

Mercury Injection Capillary Pressure Analysis
Core I.D. 143, B-50-I/94-P-10, 1139.89m

In situ Klinkenberg Permeability = 0.0106 md
In situ Porosity = 5.6 %

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	100.0	0.0	0.000	0.8	1.1	0.0	100.0	0.0	100.0	-5.0
3.3	65	100.0	0.0	0.000	1.0	1.4	0.0	100.0	0.0	100.0	-5.0
4.3	50	100.0	0.0	0.000	1.3	1.8	0.0	100.0	0.0	100.0	-5.0
5.5	39	100.0	0.0	0.000	1.7	2.4	0.0	100.0	0.0	100.0	-5.0
7.2	30	100.0	0.0	0.000	2.2	3.1	0.0	100.0	0.0	100.0	-5.0
9.3	23	100.0	0.0	0.000	2.9	4.0	0.0	100.0	0.0	100.0	-5.0
12.0	18	100.0	0.0	0.000	3.7	5.2	0.0	100.0	0.0	100.0	-5.0
15.5	14	100.0	0.0	0.000	4.8	6.7	0.0	100.0	0.0	100.0	-5.0
20	11	100.0	0.0	0.000	6.2	8.7	0.0	100.0	0.0	100.0	-5.0
25	8.6	100.0	0.0	0.000	8.0	11.2	0.0	100.0	0.0	100.0	-5.0
35	6.1	100.0	0.0	0.000	9.9	14.0	0.0	100.0	0.0	100.0	-5.0
45	4.8	100.0	0.0	0.000	14	20	0.0	100.0	0.0	100.0	-5.0
55	3.9	100.0	0.0	0.000	18	25	0.0	100.0	0.0	100.0	-5.0
75	2.9	98.5	1.5	0.000	22	31	0.0	100.0	0.0	100.0	-5.0
95	2.3	96.3	2.3	0.001	30	42	0.0	25.4	0.0	93.5	-5.0
120	1.8	92.2	4.1	0.003	38	53	0.2	24.1	0.0	84.1	-5.4
150	1.4	88.9	3.3	0.003	48	67	0.8	21.8	0.0	69.0	-4.0
200	1.1	72.0	17.0	0.016	60	84	1.5	20.0	0.0	58.3	-3.4
260	0.82	59.3	12.7	0.028	80	112	9.9	12.1	1.0	21.4	-1.3
350	0.61	48.0	11.3	0.043	103	145	20.9	7.5	4.7	8.2	-0.2
430	0.50	41.7	6.2	0.053	139	196	34.2	4.3	12.4	2.7	0.7
550	0.39	37.8	3.9	0.061	171	240	42.9	2.9	19.5	1.3	1.2
725	0.30	33.2	4.6	0.073	219	308	48.9	2.2	25.4	0.7	1.6
925	0.23	30.4	2.8	0.082	288	405	56.3	1.5	33.7	0.3	2.0
1200	0.18	27.9	2.5	0.094	368	517	61.1	1.1	39.7	0.2	2.3
1550	0.14	25.6	2.3	0.107	477	671	65.6	0.8	45.8	0.1	2.7
2000	0.11	22.7	2.9	0.128	617	867	69.9	0.6	52.0	0.1	3.0
2600	0.08	20.4	2.3	0.151	796	1119	75.4	0.4	60.5	0.0	3.5
3350	0.06	18.4	2.0	0.175	1034	1454	80.0	0.2	68.0	0.0	4.0
4300	0.05	16.6	1.8	0.204	1333	1874	84.0	0.1	75.0	0.0	4.5
5550	0.04	15.1	1.5	0.235	1711	2405	87.7	0.1	81.8	0.0	5.2
7200	0.03	13.4	1.7	0.282	2208	3104	91.0	0.0	88.0	0.0	6.0
9300	0.02	12.4	1.0	0.317	2864	4027	94.7	0.0	95.5	0.0	7.7
					3700	5201	97.0	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 = 12.4 12.4 %
Sorw assumed for relative permeability = 0 0 %
In situ Gas/Oil & Brine Density (g/cc)= 0.043/0.80 1.045 g/cc

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