STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION

BRUCE KING
GOVERNOR

LARRY KEHOE
SECRETARY

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

November 17, 1981

IPI-371

Conoco Inc.
Production Department
P. O. Box 460
Hobbs, New Mexico 88240

Attention: Mark K. Mosley

Re: Order No. WFX-491
MCA Well No. 161, Unit J,
Section 30, Township 17 South,
Range 32 East, NMPM, Lea County,
New Mexico

Gentlemen:

Based upon information and test data submitted by your letter of October 1, 1981, the maximum authorized wellhead injection pressure for the subject well is hereby increased from 730 psi to 2100 psi.

Please note that it remains the responsibility of the well operator to promptly report any of disposal well failures or indications that injected fluid is "out-of-zone" to the supervisor of the Division's Hobbs District Office.

Sincerely,

JOE D. RAMEY
Division Director

JDR/MS/og

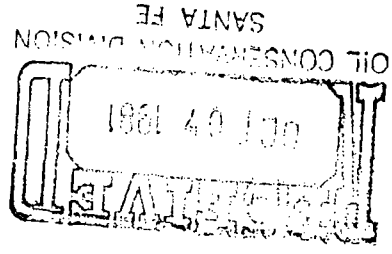
cc: Oil Conservation Division
Hobbs, New Mexico

30-025-12781

Production Department
Hobbs Division
Western Hemisphere Petroleum Division

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

October 1, 1981



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

491

Attention Mr. Joe D. Ramey

Gentlemen:

Administrative Order No. WFX-491

New Mexico Oil Conservation Division Administrative Order No. WFX-491 dated September 18, 1981, authorized Conoco Inc to inject water into the Grayburg and San Andres formations in the MCA well No. 161 located in Unit J of Section 30, Township 17 South, Range 32 East, NMPM, Lea County, New Mexico.

It was further ordered that the injection well or system be equipped with a pressure limiting device which will limit the wellhead pressure to a maximum of 730 pounds per square inch. It further provided that the Division Director may administratively authorize a pressure limitation in excess of the above, upon the operator establishing that such higher pressure will not result in fracturing of the confining strata.

By your letter dated August 12, 1980 (copy attached), Conoco was granted permission to increase the maximum surface injection pressure to 2100 psi on seven MCA Unit wells, within 1/2 mile of the subject well.

A breakdown pressure test in the MCA Unit well No. 256 (copy attached) indicated that the surface injection pressure would have to exceed 2300 psi to initiate fracture in the confining strata. The MCA Unit well No. 161 is located at 969 feet southeast of the MCA well No. 162, and at 898 feet northwest of the MCA Unit well No. 166; both are injection wells with surface injection pressure of 1800 psi. MCA Unit well No. 166 has been shut-in since December 1980 due to downhole mechanical problems.

It is our intention to utilize the MCA well No. 161 as a replacement to the shut-in MCA injection well No. 166, which had surface injection pressure of 1800 psi. In order to achieve an injection rate in the subject well comparable to the injection rates in the offset injection wells and to provide for secondary recovery efficiency in this area of

the waterflood, it is respectfully requested that Conoco Inc be permitted to inject water into the MCA Unit well No. 161 at a pressure consistent with other injection wells in the same waterflood project, but not to exceed 2100 psi surface pressure.

Your consideration of this request will be appreciated.

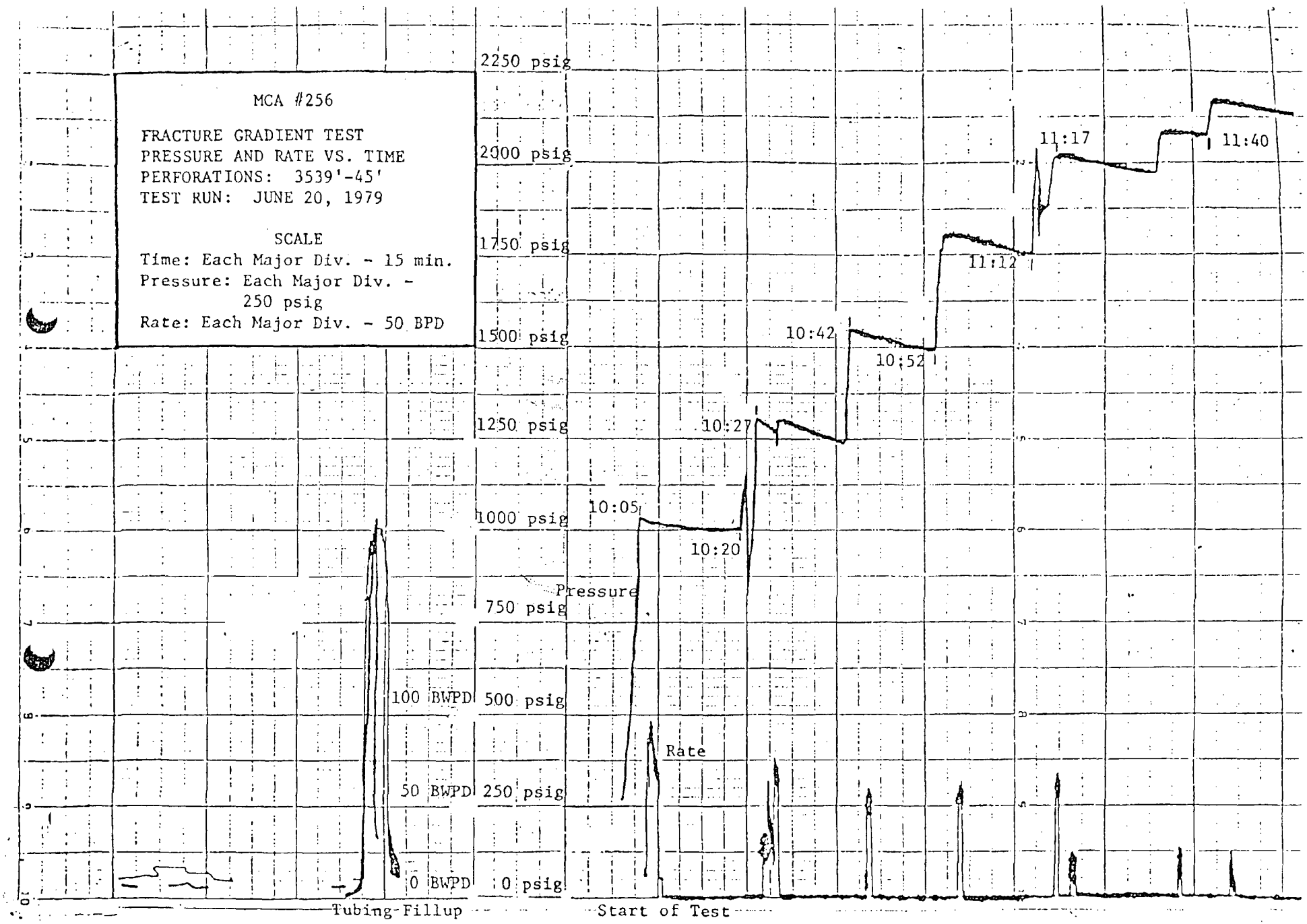
Very truly yours,

M K Mosley

AMS/HAI:rej

M.K. Mosley

Mark K. Mosley


MCA #256
FRACTURE GRADIENT TEST
PRESSURE AND RATE VS. TIME
PERFORATIONS: 3539'-45'
TEST RUN: JUNE 20, 1979
SCALE
Time: Each Major Div. - 15 min.
Pressure: Each Major Div. - 250 psig
Rate: Each Major Div. - 50 BPD
2250 psig
2000 psig
1750 psig
1500 psig
1250 psig
1000 psig
750 psig
500 psig
250 psig
0 psig
100 BWPD
50 BWPD
0 BWPD
Pressure
Rate
10:05
10:20
10:27
10:42
10:52
11:12
11:17
11:40
Tubing Fillup
Start of Test