

March 1, 1965

**ILLEGIBLE**

Shell Oil Company  
Post Office Box 1509  
Midland, Texas

Att: W. K. Fairchild

In RE: Commingling gas and  
liquid production from  
Devonian and Pennsyl-  
vanian Wells, Antelope  
Ridge Unit, Lea County, N.M.

Gentlemen:

Subject to approval of Oil Conservation Commission according to New Mexico Oil Conservation Commission rules for measuring and separating commingled production, we will approve the above captioned request. This also is an approval by the Unit Division of the Oil and Gas Department of the New Mexico State Land Office.

This approval is granted with the understanding that the Commissioner of Public Lands reserves the right to amend or withdraw this approval at any time should a loss of revenue occur through this installation.

Very truly yours,

GUYTON B. HAYS,  
Commissioner of Public Lands

By

TED BILBERRY, Director,  
Oil and Gas Department

GBH/TB/RGM/RDG/kcl

w/cc to: Oil Conservation Commission  
Oil and Gas Accounting Commission  
Unit Division  
Royalty Division

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# SHELL OIL COMPANY

PETROLEUM BUILDING

P. O. BOX 1509

MIDLAND, TEXAS

March 3, 1965

Subject: Commingling Gas and Liquid Production from Devonian and Pennsylvanian Wells - Antelope Ridge Unit, Lea County, New Mexico

New Mexico Oil Conservation Commission (3)  
P. O. Box 871  
Santa Fe, New Mexico

Gentlemen:

Referring to our previous correspondence dated November 13, 1964, and January 28, 1965, on the captioned subject, this will confirm a phone conversation recently with Mr. Nutter and summarize our present position. Five wells are presently completed or completing in the Antelope Ridge unit: Devonian wells 27-1, 34-1 and 4-1 (dual); Pennsylvanian wells 4-2 (Atoka), and 4-1 (dual) (Morrow). Authority has been granted to produce and commingle the 27-1 and 34-1 Devonian production. Our December 23, 1964 letter requested permission to commingle the 4-1 Devonian. The 4-1 Pennsylvanian (Morrow) is connected to a low temperature separation unit and will not be commingled immediately with other formations. It is the 4-2 Pennsylvanian (Atoka) well which we should like permission to commingle with the Devonian. The drawing MG-E-316 with our January 28 letter incorrectly shows the 4-1 Pennsylvanian Morrow well as the one to be commingled. A corrected drawing MG-E-316 is attached.

The 4-2 Pennsylvanian (Atoka) well has recently been completed and tested -- the first completion in this formation. The well produced about 26 barrels of 57° API condensate per million cubic feet of gas. Thus this formation, although sweet, has a similar liquid content as the Devonian and no condensate price reduction will result from commingling as we originally indicated based on 4-1 Pennsylvanian (Morrow) condensate gravity. The royalty interest is the same in both Pennsylvanian formations but not the same as in the Devonian.

Referring again to our drawing MG-E-316, revised, we should like to operate two meters in parallel on the condensate from the 300# Devonian separator; no bypass on the meters will be installed. Since this separator handles the majority of our producing capacity, the parallel meters will give us some operating flexibility in the event of failure of a meter. This will also permit single meter operation on low load thereby keeping the flow through the meter in the range of maximum meter accuracy.

The residue gas sale contract with Southern Union Gas Company provides a daily contract sales quantity of 30 million cubic feet per day in 1965 contingent upon a deliverability of 60 million cubic feet per day by

our facilities. Because their market is not yet able to take contract quantities, we can meet our current commitments. However, by June we expect Southern Union to be calling upon our full deliverability commitment. To meet it we must have installed facilities to handle 4-1 Devonian and 4-2 Pennsylvanian (Atoka) production. In order to select and obtain deliveries on equipment for installation in time to meet this market, we should appreciate your action on our application for commingling. We are available for discussions of the facilities if you will advise us.

Yours very truly,

*W R Fairchild*

W. R. Fairchild  
Chief - Gas Engineering

WRF:BAK

cc - Commissioner of Public Lands  
Oil & Gas Department  
P. O. Box 791  
Santa Fe, New Mexico

United States Department of the Interior  
Geological Survey  
P. O. Drawer 1857  
Roswell, New Mexico

LARGE FORMAT  
EXHIBIT HAS  
BEEN REMOVED  
AND IS LOCATED  
IN THE NEXT FILE