

Mercury Injection Capillary Pressure Analysis
Core I.D. 172, B-50-I/94-P-10, 1144.85m

In situ Klinkenberg Permeability = 0.755 md
In situ Porosity = 13.5 %

Mercury Injection Capillary Pressure (psia)	Approx. Pore Entry Diameter (um)	Cumulative Wetting Phase Saturation (% pore vol)	Pore Size Distribution Frequency	Cumulative Surface Area (m2/g)	Approx. Gas-Water Height Above Free Water Level (ft)	Approx. Oil-Water Height Above Free Water Level (ft)	Honarpour <i>et al.</i> Imbibition Carbonate		Corey Calculated		
							Oil Relative Permeability (%)	Water Relative Permeability (%)	Oil or Gas Relative Permeability (%)	Water Relative Permeability (%)	Log Oil/Brine Kro/Krw Ratio
2.0	107	100.0	0.0	0.000	0.1	0.1	0.0	100.0	0.0	100.0	-5.0
2.5	86	99.9	0.1	0.000	0.8	1.1	0.0	100.0	0.0	100.0	-5.0
3.3	65	99.9	0.1	0.000	1.0	1.4	0.0	29.1	0.0	99.7	-5.0
4.3	50	99.8	0.1	0.000	1.3	1.8	0.0	29.1	0.0	99.4	-5.0
5.5	39	99.6	0.2	0.000	1.7	2.4	0.0	29.0	0.0	99.1	-5.0
7.2	30	99.6	0.0	0.000	2.2	3.1	0.0	29.0	0.0	98.4	-5.0
9.3	23	99.5	0.1	0.000	2.9	4.0	0.0	28.9	0.0	98.3	-5.0
12.0	18	99.5	0.0	0.000	3.7	5.2	0.0	28.9	0.0	98.0	-5.0
15.5	14	99.5	0.0	0.000	4.8	6.7	0.0	28.9	0.0	98.0	-5.0
20	11	99.5	0.0	0.000	6.2	8.7	0.0	28.9	0.0	98.0	-5.0
25	8.6	99.5	0.0	0.000	8.0	11.2	0.0	28.9	0.0	98.0	-5.0
35	6.1	99.0	0.5	0.000	9.9	14.0	0.0	28.9	0.0	98.0	-5.0
45	4.8	99.0	0.0	0.000	14	20	0.0	28.6	0.0	95.9	-5.0
55	3.9	98.9	0.1	0.000	18	25	0.0	28.6	0.0	95.9	-5.0
75	2.9	97.8	1.0	0.001	22	31	0.0	28.5	0.0	95.5	-5.0
95	2.3	91.3	6.5	0.007	30	42	0.1	27.9	0.0	91.4	-6.6
120	1.8	42.9	48.4	0.068	38	53	0.9	24.2	0.0	68.8	-4.0
150	1.4	31.4	11.5	0.025	48	67	41.1	4.9	11.9	2.9	0.6
200	1.1	22.7	8.7	0.043	60	84	59.4	2.5	24.9	0.7	1.5
260	0.82	17.7	5.0	0.057	80	112	75.4	1.2	40.2	0.2	2.4
350	0.61	14.1	3.6	0.070	103	145	85.5	0.7	51.7	0.1	3.0
430	0.50	12.8	1.3	0.076	139	196	93.1	0.4	61.2	0.0	3.5
550	0.39	11.4	1.5	0.084	171	240	95.9	0.3	65.0	0.0	3.8
725	0.30	9.9	1.4	0.095	219	308	99.2	0.2	69.5	0.0	4.1
925	0.23	8.3	1.6	0.111	288	405	102.5	0.2	74.2	0.0	4.4
1200	0.18	7.2	1.0	0.123	368	517	106.2	0.1	79.7	0.0	4.9
1550	0.14	6.4	0.8	0.136	477	671	108.6	0.1	83.4	0.0	5.3
2000	0.11	6.0	0.5	0.146	617	867	110.5	0.0	86.3	0.0	5.7
2600	0.08	5.4	0.6	0.163	796	1119	111.6	0.0	88.1	0.0	6.0
3350	0.06	4.9	0.5	0.178	1034	1454	113.1	0.0	90.4	0.0	6.4
4300	0.05	4.4	0.5	0.202	1333	1874	114.2	0.0	92.1	0.0	6.7
5550	0.04	3.9	0.5	0.230	1711	2405	115.4	0.0	94.2	0.0	7.3
7200	0.03	3.3	0.6	0.273	2208	3104	116.6	0.0	96.1	0.0	8.0
9300	0.02	2.9	0.4	0.309	2864	4027	118.0	0.0	98.4	0.0	9.6
					3700	5201	118.9	0.0	100.0	0.0	15.0

All Hg calculations assume air-mercury T=484 dyne/cm, contact angle=140deg.
Oil/Gas-Brine Pc assumes insitu o/g-brine Tcos0= 64.0000 22.0000 dynes/cm
Oil/gas-Brine height assumes o/g density gradient = 0.0186 0.3464 psi/ft
Oil/gas-Brine height assumes brine density gradient = 0.4525 0.4525 psi/ft
Swi assumed for relative permeability = 2.9 %
Sorw assumed for relative permeability = 0 %
In situ Gas/Oil & Brine Density (g/cc)= 0.043/0.80 1.045 g/cc

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