

**Mercury Injection Capillary Pressure Analysis**  
**Core I.D. 169, A-89-I/94-P-10, 1153.21m**

*In situ* Klinkenberg Permeability = 0.00083 md  
*In situ* Porosity = 3.0 %

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	100.0	0.0	0.000	38	53	0.0	100.0	0.0	100.0	-5.0
150	1.4	100.0	0.0	0.000	48	67	0.0	100.0	0.0	100.0	-5.0
200	1.1	100.0	0.0	0.000	60	84	0.0	100.0	0.0	100.0	-5.0
260	0.82	100.0	0.0	0.000	80	112	0.0	100.0	0.0	100.0	-5.0
350	0.61	100.0	0.0	0.000	103	145	0.0	100.0	0.0	100.0	-5.0
430	0.50	100.0	0.0	0.000	139	196	0.0	100.0	0.0	100.0	-5.0
550	0.39	100.0	0.0	0.000	171	240	0.0	100.0	0.0	100.0	-5.0
725	0.30	100.0	0.0	0.000	219	308	0.0	100.0	0.0	100.0	-5.0
925	0.23	100.0	0.0	0.000	288	405	0.0	100.0	0.0	100.0	-5.0
1200	0.18	100.0	0.0	0.000	368	517	0.0	100.0	0.0	100.0	-5.0
1550	0.14	100.0	0.0	0.000	477	671	0.0	100.0	0.0	100.0	-5.0
2000	0.11	97.2	2.8	0.012	617	867	0.0	100.0	0.0	100.0	-5.0
2600	0.08	86.6	10.5	0.070	796	1119	0.1	21.1	0.0	86.0	-5.7
3350	0.06	59.5	27.1	0.261	1034	1454	2.3	15.4	0.1	46.2	-2.7
4300	0.05	47.1	12.4	0.373	1333	1874	20.7	4.9	8.0	4.8	0.2
5550	0.04	36.7	10.3	0.494	1711	2405	35.4	2.1	23.5	0.9	1.4
7200	0.03	30.4	6.4	0.590	2208	3104	50.5	0.6	47.9	0.1	2.8
9300	0.02	24.0	6.4	0.716	2864	4027	61.2	0.2	70.3	0.0	4.1
					3700	5201	73.0	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 = 24.0 24.0 %  
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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