

DATA FOR "LIQUID" TEST CALCULATIONS

1. Oil Gravity (G_{roil})	G_{roil}	°API @ 60°F
2. Reservoir Temperature (T_f)	T_f	°F
3. Oil Saturation (S_o)	Logs or Core Analysis	%
4. Gas Saturation (S_g)	Logs or Core Analysis	%
5. Water Saturation (S_w)	Logs or Core Analysis	%
6. Pressure Standard Conditions (P_{sc})	Table #	P
7. Reservoir Pressure (P_i) = P _____ P_{sig} + P_{sc} _____	P_i	P_{sia}
8. Final Flow Pressure (P_{wf}) = P_{wf} _____ P_{sig} + P_{sc} _____ PSI	P_{wf}	P_{sia}
9. Gas Oil Ratio (GOR)	GOR	$\frac{Ft^3}{Bbl}$
(a) Sample Chamber: $GOR = (159,000 \times \text{Gas} \text{ _____ } Ft^3) \div \text{Oil} \text{ _____ } C_c$	GOR	$\frac{Ft^3}{Bbl}$
(b) Surface Rate: $GOR = \text{Gas Rate} \text{ _____ } \frac{Scf}{day} \div \text{Oil Rate} \text{ _____ } \frac{Bbls}{day}$	GOR	$\frac{Ft^3}{Bbl}$
10. Bubble Point Pressure (B_{pp})	Chart #	PSI
11. Oil Viscosity (μ_o)	Charts # _____ & _____	Cps
12. Oil Formation Volume Factor (B_o)	Chart #	$\frac{Bbls}{Bbl}$
13. Oil Compressibility (C_o)	Chart #	PSI^{-1}
14. Gas Compressibility (C_g)	Chart # _____ $C_g = C_r$ _____ $\div P_r$ _____	PSI^{-1}
15. Water Compressibility (C_w)		PSI^{-1}
16. Rock Compressibility (C_f)		PSI^{-1}
17. Total Compressibility (C_t)		PSI^{-1}
$C_t = (S_o \text{ _____ } dec \times C_o \text{ _____ } \times 10^{-1}) + (S_w \text{ _____ } dec \times C_w \text{ _____ } \times 10^{-1}) + (S_g \text{ _____ } dec \times C_g \text{ _____ } \times 10^{-1}) + C_f \text{ _____ } \times 10^{-1}$	C_t	PSI^{-1}
18. Oil Production Rate (Q_o) (Rate Calculation Sheet 1 or 2)	Q_o _____ $\frac{Bbls}{day} \times B_o$ _____ $\frac{Bbls}{Bbls} =$	$\frac{R Bbls}{day}$
19. Gas Test Rate (Q_g) (Surface Measurement)	Q_g	$\frac{Mcf}{day}$
20. Water Production Rate (Q_w) (Rate Calculation Sheet 1)	Q_w	$\frac{Bbls}{day}$
21. Porosity (ϕ)	ϕ	%
22. Net Zone Thickness (h)	h	Ft
23. Wellbore Radius (r_w)	r_w	Ft
24. Flow Time (T)	T	Min