

**Mercury Injection Capillary Pressure Analysis**  
**Core I.D. 123, C-92-J/94-P-10, 1167.33m**

*In situ* Klinkenberg Permeability = 0.0329 md  
*In situ* Porosity = 6.9 %

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	99.2	0.8	0.000	0.8	1.1	0.0	100.0	0.0	100.0	-5.0
3.3	65	98.6	0.6	0.000	1.0	1.4	0.0	26.7	0.0	96.6	-5.0
4.3	50	98.6	0.0	0.000	1.3	1.8	0.0	26.3	0.0	94.1	-5.0
5.5	39	98.6	0.0	0.000	1.7	2.4	0.0	26.3	0.0	94.1	-5.0
7.2	30	98.6	0.0	0.000	2.2	3.1	0.0	26.3	0.0	94.1	-5.0
9.3	23	98.6	0.0	0.000	2.9	4.0	0.0	26.3	0.0	94.1	-5.0
12.0	18	98.6	0.0	0.000	3.7	5.2	0.0	26.3	0.0	94.1	-5.0
15.5	14	98.6	0.0	0.000	4.8	6.7	0.0	26.3	0.0	94.1	-5.0
20	11	98.6	0.0	0.000	6.2	8.7	0.0	26.3	0.0	94.1	-5.0
25	8.6	98.6	0.0	0.000	8.0	11.2	0.0	26.3	0.0	94.1	-5.0
35	6.1	98.6	0.0	0.000	9.9	14.0	0.0	26.3	0.0	94.1	-5.0
45	4.8	97.5	1.1	0.000	14	20	0.0	26.3	0.0	94.1	-5.0
55	3.9	96.8	0.7	0.000	18	25	0.1	25.6	0.0	89.5	-6.2
75	2.9	94.9	1.9	0.001	22	31	0.1	25.2	0.0	86.6	-5.7
95	2.3	93.0	1.9	0.002	30	42	0.3	24.1	0.0	79.3	-4.9
120	1.8	85.1	7.9	0.006	38	53	0.6	23.1	0.0	72.5	-4.3
150	1.4	82.2	2.9	0.004	48	67	2.8	18.9	0.1	48.6	-2.8
200	1.1	77.6	4.7	0.008	60	84	4.0	17.4	0.1	41.6	-2.4
260	0.82	69.5	8.1	0.018	80	112	6.4	15.3	0.4	31.9	-1.9
350	0.61	56.3	13.1	0.039	103	145	11.8	11.8	1.3	19.2	-1.2
430	0.50	48.0	8.3	0.056	139	196	24.1	7.2	5.5	7.1	-0.1
550	0.39	40.0	8.0	0.076	171	240	34.1	4.9	11.0	3.2	0.5
725	0.30	36.4	3.6	0.089	219	308	45.4	3.0	19.5	1.3	1.2
925	0.23	33.2	3.2	0.102	288	405	51.1	2.4	24.6	0.8	1.5
1200	0.18	29.7	3.5	0.122	368	517	56.3	1.8	30.0	0.5	1.8
1550	0.14	25.8	3.9	0.150	477	671	62.4	1.3	36.8	0.2	2.2
2000	0.11	21.9	3.9	0.186	617	867	69.5	0.9	45.5	0.1	2.7
2600	0.08	18.8	3.1	0.223	796	1119	77.0	0.5	55.9	0.0	3.2
3350	0.06	16.5	2.3	0.259	1034	1454	83.2	0.3	65.3	0.0	3.8
4300	0.05	14.2	2.3	0.305	1333	1874	87.9	0.2	73.0	0.0	4.3
5550	0.04	12.5	1.7	0.349	1711	2405	92.8	0.1	81.4	0.0	5.1
7200	0.03	11.1	1.5	0.398	2208	3104	96.6	0.0	88.0	0.0	6.0
9300	0.02	9.7	1.4	0.457	2864	4027	99.8	0.0	94.1	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 = 9.7 %  
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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