EMPirical Analysis on Vertical and Horizontal Wells in San Juan Basin

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Development Activity

Production Decline Curve
Case: Mancos Shale Gas

Classic hyperbolic decline curve (Arps 1945):

\[ q = \frac{q_0}{(1 + b \cdot t)^{1/a}} \]

Marginal Wells
Stripper/Marginal wells: Producing no more than 90MCF/Day of natural gas.[1]
Have produced between 11% to 15% of the total U.S. oil and gas production over the past decade.[2]

Marginal Gas Wells in San Juan Basin

Production Trends

Data Sources
• New Mexico’s Oil Conservation District
• Baker Hughes
• Energy Information Agency
• Drilling Info
• United States Geological Survey

Reference