Abbreviations

A Cross sectional area

B Specific Counterion Activity (Waxman-Smits)

C_p Capillary Pressure FF,F Formation factor E Tortuosity factor

H_t Producing zone thicknessK_{brine} Brine permeability

K_{brine} Brine permeability
K_g Gas permeability

K_L Equivalent liquid permeability (Klinkenberg corrected gas permeability)

K_o Oil permeability

 K_{eo} Effective oil permeability K_r Relative permeability K_{ro} Relative permeability to oil K_{rw} Relative permeability brine

K_{SFW} Permeability to simulated formation water

K_w Brine/water permeability

K_{ew} Effective brine/water permeability

 ℓ , L Length

m Cementation factor

m* Cementation factor (corrected)

M_r Mobility

n Saturation exponent

n* Saturation exponent (corrected)

P, p Pressure

 $\begin{array}{ll} P_c & Capillary \ pressure \ (psi) \\ P_d & Drawdown \ pressure \\ P_m & Mean \ flowing \ pressure \\ Q_o & Volume \ oil \ produced \\ Q_i & Volume \ water \ injected \end{array}$

Q_v Cation exchange capacity meq/ml

Qw Volume water produced
Re Effective reservoir radius
RCAL Routine core analysis
Relative Permeability

R_o Core resistivity

R_w Brine resistivity (or wellbore diameter)

 R_t Core resistivity at reduced S_w

SCAL Special Core Analysis

S_o Oil saturation

S_{or} Residual oil saturation

S_{gt} Residual trapped gas saturation

 $egin{array}{lll} S_w & Brine saturation \\ S_{wi} & Initial brine saturation \end{array}$

t Time (secs)

Dr. Paul Glover Page i

Abbreviations continued

V, v	Volume
g	Interfacial tension
1	Mobility ratio
\boldsymbol{q}	Contact angle
\boldsymbol{f}	Porosity
r_o	Oil density
$r_{\scriptscriptstyle W}$	Brine density
m_{o}	Oil viscosity
$m_{\!\scriptscriptstyle W}$	Water (brine) viscosity

Dr. Paul Glover Page ii