088

## SANTA FE NEW MEXICO 87501

April 14, 1975

45-18

Amoco Production Company P. O. Box 3092 Houston, Texas 77001

Attention: Mr. C. J. Christensen

Re: Third Revision, Morrow Participating Area, Empire South Deep Unit, Eddy County, New Mexico

Gentlemen:

This is to advise that the New Mexico Oil Conservation Commission has this date approved the Third Revision of the Participating Area for the Morrow Formation for the Empire South Deep Unit, Eddy County, New Mexico, subject to like approval by the United States Geological Survey.

Two approved copies of the application are returned herewith.

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/JEK/og

cc: United States Geological Survey
Box 1857

Roswell, New Mexico



## **Amoco Production Company**

500 Jefferson Building P.O. Box 3092 Houston Texas 77001

Carl J. Christensen Assistant Division Production Manager

April 3, 1975

File: RCJ-956-LF

Re: Third Revision of the

Morrow Participating Area Empire South Deep Unit Eddy County, New Mexico APR 9 - 1975

OIL CONSERVATION COIN...

Santa Fe

Mr. Carl C. Traywick (3) United States Department of the Interior P. O. Drawer 1857 Roswell, NM 88201

Mr. James E. Kapteina (3) New Mexico Oil Conservation Commission P. O. Box 2088 Santa Fe, NM 87501

## Gentlemen:

Amoco Production Company is the successor Operator to Midwest Oil Corporation of the Empire South Deep Unit, Eddy County, New Mexico, No. 14-08-0001-11591. As such, we propose a Third Revision of the Participating Area for the Morrow Series of the Pennsylvanian System be made to include the following lands effective as of November 1, 1974.

T17S, R28E	T17S, R28E	
Section 36: NE/4 NE/4	Section 30: Lot 4, SE/4 SW/4, S/2 SE/4 Section 31: Lot 1, NE/4 NW/4, N/2 NE/4 Section 32: W/2 NW/4, NW/4 SW/4	
Total Acres to be added Previous Participating	= 457.03	
Area Acres New Total	= <u>1516.65</u> = <u>1973.68</u> acres	

In support of this application we attach the following:

- 1. An ownership map showing the boundaries of the Unit Area, location of the wells, the Initial, First Revision, Second Revision and proposed Third Revision of the Participating Area.
- 2. A contour map on the Middle Morrow showing wells in the Unit and surrounding area.
- 3. A seven well Morrow cross-section showing the 5 Unit wells plus 2 nearby producers.
- 4. A schedule showing the lands entitled to participate in unitized substances from the Morrow in the present participating area plus the proposed Third Revision with the percentage of participation of each lease or tract in such area. A list of the working interest owners in the Unit is also included.

The proposed Third Revision of the Morrow participating area is based primarily on the information revealed by drilling and completing Well No. 5. As you can note from the log cross section this well drilled an about 72' thick sand section from 11,796' to 11,868' with porosity averaging 10.4%. It was completed natural November 25, 1974, from perforations placed at 11,796' to 11,803'. It was subsequently tested for an official calculated absolute open flow of 12,874 MCFD. Log calculations show higher water saturations in the bottom of the sand.

The well was placed on temporary production for 60 days in January, 1975, during which time it produced 113,794 MCF of gas with rates varying up to 7 million cubic feet per day. Some water was being produced when the sales period ended. In a volumetric reservoir such as the Morrow, water production is not ordinarily a problem and we feel the well is definitely a "commercial" producer.

The proposed Third Revision of the Morrow Participating Area is shown by color and by graphic linear code on the Unit map referred to in 1. above. It contains 12-40 acre tracts or lots as compared to 20 in the Initial Area, 5 in the First Revision and 10 in the Second Revision. The North half of Section 31, T17S, R29E, has already been assigned as the proration unit for Well No. 5. We feel the proposed Third Revision is very reasonable and compares favorably to previous actions. It also recognizes the slight eastward trend of the producing area.

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Your favorable consideration of the foregoing is respectfully requested.

Yours very truly,

JVM/mct 4/04

To	MR. JAMES	E. KAPTEINA	Bldg	Mail Code or Rm. No
To	):	<u>.</u>	Bldg	Mail Code or  Mail Code or  Rm. No.  Mail Code or  Rm. No.
To: SANTA FE, NEW MEXICO			-	
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<b>Route Ticket</b>	Please Approve Please Note and return For Your Information Please See Me Please Advise Your File Form 9 8-73			4/4/75 Date
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Approved April 1975
Secretary-Director

NEW MEXICO OIL CONSERVATION COMMISSION