

Mercury Injection Capillary Pressure Analysis
Core I.D. 77, A-89-I/94-P-10, 1149.38m

In situ Klinkenberg Permeability = 0.000048 md
In situ Porosity = 2.3 %

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>		Corey Calculated		
							Imbibition	Carbonate	Oil or Gas	Water	Log Oil/Brine
							Relative Permeability (%)	Relative Permeability (%)	Relative Permeability (%)	Relative Permeability (%)	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	100.0	0.0	0.000	22	31	0.0	100.0	0.0	100.0	-5.0
95	2.3	100.0	0.0	0.000	30	42	0.0	100.0	0.0	100.0	-5.0
120	1.8	98.8	1.2	0.000	38	53	0.0	100.0	0.0	100.0	-5.0
150	1.4	98.4	0.4	0.000	48	67	0.0	25.9	0.0	94.6	-5.0
200	1.1	98.4	0.0	0.000	60	84	0.0	25.6	0.0	92.8	-6.9
260	0.82	95.9	2.4	0.001	80	112	0.0	25.6	0.0	92.8	-6.9
350	0.61	93.9	2.0	0.002	103	145	0.2	24.2	0.0	82.8	-5.3
430	0.50	92.3	1.6	0.003	139	196	0.5	23.0	0.0	75.1	-4.5
550	0.39	90.1	2.2	0.005	171	240	0.8	22.1	0.0	69.4	-4.1
725	0.30	86.8	3.3	0.009	219	308	1.2	21.0	0.0	62.2	-3.6
925	0.23	84.5	2.3	0.012	288	405	2.2	19.2	0.0	52.5	-3.0
1200	0.18	83.7	0.8	0.014	368	517	3.0	18.1	0.1	46.5	-2.7
1550	0.14	81.6	2.1	0.019	477	671	3.3	17.7	0.1	44.4	-2.6
2000	0.11	78.2	3.5	0.030	617	867	4.3	16.7	0.2	39.5	-2.3
2600	0.08	64.8	13.3	0.085	796	1119	6.0	15.1	0.4	32.3	-1.9
3350	0.06	43.0	21.9	0.201	1034	1454	15.6	9.6	2.5	13.3	-0.7
4300	0.05	24.7	18.2	0.325	1333	1874	41.1	3.4	17.1	1.6	1.0
5550	0.04	18.6	6.1	0.379	1711	2405	71.5	0.6	51.9	0.1	3.0
7200	0.03	15.2	3.4	0.417	2208	3104	83.6	0.2	71.0	0.0	4.2
9300	0.02	11.3	3.9	0.474	2864	4027	90.7	0.1	83.6	0.0	5.4
					3700	5201	99.2	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 = 11.3 11.3 %
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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