

Rock Summary

	Property	Symbols	Value	Unit	Comment
	Summary Date		16.03.2004		
Geology					
	Deposit structure		Anticline		
	Rock type		Carbonate Rock		mostly packstone
	Geological period		Cretaceous		
	Depositional environment		Deltaic / Tidal		
Depths					
	Surface Elevation	Z_{alt}	125	m (above sea)	
	Average Formation Top	Z_{top}	1,457	m TVDSS	
	Gas-Oil Contact	GOC	1,460	m TVDSS	
	Oil-Water Contact	OWC	1,475	m TVDSS	
	Datum	Z_{dat}	1,475	m TVDSS	= OWC
Thicknesses					
	Average formation thickness	H	30	m	
	Net-To-Gross Thickness	NTG	0.56		
	Oil column thickness	h_o	15	m	field average
	Gas column thickness	h_g	2	m	field average
	Water column thickness	h_w	0	m	field average
Areas					
	Net Oil Pay Area	A_O	20	10^6 m^2	
	Net Gas Pay Area	A_G	3	10^6 m^2	
Volumes					
	Total pore volume	V	> 300	10^6 m^3	
	Oil pore volume	V_O	180	10^6 m^3	
	Gas pore volume	V_G	20	10^6 m^3	
	Aquifer volume	V_{aqf}	> 100	10^6 m^3	
Pressure & Temperature					
	Initial reservoir pressure	P_i	14,300	kPa	@ Datum

	Initial reservoir temperature	T_i	67	°C	@ Datum
Porosity and Shaliness					
	Effective formation porosity	e	25	p.u. (%)	median average
	Shaliness	V_{sh}	4	%	
Compressibility					
	Pore compressibility	c_r	1.0	GPa ⁻¹	
	Total compressibility in oil area	c_{to}	2.1	GPa ⁻¹	
	Total compressibility in gas area	c_{tg}	71	GPa ⁻¹	
	Total compressibility in aquifer	c_{tw}	1.45	GPa ⁻¹	
Permeability					
	Absolute permeability	k_a	150	md	median average
	Vertical-to-horizontal perm ratio	k_v/k_h	0.1		
	Oil relative permeability	k_{ro}	0.8		
	Gas relative permeability	k_{rg}	0.9		
	Water relative permeability	k_{rw}	0.3		
Mobility					
	Relative oil mobility	M_{ro}	0.2	cp ⁻¹	k_{ro}/μ at maximum
	Relative gas mobility	M_{rg}	58	cp ⁻¹	k_{rg}/μ at maximum
	Relative water mobility	M_{rw}	0.6	cp ⁻¹	k_{rw}/μ at maximum
Saturation					
	initial water saturation	S_{wi}	0.21		
	Residual oil saturation to water	S_{orw}	0.15		
	Residual oil saturation to gas	S_{org}	0.05		
	Residual gas saturation to water sweep	S_{grw}	0.2		
Displacement					
	WaterOil Displacement Efficiency	ED_{ow}	0.81		
	GasOil Displacement Efficiency	ED_{og}	0.94		

See also

