

Mercury Injection Capillary Pressure Analysis
Core I.D. 45, B-50-I/94-P-10, 1145.31m

In situ Klinkenberg Permeability = 0.706 md
In situ Porosity = 7.5 %

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	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	99.4	0.6	0.000	6.2	8.7	0.0	100.0	0.0	100.0	-5.0
25	8.6	98.0	1.4	0.000	8.0	11.2	0.0	28.5	0.0	97.7	-5.0
35	6.1	95.0	3.0	0.001	9.9	14.0	0.0	27.7	0.0	92.0	-6.7
45	4.8	94.3	0.8	0.001	14	20	0.3	25.9	0.0	80.9	-5.1
55	3.9	92.2	2.1	0.001	18	25	0.4	25.5	0.0	78.2	-4.8
75	2.9	86.0	6.2	0.004	22	31	0.8	24.3	0.0	71.3	-4.2
95	2.3	78.9	7.1	0.007	30	42	2.5	21.0	0.0	53.3	-3.1
120	1.8	63.6	15.3	0.016	38	53	5.6	17.5	0.2	37.1	-2.2
150	1.4	56.2	7.4	0.012	48	67	16.7	11.1	2.1	14.9	-0.9
200	1.1	45.5	10.8	0.022	60	84	24.2	8.5	4.3	8.8	-0.3
260	0.82	36.9	8.6	0.033	80	112	37.5	5.4	10.4	3.5	0.5
350	0.61	29.7	7.2	0.045	103	145	50.3	3.4	18.7	1.4	1.1
430	0.50	26.2	3.5	0.052	139	196	62.4	2.1	28.7	0.5	1.7
550	0.39	23.1	3.2	0.060	171	240	68.7	1.5	34.8	0.3	2.1
725	0.30	20.4	2.7	0.070	219	308	74.7	1.1	41.1	0.2	2.4
925	0.23	19.2	1.2	0.075	288	405	80.0	0.8	47.2	0.1	2.7
1200	0.18	16.9	2.3	0.088	368	517	82.5	0.7	50.2	0.1	2.9
1550	0.14	15.4	1.5	0.099	477	671	87.2	0.5	56.0	0.0	3.2
2000	0.11	14.0	1.4	0.113	617	867	90.4	0.4	60.2	0.0	3.5
2600	0.08	12.2	1.8	0.135	796	1119	93.4	0.3	64.3	0.0	3.7
3350	0.06	10.0	2.2	0.170	1034	1454	97.4	0.2	69.9	0.0	4.1
4300	0.05	8.2	1.8	0.207	1333	1874	100.0	0.1	77.2	0.0	4.7
5550	0.04	6.2	2.0	0.259	1711	2405	100.0	0.1	83.5	0.0	5.3
7200	0.03	4.9	1.3	0.304	2208	3104	100.0	0.0	91.0	0.0	6.5
9300	0.02	3.9	0.9	0.345	2864	4027	100.0	0.0	96.2	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 = 3.9 3.9 %
Sorw assumed for relative permeability = 0 0 %
In situ Gas/Oil & Brine Density (g/cc)= 0.043/0.80 1.045 g/cc

Mercury Injection Capillary Pressure Analysis
Core I.D. 45, B-50-I/94-P-10, 1145.31m

