

Mercury Injection Capillary Pressure Analysis
Core I.D. 97, A-21-A/94-P-15, 1120.7m

In situ Klinkenberg Permeability = 0.0140 md
In situ Porosity = 5.0 %

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	99.6	0.4	0.000	18	25	0.0	100.0	0.0	100.0	-5.0
75	2.9	98.0	1.5	0.000	22	31	0.0	27.0	0.0	98.2	-5.0
95	2.3	94.9	3.2	0.001	30	42	0.0	26.0	0.0	91.6	-6.6
120	1.8	88.0	6.9	0.004	38	53	0.3	24.2	0.0	79.2	-4.9
150	1.4	79.7	8.2	0.006	48	67	1.8	20.4	0.0	56.6	-3.3
200	1.1	71.0	8.7	0.011	60	84	5.2	16.4	0.2	36.3	-2.2
260	0.82	63.9	7.1	0.017	80	112	10.6	12.5	1.0	21.4	-1.3
350	0.61	53.5	10.4	0.030	103	145	16.4	9.8	2.5	13.1	-0.7
430	0.50	44.9	8.6	0.042	139	196	27.3	6.4	6.9	5.6	0.1
550	0.39	36.5	8.5	0.057	171	240	38.3	4.2	13.6	2.4	0.8
725	0.30	30.7	5.7	0.071	219	308	51.0	2.4	24.2	0.8	1.5
925	0.23	27.3	3.5	0.082	288	405	60.5	1.5	34.1	0.3	2.0
1200	0.18	25.6	1.7	0.088	368	517	66.7	1.1	41.4	0.2	2.4
1550	0.14	22.8	2.8	0.103	477	671	69.9	0.9	45.4	0.1	2.6
2000	0.11	20.6	2.2	0.117	617	867	75.2	0.6	52.7	0.0	3.0
2600	0.08	18.5	2.1	0.136	796	1119	79.5	0.4	58.9	0.0	3.4
3350	0.06	17.2	1.3	0.150	1034	1454	83.9	0.3	65.5	0.0	3.8
4300	0.05	14.6	2.6	0.188	1333	1874	86.5	0.2	69.7	0.0	4.1
5550	0.04	12.5	2.0	0.225	1711	2405	92.1	0.1	79.0	0.0	4.9
7200	0.03	10.6	1.9	0.271	2208	3104	96.5	0.0	86.7	0.0	5.8
9300	0.02	9.4	1.3	0.310	2864	4027	100.0	0.0	94.6	0.0	7.4
					3700	5201	100.0	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 = 9.4 %
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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