

Blancett #2R
Commingling Application

Allocation Formula

The Aztec Pictured Cliffs was completed in November of 1995. Production from the well has steadily declined to the point that the well is only marginally economic. The decline curve is attached. The decline rate on the Pictured Cliffs formation has been calculated at 38.8% per year.

The Fruitland Coal has not been completed so there is insufficient data to determine a stabilized flow rate or decline curve.

Thompson proposes to allocate the production from the commingled well according to the following formula:

$$Q_{Ftc} = Q_{Total} - (Q_{Pci} * e^{(-D*t)})$$

where:

Q_{Ftc} = Production allocated to the Fruitland Coal

Q_{Total} = Total measured production from the well

Q_{Pci} = Last Pictured Cliffs rate prior to commingling

D = Exponential decline rate (0.3233/mo.) =
38.8%/year

t = time since commingling began in months.

Both zones are expected to have very similar bottom hole pressures (approximately 350 psig from the Pictured Cliffs and the Fruitland Coal) so cross flow will not be a factor. Both zones will produce some amount of water. Neither zone is fluid sensitive and the fluids from the two zones are compatible. A copy of the gas analysis from the Pictured Cliffs is attached.

