

Mercury Injection Capillary Pressure Analysis
Core I.D. 149, C-32-G/94-P-10, 1143.84m

In situ Klinkenberg Permeability = 7.86 md
In situ Porosity = 11.5 %

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	99.8	0.2	0.000	0.8	1.1	0.0	100.0	0.0	100.0	-5.0
3.3	65	99.4	0.4	0.000	1.0	1.4	0.0	28.9	0.0	99.2	-5.0
4.3	50	99.1	0.3	0.000	1.3	1.8	0.0	28.7	0.0	97.7	-5.0
5.5	39	98.6	0.5	0.000	1.7	2.4	0.0	28.5	0.0	96.3	-5.0
7.2	30	98.5	0.1	0.000	2.2	3.1	0.0	28.2	0.0	94.3	-5.0
9.3	23	98.1	0.4	0.000	2.9	4.0	0.0	28.2	0.0	94.1	-5.0
12.0	18	98.0	0.1	0.000	3.7	5.2	0.0	27.9	0.0	92.5	-6.8
15.5	14	97.4	0.6	0.000	4.8	6.7	0.1	27.8	0.0	92.0	-6.7
20	11	96.9	0.6	0.000	6.2	8.7	0.1	27.5	0.0	89.8	-6.3
25	8.6	95.8	1.1	0.000	8.0	11.2	0.1	27.2	0.0	87.7	-5.9
35	6.1	87.6	8.2	0.003	9.9	14.0	0.2	26.5	0.0	83.5	-5.3
45	4.8	77.6	10.0	0.006	14	20	1.9	22.0	0.0	57.7	-3.3
55	3.9	70.3	7.4	0.010	18	25	6.3	17.1	0.3	34.8	-2.1
75	2.9	60.5	9.8	0.016	22	31	11.2	13.9	0.9	22.9	-1.4
95	2.3	52.2	8.3	0.022	30	42	19.7	10.1	2.8	12.2	-0.6
120	1.8	34.9	17.2	0.039	38	53	28.9	7.4	6.0	6.5	0.0
150	1.4	27.5	7.4	0.031	48	67	53.4	3.1	20.6	1.1	1.3
200	1.1	21.7	5.8	0.041	60	84	66.3	1.8	31.7	0.4	1.9
260	0.82	18.3	3.5	0.048	80	112	77.4	1.0	43.1	0.1	2.5
350	0.61	15.5	2.7	0.056	103	145	84.4	0.7	51.3	0.1	3.0
430	0.50	14.1	1.4	0.061	139	196	90.1	0.5	58.5	0.0	3.4
550	0.39	12.7	1.4	0.067	171	240	93.1	0.4	62.5	0.0	3.6
725	0.30	11.3	1.4	0.076	219	308	96.2	0.3	66.7	0.0	3.9
925	0.23	10.1	1.2	0.085	288	405	99.3	0.2	71.2	0.0	4.2
1200	0.18	9.3	0.8	0.093	368	517	102.0	0.1	75.0	0.0	4.5
1550	0.14	7.8	1.5	0.112	477	671	103.9	0.1	77.9	0.0	4.8
2000	0.11	7.1	0.7	0.122	617	867	107.3	0.1	83.0	0.0	5.3
2600	0.08	6.3	0.8	0.140	796	1119	108.8	0.0	85.4	0.0	5.6
3350	0.06	5.7	0.6	0.157	1034	1454	110.8	0.0	88.4	0.0	6.0
4300	0.05	4.9	0.8	0.185	1333	1874	112.2	0.0	90.8	0.0	6.5
5550	0.04	4.5	0.4	0.202	1711	2405	114.2	0.0	94.0	0.0	7.2
7200	0.03	3.7	0.8	0.248	2208	3104	115.1	0.0	95.5	0.0	7.7
9300	0.02	3.4	0.3	0.273	2864	4027	117.0	0.0	98.7	0.0	9.9
					3700	5201	117.8	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 = 3.4 3.4 %
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. 149, C-32-G/94-P-10, 1143.84m

