NAME OF THE SOFTWARE= RSS2020

INPUT VALUES

N, STOIIP(mmstb)

m, gas/sand volume ratio(fraction)

Pi, initial reservoir pressure(psig)

Pb, bubble point pressure(psig)

Boi, initial formation volume factor(rb/stb)

Rsi, initial solution gor(scf/stb)

Bgi, initial gas expansion factor(scf/cuft)

Sw, connate water saturation(fraction)

Sgc, critical gas saturation(fraction)

Np, cummulative oil production(MMstb)

Rp, cummulative produced GOR(scf/stb)

Wp, cummulative water produced(MMb)

Fw, present water cut(6/9)

P, present reservoir pressure(psig)

T, time since start of production(yrs)

UR, target ultimate recovery(MMstb)

Pa, desired abandonement pressure(psig)

Fwa, abandonement water cut(6/9)

H, original oil column(ft)

Ha, abandonement oil column(ft)

E, sweep efficiency(fraction)

Sorw, residual oil saturation to water drive(fraction)

S’orw, residual oil saturation to water drive in presence of gas(fraction)

Sgro, residual gas saturation to oil drive(fraction)

OUTPUT VALUES

CURRENT AVERAGE GROSS RATE(b/d)

PRESENT TRAPPED GAS SATURATION(%)

CRITICAL PRESSURE(psig)

PRESENT RESATURATION(MMstb)

PRESENT NET WATER INFLUX(MMb)

PRESENT WATER DRIVE INDEX(%)

ABANDONEMENT PRESSURE ESTIMATE AT CURRENT Rp AND GROSS RATE(psig)

MB ABANDONEMENT PRESSURE ASSUMING CURRENT Rp AND WATER DRIVE INDEX(psig)

ESTIMATED GROSS OFFTAKE RATE FOR DESIRED ABANDONEMENT PRESSURE(b/d)

RECOMMENDED MAXIMUM GOR BASED ON AVAILABLE ENERGY AND DESIRED ABANDONEMENT PRESSURE(scf/b)

RECOMMENDED GOR FOR NO ULTIMATE RESATURATION(scf/b)

ULTIMATE RECOVERY WITHOUT GASCAP BLOWDOWN(MMstb)

ULTIMATE RECOVERY WITH GASCAP BLOWDOWN(MMstb)

GAIN IN ULTIMATE RECOVERY WITH GASCAP BLOWDOWN(MMstb)