

**BENSON-MONTIN-GREER DRILLING CORP.**

221 PETROLEUM CENTER BUILDING  
FARMINGTON, NEW MEXICO 87401

PHONE: 325-8874

March 25, 1969

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New Mexico Oil Conservation Commission  
Box 2088  
Santa Fe, New Mexico

Attention: Mr. Dan Nutter

Re: LA PLATA GALLUP POOL

Gentlemen:

We are sending you with this letter information respecting the west reservoir in the La Plata Gallup Pool, into which reservoir three wells are currently completed (Taylor No. 1 Walker, Benson-Montin-Greer Drilling Corp. No. P-31 and N-31 La Plata Mancos Unit).

Our estimate of initial reservoir pressure is for the period September 10 to October 15, 1968, at which time the fluid level in the Taylor No. 1 Walker was fairly well stabilized at 1334'. On August 27, 1968, when the fluid level was 1336', this pressure was 313#, and we estimate the pressure accordingly, when the fluid level was 3' higher than this, to be 314# for this period September 10 to October 15. We believe the mid-point of the pay in this well to be at about 2300', which accordingly would make a pressure at the pay in the Taylor well for this time period of 331#. The 2300' level in the Taylor well is at a datum of + 3727. We consider the average reservoir pressure to be one which is approximately halfway between the Taylor No. 1 Walker and the P-31 well, which is structurally down-dip 300' from the Taylor No. 1 Walker. The oil has a density of .341#/sq.in./ft., which accordingly gives a pressure of 445# at a datum of + 3400' referred to sea level.

We estimate the temperature at this + 3400' datum to be approximately 115° F.

As to gas deviation factors (Z factors) we have enclosed a graph which shows these gas compressibility factors for the various Niobrara fractured shale pools in the San Juan Basin, and on this we have plotted the deviation factors as measured from the bottom hole sample taken from the Taylor No. 1 Walker. In addition we have drawn estimated compressibility factors for the 3400' datum. Gas injected into the gas cap would probably have the compressibility factor shown for the No. 1 Walker bottom hole sample. Gas which reaches the datum of + 3400 would probably follow more closely the other line.

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New Mexico Oil Conservation Commission


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We hope this information will be adequate for your needs. If not, however, let us know and we will provide such additional data as you may require.

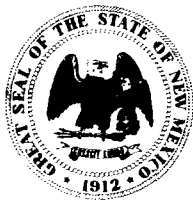
Yours very truly,

BENSON-MONTIN-GREER DRILLING CORP.

BY:

A handwritten signature in cursive script, appearing to read "Albert R. Greer", written over a horizontal line.

Albert R. Greer, President



# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87501

GOVERNOR  
DAVID F. CARGO  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER

STATE GEOLOGIST  
A. L. PORTER, JR.  
SECRETARY - DIRECTOR

April 1, 1969

Mr. Jack Cooley  
Burr & Cooley  
Attorneys at Law  
152 Petroleum Center Building  
Farmington, New Mexico 87401

Re: Case No. 4074  
Order No. R-3714  
Applicant:  
Benson-Montin-Greer Drlg. Corp.

Dear Sir:

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

A. L. PORTER, Jr.  
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x

Artesia OCC x

Aztec OCC x

Other \_\_\_\_\_