

Mercury Injection Capillary Pressure Analysis
Core I.D. 38, C-74-A/94-P-15, 1172.62m

In situ Klinkenberg Permeability = 0.0819 md
In situ Porosity = 5.1 %

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	98.7	1.3	0.000	9.9	14.0	0.0	100.0	0.0	100.0	-5.0
45	4.8	98.2	0.6	0.000	14	20	0.0	27.9	0.0	94.9	-5.0
55	3.9	97.8	0.4	0.000	18	25	0.0	27.6	0.0	92.6	-6.9
75	2.9	96.5	1.3	0.001	22	31	0.1	27.3	0.0	91.0	-6.5
95	2.3	95.4	1.1	0.001	30	42	0.2	26.6	0.0	86.1	-5.7
120	1.8	88.0	7.4	0.006	38	53	0.3	25.9	0.0	82.1	-5.2
150	1.4	85.8	2.2	0.003	48	67	1.8	21.9	0.0	58.5	-3.4
200	1.1	78.5	7.4	0.010	60	84	2.5	20.7	0.0	52.5	-3.0
260	0.82	70.3	8.2	0.021	80	112	5.9	17.1	0.3	35.9	-2.1
350	0.61	60.9	9.3	0.037	103	145	11.2	13.5	1.0	22.4	-1.4
430	0.50	53.6	7.4	0.053	139	196	19.3	9.9	2.8	12.1	-0.6
550	0.39	43.5	10.1	0.080	171	240	27.2	7.5	5.6	6.9	-0.1
725	0.30	32.9	10.6	0.118	219	308	40.3	4.7	12.4	2.7	0.7
925	0.23	25.8	7.2	0.151	288	405	56.8	2.5	24.5	0.8	1.5
1200	0.18	20.1	5.7	0.185	368	517	69.5	1.4	36.8	0.2	2.2
1550	0.14	16.6	3.4	0.212	477	671	80.6	0.7	49.5	0.1	2.9
2000	0.11	14.8	1.8	0.230	617	867	87.7	0.4	58.6	0.0	3.4
2600	0.08	13.1	1.8	0.253	796	1119	91.5	0.3	63.8	0.0	3.7
3350	0.06	10.8	2.2	0.290	1034	1454	95.4	0.2	69.2	0.0	4.1
4300	0.05	8.4	2.4	0.341	1333	1874	100.0	0.1	76.7	0.0	4.7
5550	0.04	6.9	1.5	0.383	1711	2405	100.0	0.0	85.2	0.0	5.6
7200	0.03	5.6	1.3	0.430	2208	3104	100.0	0.0	91.1	0.0	6.5
9300	0.02	4.7	0.9	0.471	2864	4027	100.0	0.0	96.3	0.0	8.1
					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 = 4.7 4.7 %
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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