

**Mercury Injection Capillary Pressure Analysis**  
**Core I.D. 20, A-41-A/94-P-15, 1140.71m**

*In situ* Klinkenberg Permeability = 0.0014 md  
*In situ* Porosity = 2.6 %

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	98.4	1.6	0.001	60	84	0.0	100.0	0.0	100.0	-5.0
260	0.82	95.6	2.8	0.002	80	112	0.0	24.1	0.0	92.5	-6.8
350	0.61	91.2	4.4	0.004	103	145	0.2	22.5	0.0	80.5	-5.0
430	0.50	85.9	5.2	0.008	139	196	1.0	20.0	0.0	64.0	-3.7
550	0.39	79.4	6.6	0.014	171	240	2.5	17.3	0.1	47.9	-2.8
725	0.30	71.8	7.6	0.024	219	308	5.4	14.2	0.4	32.3	-1.9
925	0.23	69.1	2.6	0.028	288	405	10.1	11.0	1.3	19.3	-1.2
1200	0.18	65.5	3.6	0.035	368	517	12.0	9.9	1.9	15.9	-0.9
1550	0.14	62.0	3.5	0.044	477	671	15.0	8.6	2.9	11.9	-0.6
2000	0.11	58.8	3.2	0.055	617	867	18.2	7.4	4.2	8.9	-0.3
2600	0.08	52.5	6.3	0.083	796	1119	21.4	6.4	5.9	6.7	-0.1
3350	0.06	47.1	5.5	0.114	1034	1454	28.4	4.7	10.4	3.5	0.5
4300	0.05	34.8	12.3	0.203	1333	1874	35.4	3.4	16.0	1.8	0.9
5550	0.04	25.9	8.8	0.286	1711	2405	53.7	1.2	37.0	0.2	2.2
7200	0.03	21.4	4.5	0.342	2208	3104	69.3	0.3	61.5	0.0	3.6
9300	0.02	16.3	5.0	0.421	2864	4027	78.1	0.1	78.1	0.0	4.8
					3700	5201	88.3	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 = 16.3 16.3 %  
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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