



Production Department
Hobbs Division
North American Production

Conoco Inc.
P.O. Box 460
726 East Michigan
Hobbs, NM 88240
(505) 393-4141

January 14, 1987

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

MA
Case 9079

Attention Michael Stogner

Gentlemen:

Request for Hearing - Hardship Gas Well Classification - Levers Federal
Well No. 1, Springs Upper Penn (Gas) Pool, Eddy County, New Mexico

Attached are three (3) copies of the subject Application for Examiner Hearing. Per Mr. Les A. Clement's letter dated January 12, 1987, this matter will be scheduled on the Examiner Docket for February 18, 1987.

A copy of this Application has been sent to all known offset operators.

Yours very truly,

H. A. Ingram
Conservation Coordinator

:tr

Attachments

cc: Tom Kellahin - Santa Fe
Gas Company of New Mexico, Albuquerque
Chevron U.S.A. Inc. - Hobbs
Barbara Fasken - Midland
Texaco Inc. - Hobbs
Woods Petroleum Corp. - Oklahoma City
Yates Petroleum Corp. - Artesia

BEFORE THE OIL CONSERVATION DIVISION
OF THE
NEW MEXICO DEPARTMENT OF ENERGY AND MINERALS

IN THE MATTER OF THE APPLICATION OF
CONOCO INC. FOR HARDSHIP GAS WELL CLASS-
IFICATION FOR ITS LEVERS FEDERAL WELL NO. 1
LOCATED IN UNIT E, SECTION 2, T21S, R25E,
EDDY COUNTY, NEW MEXICO, SPRINGS UPPER
PENN (GAS) POOL

A P P L I C A T I O N

Applicant, CONOCO INC., respectfully requests HARDSHIP GAS WELL
CLASSIFICATION for its Levers Federal Well No. 1, Springs Upper Penn (Gas)
Pool, located in Unit E, Section 2, T21S, R25E, Eddy County, New Mexico, and
in support thereof will show:

1. Applicant is co-owner and operator of the Levers Federal Lease
consisting of Section 2, T21S, R25E, Eddy County, New Mexico.
2. That the Levers Federal Well No. 1 is an Upper Penn gas well
located in Section 2, T21S, R25E, Eddy County, New Mexico, which
under normal producing conditions will flow approximately 470 MCFG,
8BO, and 2200 BW per day, with the reservoir drive mechanism of the
Upper Penn gas zone being water.
3. That water encroachment during periods of shut-in reduces the total
recoverable gas reserves and increases the risk of watering out the
Upper Penn gas zone in this well.
4. That water encroachment in and around the wellbore could cause
premature abandonment and waste of recoverable gas and oil
reserves.
5. That the Levers Federal Well No. 1 is located 1594' FNL and 660'
FWL of said Section 2, with Lots 3, 4, 5, 6, 11, 12, 13 and 14
containing 296.4 acres more or less being assigned as the proration

APPLICATION

January 14, 1987

Federal 34 Well No. 1


6. That Conoco Inc. operates the only wells in the Springs Upper Penn
(Gas) Pool.
7. That the granting of this Application will prevent waste and will not
impair the correlative rights to any party.

WHEREFORE, Applicant respectfully requests that this application be
set for hearing before the Division's duly appointed Examiner, and upon
hearing, an order be entered designating the Levers Federal Well No. 1 as a
HARDSHIP GAS WELL.

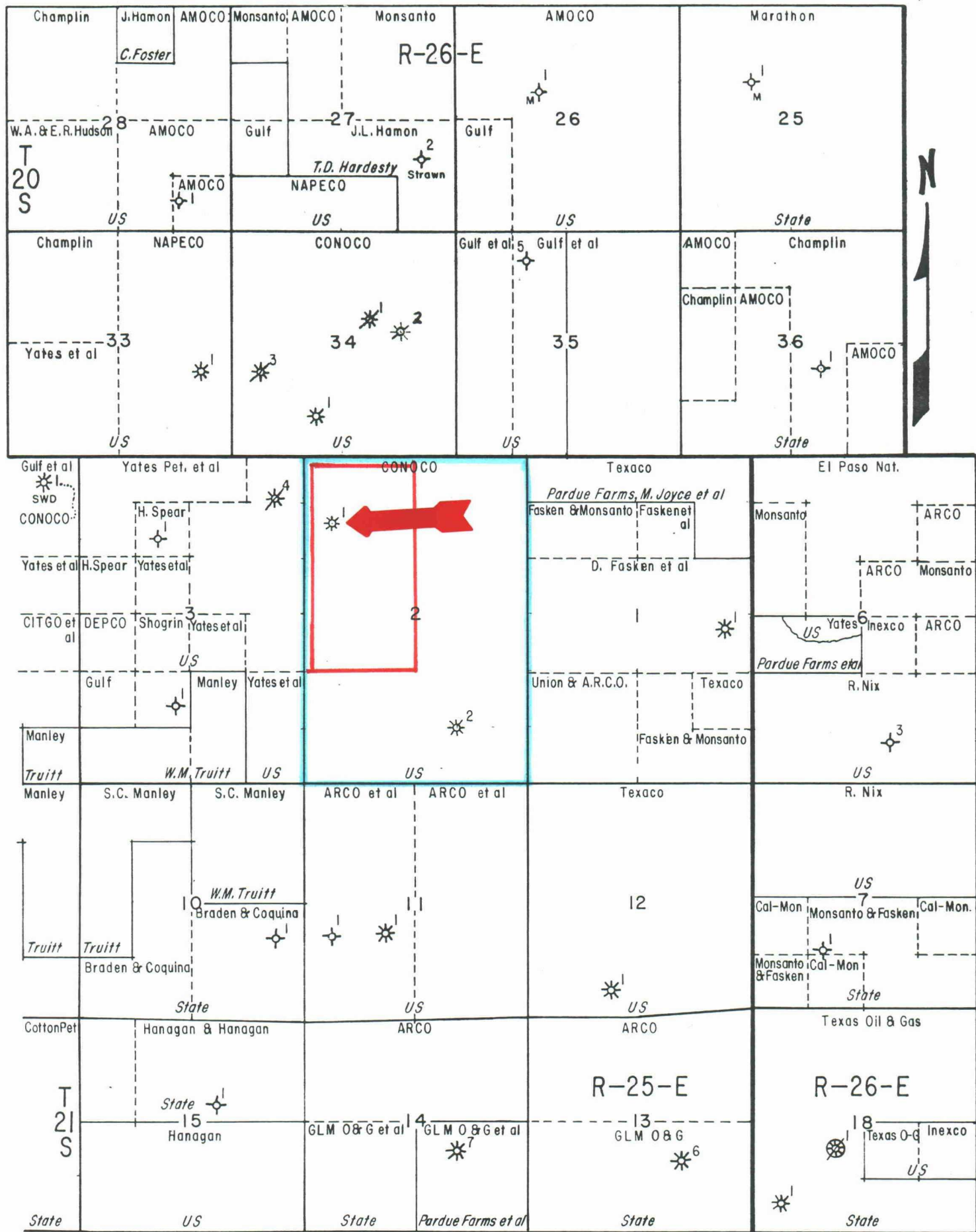
Respectfully submitted,

CONOCO INC.

BY



R. E. Irelan
DIVISION MANAGER OF PRODUCTION
HOBBS DIVISION





R. E. Irelan
Division Manager
Production Department
Hobbs Division
North American Production

Conoco Inc.
P.O. Box 460
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Hobbs, NM 88240
(505) 393-4141

January 8, 1987

New Mexico Oil Conservation Division
Drawer DD
Artesia, New Mexico 88210

Attention Les Clements

Case 9074

Gentlemen:

Application for Emergency Classification as Hardship Gas Well -
Levers Federal Well No. 1, Eddy County, New Mexico

Conoco Inc. respectfully requests emergency Hardship Gas Well Classification for the Levers Federal Well No. 1, located in Unit E, Section 2, T-21S, R-25E, Springs Upper Penn (Gas) Pool, Eddy County, New Mexico. This well has been shut-in in recent months due to market curtailment. The permanent waste of recoverable reserves incurred by shutting-in this well warrants a Hardship Classification, and is demonstrated by the following evidence:

1. During periods of shut-in, water encroaches toward the wellbore. The cost to restore production is significant because nitrogen and coil tubing are needed to return the well to its flowing status. The Levers Federal No. 1 production was recently restored after an extended shut-in period. It was necessary to use 1,517,000 SCF of nitrogen during a continuous period of 2.5 days to lift water from the wellbore. The total cost of the work was \$34,000. At current market prices, the work will payout in 2.6 months.
2. In addition to the cost factor, the permanent loss of reserves is a primary concern. Due to the large quantity of water produced from the reservoir, water will accumulate in and around the wellbore during shut-in periods. In the past, we have been able to economically unload enough water to allow the well to flow on its own. However, efforts to restore production were much more difficult this year than in past years. The amount of nitrogen and required jetting hours increased by 1.5 times from the past year. The cost to restore production in 1986 was 1.5 times the cost in 1985. A time will come when it will not be economical or feasible to restore production after a shut-in period. This may cause Conoco to prematurely abandon the well, and the remaining gas reserves will be lost (as is the case with Conoco's Federal 34 No. 2).

January 8, 1987

3. Prior to the shut-in period, Levers Federal No. 1 produced at a daily average rate of 619 MCF, 9 BO, and 2362 BW. The production test following the shut-in period was 441 MCFPD, 9 BOPD, and 2175 BWPD. A decrease of 178 MCFPD is due to an increase in water saturation at the wellbore which subsequently reduces the relative permeability of gas at the wellbore. A decline curve analysis indicates that the economic life of the well has been shortened due to the decrease in gas production. As a result, the total recoverable gas reserves from the Levers Federal No. 1 well has been decreased by 275.7 MMCFG.

4. The possibility of underground waste is evident in Conoco's Federal 34 No. 2, located in Unit H, Section 34, T-20S, R-26E, Springs Upper Penn (Gas) Pool, Eddy County, New Mexico. This well is located 0.9 mile from the Levers Federal No. 1 well and is completed similarly. During the recent shut-in period, water accumulated in and around the wellbore. Production was restored after jetting 2,652,750 SCF of nitrogen for 4 continuous days for a total cost of \$68,000. Conoco was unable to restore a production rate equivalent to the rate being maintained prior to the shut-in period. Federal 34 No. 2 produced 555 MCFPD, 4 BOPD, and 2000 BWPD prior to the shut-in period. After the shut-in period, the production test was 290 MCFPD and 0 BOPD. The quantity of water lifted from the wellbore was not sufficient enough to reduce the water saturation at the wellbore. Therefore, the Federal 34 No. 2 well loaded up with fluid and died after 13 days of production. Based on the production rate maintained during the 13 day period, the coil tubing and nitrogen job would have paid-out in 1 year and 2 months had production been maintained. No further attempts will be made to restore production unless Hardship Classification is obtained. If the well is prematurely abandoned, an estimated 616 MMCFG of recoverable reserves will be lost.

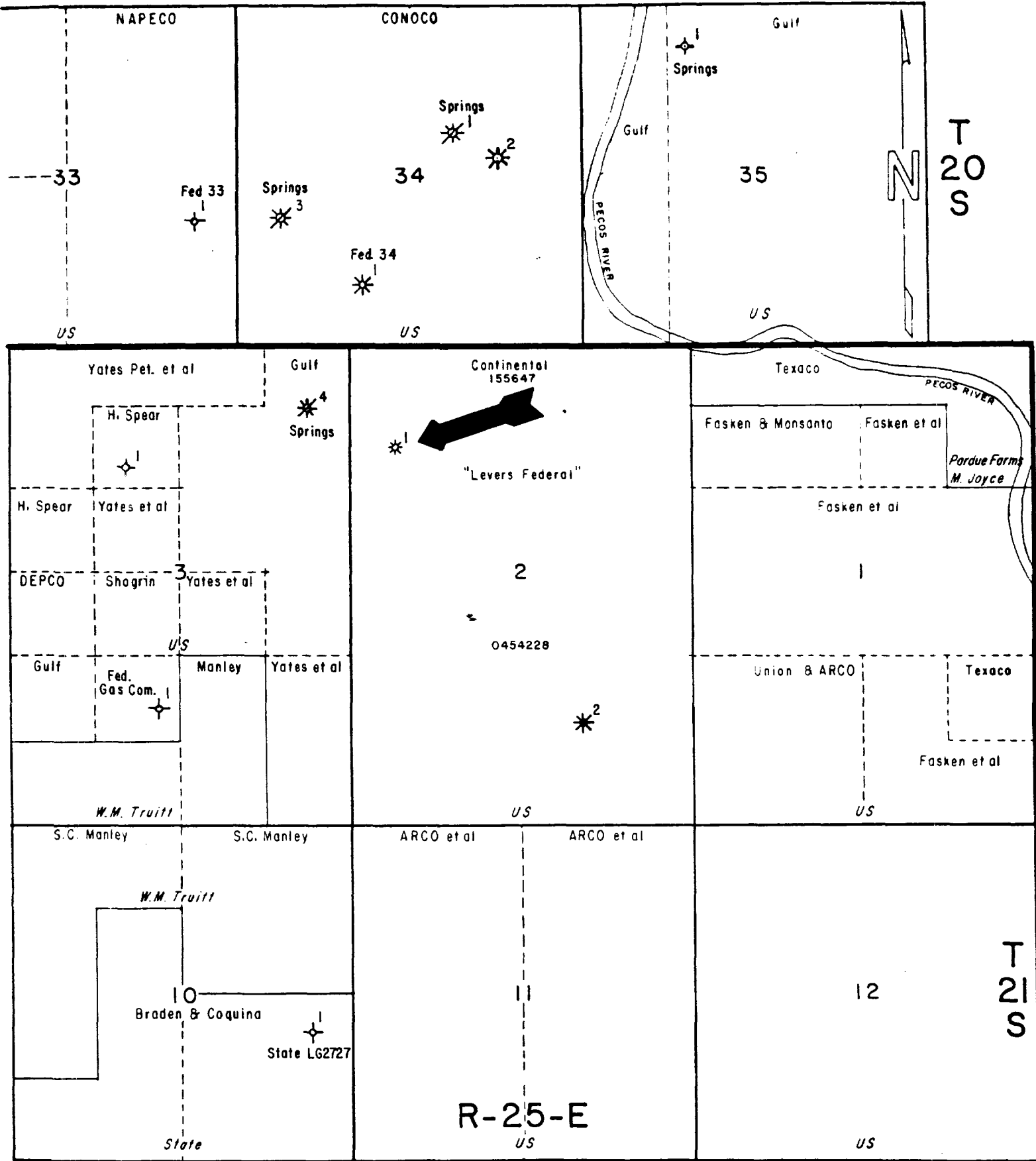
The recent loss of the Federal 34 No. 2 well has prompted Conoco to apply for an emergency Hardship Classification in order to prevent any further loss of reserves from the Springs Upper Penn Gas Pool. Conoco understands that the emergency Hardship Classification is for a period of 90 days. Additional well data is being assembled to complete all of the requirements of the Oil Conservation Division's Rules and Regulations outlined in Article F-409. A formal application and request for an Examiner Hearing will be submitted as soon as this data is assembled. Conoco requests the emergency classification as a Hardship Gas Well for the Levers Federal No. 1 well to prevent any shut-in periods which may occur while the formal application is being processed.

Yours very truly,



cc: V. T. Lyon, NMOCD, Santa Fe
Gas Company of New Mexico

R-26-E



PRODUCTION
DEPARTMENT

HOBBS
DIVISION

LEVERS FEDERAL

EDDY COUNTY, NEW MEXICO

SCALE
0' 1000' 2000'

LEGEND
○ LOCATION
● OIL WELL
★ GAS WELL

✦ DRY HOLE
⊕ INJECTION WELL
✱ ABANDONED WELL
✱ SHUT-IN WELL

⊕ SALT WATER
⊕ DISPOSAL WELL
⊕ DEEPER WELL
⊕ ZONE UNTESTED