

Petroleum Reservoir Classification

Gas Reservoir		
	Dry Gas Reservoir	$\text{STOIIP} = 0$
	Gas Reservoir with Oil Rim	$(\text{STGIIP} - \text{STOIIP} \cdot R_s) * \text{GOE} > \text{STOIIP}$
Condensate Reservoir		
Saturated Oil Reservoir		
	Saturated Oil with Gas Cap Reservoir	$P_i \leq P_b , \text{ GOC} < Z_{\text{top}}$
	Saturated Oil w/o Gas Cap Reservoir	$P_i \leq P_b , \text{ GOC} > Z_{\text{top}}, (\text{STGIIP} - \text{STOIIP} \cdot R_s) * \text{GOE} \leq \text{STOIIP}$
Near Critical Oil Reservoir		
	Near Critical Very Low Gas Oil Reservoir	$P_b < P_i < P_b + 1\% , R_s \leq 15 \text{ m}^3/\text{m}^3 , R_v = 0$
	Near Critical Low Gas Oil Reservoir	$P_b < P_i < P_b + 1\% , 15 \text{ m}^3/\text{m}^3 < R_s < 75 \text{ m}^3/\text{m}^3 , R_v = 0$
	Near Critical Medium Gas Oil Reservoir	$P_b < P_i < P_b + 1\% , 75 \text{ m}^3/\text{m}^3 < R_s < 150 \text{ m}^3/\text{m}^3 , R_v = 0$
	Near Critical High Gas Oil Reservoir	$P_b < P_i < P_b + 1\% , 150 \text{ m}^3/\text{m}^3 < R_s < 300 \text{ m}^3/\text{m}^3 , R_v = 0$
	Near Critical Very High Gas Oil Reservoir	$P_b < P_i < P_b + 1\% , R_s \geq 300 \text{ m}^3/\text{m}^3 , R_v = 0$
	Near Critical Volatile Oil Reservoir	$P_b < P_i < P_b + 1\% , R_v > 0$
Undersaturated Oil Reservoir		
	Undersaturated Very Low Gas Oil Reservoir	$P_i > P_b , R_s \leq 15 \text{ m}^3/\text{m}^3 , R_v = 0$
	Undersaturated Low GasOil Reservoir	$P_i > P_b , 15 \text{ m}^3/\text{m}^3 < R_s < 75 \text{ m}^3/\text{m}^3 , R_v = 0$
	Undersaturated Medium GasOil Reservoir	$P_i > P_b , 75 \text{ m}^3/\text{m}^3 < R_s < 150 \text{ m}^3/\text{m}^3 , R_v = 0$
	Undersaturated High Gas Oil Reservoir	$P_i > P_b , 150 \text{ m}^3/\text{m}^3 < R_s < 300 \text{ m}^3/\text{m}^3 , R_v = 0$

	Undersaturated Very High Gas Oil Reservoir	$P_i > P_b$, $R_s \geq 300 \text{ m}^3/\text{m}^3$, $R_v = 0$
	Undersaturated Volatile Oil Reservoir	$P_i > P_b$, $R_v > 0$
Dead Oil Reservoir		$R_s = 0$

See Also

[Petroleum Industry](#) / [Upstream](#) / [Subsurface E&P Disciplines](#) / [Petroleum Geology](#)

[[Hydrocarbon Initial In Place \(HCIIP\)](#)] [[Hydrocarbon Reserves \(HCR\)](#)] [[Hydrocarbon Reserves Classification](#)]

[[Petroleum reservoir fluids](#)][[Hydrocarbon Reserves](#)]