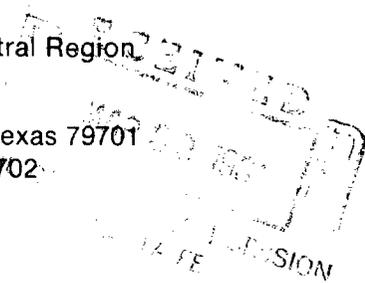


Union Oil and Gas Division: Central Region

Union Oil Company of California
500 North Mariefeld, Midland, Texas 79701
P.O. Box 671, Midland, Texas 79702
Telephone (915) 682-9731



Robert V. Lockhart
District Land Manager
Midland District

March 5, 1981

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

Attn: Mr. Joe Ramey, Director

Gentlemen:

Case No. 6516
Maduro Unit
Lea County, New Mexico

Please find enclosed a copy of a letter from the U.S.G.S. approving our request for the first revision of the Morrow participating area for the Maduro Unit.

Sincerely yours,

UNION OIL COMPANY OF CALIFORNIA

Linda H. Hicks
Landman

LHH:cs
Encl. 1



United States Department of the Interior

GEOLOGICAL SURVEY
South Central Region
P. O. Box 26124
Albuquerque, New Mexico 87125

RECEIVED
OIL CONSERVATION DIVISION
SANTA FE

17 FEB 1981

RECORDED

FEB 19 1981

MIDLAND DISTRICT LAND

Union Oil Company of California
Attention: Robert V. Lockhart
P. O. Box 671
Midland, Texas 79702

Gentlemen:

Your application of September 29, 1980, requesting approval of the first revision of the Morrow participating area for the Maduro unit agreement, Lea County, New Mexico, is hereby approved effective May 1, 1980.

The first revision adds 800.00 acres, described as the $W\frac{1}{2}$ sec. 28, $N\frac{1}{2}$ sec. 32 and the $NW\frac{1}{4}$ sec. 33, all in T. 19 S., R. 33 E., N.M.P.M., thereby enlarging the Morrow participating area to 1,440 acres. Such revision is based on information obtained by the completion of well No. 2 located in the $NE\frac{1}{4}NW\frac{1}{4}$ sec. 32 as a commercial well. Well No. 2 was completed on May 10, 1980 for a flow rate of 2,977 MCFGPD, plus 192 barrels of condensate per day from the Morrow interval of 13,478-to-13,487 feet.

Copies of the approved application are being distributed to the appropriate Federal offices and one copy is returned herewith. You are requested to furnish the State of New Mexico and all interested parties with appropriate evidence of this approval.

Sincerely yours,

Gene F. Daniel
Deputy Conservation Manager
Oil and Gas

Enclosure

Union Oil and Gas Division: Central Region

Union Oil Company of California
500 North Marientfeld, Midland, Texas 79701
P.O. Box 671, Midland, Texas 79702
Telephone (915) 682-4300

UNION 76



6516

Robert V. Lockhart
District Land Manager
Midland District

July 10, 1980

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

Attn: Mr. Joe D. Ramey, Director

Gentlemen:

Maduro Unit Well No. 2
NW/4 Section 32-19S-33E
Lea County, New Mexico

Please find enclosed a copy of the Commissioner of Public Lands' letter concurring with our determination that the Maduro Unit Well No. 2 qualifies as a unit well.

If you need any further information in this regard, please advise.

Sincerely yours,

UNION OIL COMPANY OF CALIFORNIA

A handwritten signature in cursive script that reads "Linda H. Hicks".

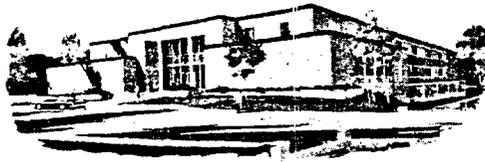
Linda H. Hicks
Landman

LHH:cs
Encl.



ALEX J. ARMIJO
COMMISSIONER

State of New Mexico



Commissioner of Public Lands

June 30, 1980

RECEIVED
JUL 14 1980
OIL CONSERVATION DIVISION
SANTA FE
JUL - 2 1980
MIDLAND DISTRICT LAND

P. O. BOX 1148
SANTA FE, NEW MEXICO 87501

Maduro Prospect

6516

Union Oil Company of California
500 North Marienfeld
P. O. Box 671
Midland, Texas 79702

Re: Request for Unit Determination
Maduro Unit Well No. 2
NW/4 Section 32-19S-33E
Lea County, New Mexico

ATTENTION: Mr. Robert V. Lockhart

Gentlemen:

In response your letters dated June 6, 1980 and June 24, 1980, please be advised that according to the information presented the Maduro Unit Well No. 2, located in the NW/4 of Section 32, Township 19 South, Range 33 East, Lea County, New Mexico, meets the requirements under Section 9 of the Unit Agreement for validation as a unit well.

By copy of this letter we are notifying the USGS of our determination.

Very truly yours,

ALEX J. ARMIJO
COMMISSIONER OF PUBLIC LANDS

BY: *Ray D. Graham*
RAY D. GRAHAM, Director
Oil and Gas Division
AC 505-827-2748

AJA/RDG/s

cc: OCD-Santa Fe, New Mexico
 USGS-Roswell, New Mexico
 USGS-Albuquerque, New Mexico



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR
LARRY KEHOE
SECRETARY

March 10, 1981

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

Union Oil Company of California
P. O. Box 671
Midland, Texas 79702

Attention: Linda H. Hicks

Re: Case No. 6516
Maduro Unit
1981 Plan of Development
and Operation

Gentlemen:

We hereby approve the 1981 Plan of Development and Operation for the Maduro Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands.

One approved copy of the Plan of Development is returned herewith.

Yours very truly,

JOE D. RAMEY
Director

JDR/EP/fd
enc.

cc: U.S.G.S. - Albuquerque
Commissioner of Public Lands

Union Oil and Gas Division: Central Region

Union Oil Company of California
500 North Marienfeld, Midland, Texas 79701
P.O. Box 671, Midland, Texas 79702
Telephone (915) 682-9781



Robert V. Lockhart
District Land Manager
Midland District

March 4, 1981

OK
S/P
3/5/81

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

Attn: Mr. Joe D. Ramey, Director

Gentlemen:

Maduro Unit
Lea County, New Mexico
T-19-S, R-33-E, N.M.P.M.
Case No. 6516
Order No. R-5976

Enclosed for your review please find one (1) copy of Union Oil Company of California's "1981 Plan of Development and Operation for Maduro Unit Area."

Union, as operator, respectfully requests your consideration and approval of this plan. Should you have any additional questions, please contact the undersigned.

Sincerely yours,

UNION OIL COMPANY OF CALIFORNIA

Linda H. Hicks

Linda H. Hicks
Landman

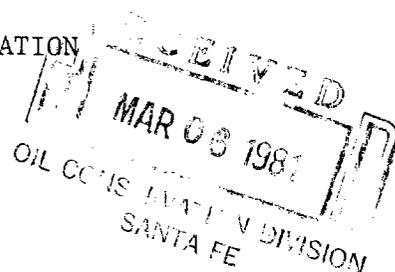
LHH:cs
Encl. 1

1981 PLAN OF DEVELOPMENT AND OPERATION

FOR

MADURO UNIT AREA

LEA COUNTY, NEW MEXICO



TO: Oil Conservation Division
Energy and Minerals Department
P. O. Box 2088
Santa Fe, New Mexico 87501

UNION OIL COMPANY OF CALIFORNIA, as Unit Operator for the Maduro Unit Area, pursuant to the provisions of Section 10 of the Unit Agreement for Development and Operation of the Maduro Unit Area dated May 3, 1979, (No. 14-08-0001-18028), respectfully submits for approval this 1981 Plan of Development and Operation for the Maduro Unit Area. This plan is for the period ending December 31, 1981.

SUMMARY OF 1979 AND 1980 OPERATIONS

The initial well, Maduro Federal Unit No. 1, was drilled in the NW/4 SE/4 Section 29, T-19-S, R-33-E, N.M.P.M. This well was completed on August 2, 1979, as a well capable of producing in paying quantities under the terms of the Unit Agreement, with an initial potential CAOF 6,686 MCFGPD plus 28 barrels of condensate per MMCFG from Morrow perforations at 13,446 to 13,457 feet. The well was connected to a sales line January 28, 1980. Oil and Gas Supervisor, U.S.G.S. concurred with our determination that the Maduro #1 did qualify as a Unit Well and validated the Unit Area. Thereafter an Initial Participating Area for the Morrow formation was approved, being all of Section 29, T-19-S, R-33-E, N.M.P.M., Lea County, New Mexico, containing 640.00 acres, more or less.

After the lower Morrow was depleted on August 26, 1980, the Maduro #1 was plugged back to the middle Morrow and three of six potentially productive zones were perforated and treated. The well produced an average of 214 MCFGPD, and 4.68 barrels of condensate per day during December, 1980.

The Maduro #2 Well was drilled in the NE/4 NW/4 Section 32, T-19-S, R-33-E, N.M.P.M. and completed on May 10, 1980 as a well capable of producing in paying quantities under the terms of the Unit Agreement with an initial test stabilized

flow rate of 2,077 MCFGPD plus 192 barrels of condensate per day and a CAOF of 2,421 MCFGPD with a gas-liquid hydrocarbon ratio of 11,458 CFG per barrel from perforation at 13,478 to 13,487 feet in the lower Morrow sand. The Maduro #2, being located on State land, was approved by the Commissioner of Public Lands as a Unit well by letter dated June 30, 1980. The well was connected to a pipeline on July 8, 1980. The Maduro #2 produced an average of 1,463 MCFGPD and 99 barrels of condensate per day during December, 1980. We submitted an application for the First Revision of the Participating Area for the Morrow formation which would add 800.00 acres more or less, being the W/2 Section 28, N/2 Section 32, NW/4 Section 33, T-19-S, R-33-E, N.M.P.M., Lea County, New Mexico, which would enlarge the total Morrow participating area to 1,440.00 acres. Our application has been approved by the Commissioner of Public Lands, the Oil Conservation Division, and was approved by the U.S.G.S. on February 17, 1981.

PLAN OF DEVELOPMENT AND OPERATION FOR 1981

We plan to drill a third Morrow well in the NW/4 Section 33, T-19-S, R-33-E as an east offset to the Maduro #2. It is expected that the well will be commenced during the fourth quarter of 1981.

In addition, we are evaluating the possibility of reperfoming the Maduro Unit Well #1.

Additional studies and evaluations will be made based on production and performance of the Maduro #1 and #2.

Our plan may be modified or supplemented from time to time with the approval needed, when necessary to meet changed conditions or to protect the interest of all parties to the Unit Agreement.

Submitted this 4 day of March, 1981.

UNION OIL COMPANY OF CALIFORNIA

BY: Robert J. Schmitt
District Land Manager

3/11 1981
J. D. [Signature]
[Faint text]

OIL CONSERVATION DIVISION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

December 3, 1980

Union Oil Company of California
P. O. Box 671
Midland, Texas 79702

Attention: Robert V. Lockhart

Re: Case No. 6516
Maduro Unit
First Revision of the
Participating Area for
the Morrow Formation

Gentlemen:

We hereby approve the First Revision of the Participating Area for the Morrow Formation for the Maduro Unit, Lea County, New Mexico, subject to like approval by the United States Geological Survey and the Commissioner of Public Lands.

Two approved copies of the First Revision are returned herewith.

Yours very truly,

JOE D. RAMEY
Director

JDR/EP/fd
enc.

cc: U.S.G.S. - Roswell
Commissioner of Public Lands

C

O

P

Y

Union Oil and Gas Division: Central Region

Union Oil Company of California
500 North Marienfeld, Midland, Texas 79701
P.C. Box 671, Midland, Texas 79702
Telephone (915) 682-9731



Robert V. Lockhart

District Land Manager
Midland District

November 13, 1980

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

Attn: Mr. Joe Ramey, Director

Dear Mr. Ramey:

Maduro Unit
Case #6516
Order R-5976
Lea County, New Mexico

Please find enclosed an original and two copies of an application for approval of the first revision of the Morrow formation for the Maduro Unit. A similar application has been sent to the U.S.G.S. and the Commissioner of Public Lands. The Commissioner has approved the revision by letter dated October 23, 1980, a copy of which is enclosed.

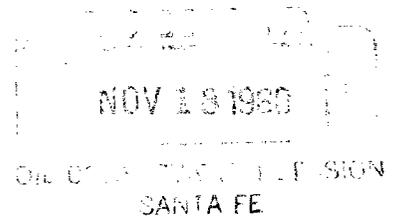
The enclosed geological report is in triplicate but only one supporting map is enclosed. I was told by Mr. Padilla that one would suffice. Should you need further information, please advise.

Sincerely yours,

UNION OIL COMPANY OF CALIFORNIA

Robert V. Lockhart
Robert V. Lockhart
District Land Manager

RVL:ib
Encls: 8



State of New Mexico



RECEIVED

OCT 28 1980

MIDLAND DISTRICT LAND

Commissioner of Public Lands

October 23, 1980

ALEX J. ARMIJO
COMMISSIONER

P. O. BOX 1148
SANTA FE, NEW MEXICO 87501

Maduro Project (8138)

Union Oil Company of California
500 North Marienfeld,
Midland, Texas 79701

Re: Maduro Unit
Lea County, New Mexico
FIRST REVISION OF THE MORROW
PARTICIPATING AREA

ATTENTION: Mr. Robert V. Lockhart

Gentlemen:

The Commissioner of Public Lands has this date approved your application for approval of the First Revision of the participating area for the Morrow formation. Such revision adds 800 acres to the original 640 acre participating area and are described as follows:

| | |
|---|------|
| <u>Township 19 South, Range 33 East, N.M.P.M.</u> | |
| Section 28: | W/2 |
| Section 32: | N/2 |
| Section 33: | NW/4 |

NOV 18 1980
SANTA FE

Our approval is subject to like approval by the United States Geological Survey and the New Mexico Oil Conservation Division.

Enclosed is one approved copy for your files.

Very truly yours,

ALEX J. ARMIJO
COMMISSIONER OF PUBLIC LANDS

BY: *Floyd O. Prando*
FLOYD O. PRANDO, ASSISTANT
DIRECTOR- Oil & Gas Division
AC 505-827-2748

AJA/FOP/s
encl.
cc:

OCD-Santa Fe, New Mexico
USGS-Albuquerque, New Mexico
USGS-Roswell, New Mexico

*copy; John Hansen/Region
W.I. Partners*