

**Amoco Production Company (USA)**

Petroleum Center Building  
501 Airport Drive  
Farmington, New Mexico 87401  
505-325-8841

R. W. Schroeder  
District Superintendent

September 11, 1981

Mr. Michael E. Stogner  
Petroleum Engineering Specialist  
New Mexico Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87501

File: WLP-277-986.510

Application to Down-Hole Commingle B. S. Mesa Gallup and  
Basin Dakota Production, Jicarilla Apache 102 Nos. 7E,  
10E, 12E and 14E

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Dear Mr. Stogner:

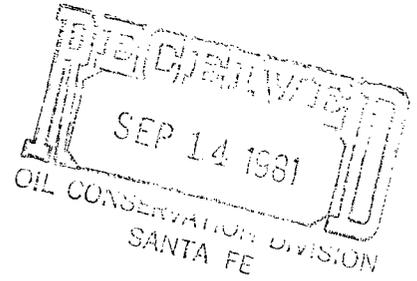
Reference is made to your telephone conversation with Randy Rickford on September 8, 1981 during which you pointed out that the pressure differentials between the Gallup and Dakota zones in Jicarilla Apache 102 Nos. 10E and 12E are greater than 2 to 1. In order to comply with Executive Order R-4059, Amoco has recalculated pressures in the Gallup formation in the two wells.

The BHP of the Gallup zone was recalculated by using surface shut in pressures and pressure gradients. A Sonalog was shot in each well to locate the height of the fluid in the wellbore. The results of these recalculations are shown on Attachments 1a and 1b.

As you can see from the Attachment 1b, the recalculated pressure differential between the Gallup and Dakota zone in Jicarilla Apache 102 No. 12 is within the limits for commingled production. However, the pressure differential in 102 10E is still greater than 2 to 1 (Attachment 1a). We therefore ask that Jicarilla Apache 102 10E be withdrawn from the commingling application until such time that the pressure differential between the zones is within the accepted limits. Until then, Jicarilla Apache 102 10E will be produced as a multiple completion; the Dakota will be produced through the tubing and the Gallup through the annulus.

Although Jicarilla Apache 102 No. 10E does not qualify for commingling, we feel that Jicarilla Apache 102 Nos. 7E, 12E and 14E do comply with Order R-4059. Therefore, we request that commingling be approved for these wells.

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If you have any further questions about Amoco's commingling application, please call Randy Rickford at 325-8841. Thank you for your prompt consideration.

Sincerely,

*R W Schroeder*  
*wsp*

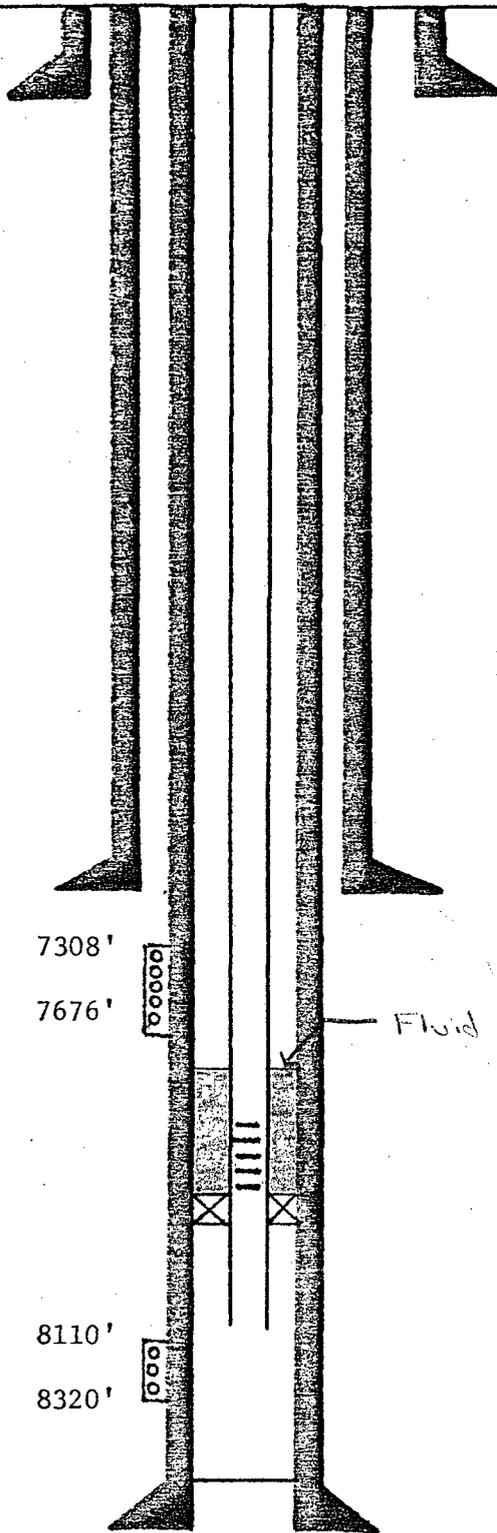
RLR/tk

Attachments

ATTACHMENT 1a

Gallup  $P_c = 586$  psi.  
 Dakota  $P_c = 1877$  psi.

9 5/8" CSA 323'



7" CSA 4250'

GALLUP  
 BHP = 749.3 psi

7308'

7676'

Fluid at 7720'

SLIDING SLEEVE AT 8002'

PKR SA 8011'

2 3/8" TBG AT 8294'

DAKOTA  
 BHP = 2377.2 psi

8110'

8320'

PBD 8364'

4 1/2" CSA 8410'

Amoco Production Company

SCALE:

JICARILLA APACHE 102 #10E

DRG.  
 NO.

ATTACHMENT 1b

GALLUP PC= 516 psi  
 DAKOTA PC= 1737 psi

9 5/8" CSA 321'

Fluid at 3517'

7" CSA 4212'

GALLUP  
BHP= 2226 psi

7360'

7566'

SLIDING SLEEVE AT 7980'

PKR SA 7980'

DAKOTA  
BHP= 2323.8 psi

8022'

8225'

PBD 8250'

4 1/2" CSA 8306'

Amoco Production Company

SCALE:

JICARILLA APACHE 102 #12E

DRG.  
 NO.



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

September 1, 1981

*Randy Richardson*  
325-8841

R. W. Schroeder  
District Superintendent  
Amoco Production Company  
Petroleum Center Building  
501 Airport Drive  
Farmington, NM 87401

RE: Application to down-hole commingle B. S. Mesa Gallup and Basin Dakota Production, Jicarilla Apache 102, Wells 7E, 10E, 12E, and 14E, Rio Arriba County, New Mexico.

Dear Mr. Schroeder:

As per our telephone conversation on Monday, August 31, 1981, the Oil Conservation Division cannot approve your application for down-hole commingling at this time.

Order R-4059 requires that the current (within 30 days) 24-hour productivity test results be reported on Commission Form C-116. Of the eight productivity test results recorded on your attachments, (1a) and (1b), only two were current as of the date of your application.

Also, we request that the pressure differential between flowing zones be no greater than 2 to 1, (50%). In wells numbers 10E and 12E (see your attachments 3b and 3c) the pressure differential between zones appears to be excessive. This differential may be acceptable if you calculate the Basin Dakota pressure at the Mesa Gallup datum. I might also add, that to comply with Order R-4059, a current (within 30 days) bottom-hole pressure measurement is required for each flowing zone.

To date we have received a waiver from El Paso Natural Gas Company. This will be kept on file along with your original application and any other waivers that shall come in.

When you refile this application please submit it in duplicate to this office. If there are any questions, please contact me. Thank you.

Sincerely,

*Michael E. Stogner*

Michael E. Stogner,  
Petroleum Engineering Specialist

MES:dp