

**Mercury Injection Capillary Pressure Analysis**  
**Core I.D. 27, C-32-G/94-P-10, 1149.66m**

*In situ* Klinkenberg Permeability = 0.0228 md  
*In situ* Porosity = 7.0 %

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	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	99.0	1.0	0.001	38	53	0.0	100.0	0.0	100.0	-5.0
150	1.4	99.0	0.0	0.000	48	67	0.0	26.8	0.0	95.5	-5.0
200	1.1	98.3	0.6	0.001	60	84	0.0	26.8	0.0	95.5	-5.0
260	0.82	95.8	2.5	0.004	80	112	0.0	26.4	0.0	92.9	-6.9
350	0.61	76.7	19.1	0.038	103	145	0.2	24.9	0.0	82.8	-5.3
430	0.50	59.7	17.0	0.075	139	196	6.9	15.2	0.4	30.8	-1.9
550	0.39	47.9	11.8	0.108	171	240	20.5	8.5	3.8	9.7	-0.4
725	0.30	39.2	8.7	0.140	219	308	34.3	5.0	10.6	3.4	0.5
925	0.23	34.8	4.4	0.161	288	405	46.7	3.0	19.6	1.3	1.2
1200	0.18	31.0	3.8	0.184	368	517	53.6	2.2	25.9	0.7	1.6
1550	0.14	27.7	3.3	0.210	477	671	60.1	1.6	32.6	0.4	2.0
2000	0.11	24.5	3.2	0.243	617	867	66.0	1.2	39.2	0.2	2.3
2600	0.08	21.1	3.4	0.288	796	1119	71.9	0.8	46.6	0.1	2.7
3350	0.06	17.3	3.8	0.352	1034	1454	78.6	0.5	55.7	0.0	3.2
4300	0.05	14.4	3.0	0.417	1333	1874	86.3	0.2	67.1	0.0	3.9
5550	0.04	12.3	2.1	0.476	1711	2405	92.6	0.1	77.3	0.0	4.7
7200	0.03	10.0	2.3	0.559	2208	3104	97.1	0.0	85.0	0.0	5.5
9300	0.02	8.7	1.4	0.623	2864	4027	100.0	0.0	94.2	0.0	7.3
					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 = 8.7 %  
Sorw assumed for relative permeability = 0 %  
*In situ* Gas/Oil & Brine Density (g/cc)= 0.043/0.80 1.045 g/cc

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