



Reservoir Engineering Services

Rate Change Data

Time Hours	Pressure psia	Rate MMscf/day
0.73981	3350.0000	0.0000
1.13336	214.0000	0.0800
1.97552	3344.4470	0.0000
3.02000	398.3930	0.0800
3.97626	3300.5120	0.0000

Log-Log Plot Model Results - Initial Buildup

Radial homogeneous - Infinitely acting

Classic Wellbore Storage

Wellbore storage coefficient 2.8153e-4 bbl/psi

Dimensionless wellbore storage 2.7118

Apparent wellbore volume 1.1897 bbl

Permeability 8.6961e-3 md

Permeability-thickness 0.5218 md.ft

Skin factor 4.0939

Log-Log Plot Line Details

Line type : Wellbore storage

Slope : 1

Intercept : 3588.33

Line type : Radial flow

Slope : 0

Intercept : 64.9141

Radial Flow Plot Model Results - Initial Buildup

Radial homogeneous - Infinitely acting

Classic Wellbore Storage

Permeability 8.7947e-3 md

Permeability-thickness 0.5277 md.ft

Radius of investigation 5.1713 ft

Flow efficiency 0.3457

dP skin (constant rate) 2423.3945 psi

Skin factor 4.1573

Extrapolated pressure 3410.5959 psia

Radial Flow Plot Line Details

Line type : Radial flow

Slope : -147.794

Intercept : 819.681

Coefficient of Determination : 0.998314

Radial flow

Extrapolated m(p) 819.6811 psi²/cp. (*1E-06)

Extrapolated pressure 3410.5959 psia

m(p) at dt = 1 hr 798.3806 psi²/cp (*1E-06)

Pressure at dt = 1 hour 3353.8398 psia

Log-Log Plot Model Results - Final Buildup

Radial homogeneous - Infinitely acting

Classic Wellbore Storage

Wellbore storage coefficient 1.0661e-4 bbl/psi