

Mercury Injection Capillary Pressure Analysis
Core I.D. 126, C-34-A/94-P-15, 1134.49m

In situ Klinkenberg Permeability = 1.34 md
In situ Porosity = 10.1 %

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	99.9	0.1	0.000	0.8	1.1	0.0	100.0	0.0	100.0	-5.0
3.3	65	99.5	0.4	0.000	1.0	1.4	0.0	29.0	0.0	99.6	-5.0
4.3	50	99.2	0.3	0.000	1.3	1.8	0.0	28.7	0.0	98.1	-5.0
5.5	39	98.6	0.6	0.000	1.7	2.4	0.0	28.5	0.0	96.7	-5.0
7.2	30	98.2	0.4	0.000	2.2	3.1	0.0	28.2	0.0	94.4	-5.0
9.3	23	97.9	0.3	0.000	2.9	4.0	0.0	27.9	0.0	92.7	-6.9
12.0	18	97.4	0.5	0.000	3.7	5.2	0.1	27.7	0.0	91.5	-6.6
15.5	14	96.8	0.6	0.000	4.8	6.7	0.1	27.5	0.0	89.7	-6.2
20	11	95.9	0.8	0.000	6.2	8.7	0.1	27.1	0.0	87.2	-5.8
25	8.6	95.6	0.4	0.000	8.0	11.2	0.2	26.6	0.0	84.2	-5.4
35	6.1	93.5	2.0	0.001	9.9	14.0	0.2	26.4	0.0	82.8	-5.3
45	4.8	92.2	1.3	0.001	14	20	0.5	25.2	0.0	75.8	-4.6
55	3.9	89.0	3.3	0.003	18	25	0.8	24.5	0.0	71.4	-4.2
75	2.9	74.3	14.6	0.010	22	31	1.5	22.7	0.0	61.5	-3.6
95	2.3	49.8	24.5	0.027	30	42	8.3	15.6	0.5	29.0	-1.8
120	1.8	34.7	15.0	0.040	38	53	31.8	6.6	7.3	5.3	0.1
150	1.4	29.2	5.5	0.033	48	67	53.8	3.0	20.9	1.1	1.3
200	1.1	23.1	6.1	0.042	60	84	63.2	2.1	28.9	0.5	1.8
260	0.82	19.1	3.9	0.049	80	112	74.7	1.2	40.4	0.2	2.4
350	0.61	15.5	3.7	0.058	103	145	82.5	0.8	49.3	0.1	2.9
430	0.50	13.7	1.7	0.063	139	196	90.2	0.4	58.9	0.0	3.4
550	0.39	11.9	1.9	0.071	171	240	94.0	0.3	63.9	0.0	3.7
725	0.30	10.4	1.5	0.078	219	308	98.1	0.2	69.6	0.0	4.1
925	0.23	9.5	0.9	0.084	288	405	101.4	0.1	74.4	0.0	4.5
1200	0.18	9.0	0.6	0.089	368	517	103.4	0.1	77.3	0.0	4.7
1550	0.14	8.0	1.0	0.099	477	671	104.6	0.1	79.2	0.0	4.9
2000	0.11	7.2	0.8	0.111	617	867	106.9	0.1	82.7	0.0	5.2
2600	0.08	6.5	0.7	0.124	796	1119	108.8	0.0	85.7	0.0	5.6
3350	0.06	5.9	0.5	0.136	1034	1454	110.5	0.0	88.3	0.0	6.0
4300	0.05	5.2	0.7	0.158	1333	1874	111.7	0.0	90.3	0.0	6.3
5550	0.04	4.7	0.6	0.180	1711	2405	113.4	0.0	93.0	0.0	7.0
7200	0.03	4.1	0.6	0.209	2208	3104	114.7	0.0	95.2	0.0	7.6
9300	0.02	3.5	0.6	0.249	2864	4027	116.1	0.0	97.6	0.0	8.8
					3700	5201	117.6	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 = 3.5 3.5 %
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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