

**Mercury Injection Capillary Pressure Analysis**  
**Core I.D. 151, C-32-G/94-P-10, 1143.35m**

*In situ* Klinkenberg Permeability = 2.62 md  
*In situ* Porosity = 13.5 %

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	99.8	0.2	0.000	0.8	1.1	0.0	100.0	0.0	100.0	-5.0
3.3	65	99.4	0.4	0.000	1.0	1.4	0.0	29.4	0.0	99.3	-5.0
4.3	50	99.1	0.3	0.000	1.3	1.8	0.0	29.1	0.0	97.7	-5.0
5.5	39	98.4	0.7	0.000	1.7	2.4	0.0	28.9	0.0	96.3	-5.0
7.2	30	97.8	0.5	0.000	2.2	3.1	0.0	28.5	0.0	93.5	-5.0
9.3	23	97.4	0.4	0.000	2.9	4.0	0.1	28.2	0.0	91.4	-6.6
12.0	18	97.0	0.4	0.000	3.7	5.2	0.1	27.9	0.0	89.8	-6.3
15.5	14	96.2	0.7	0.000	4.8	6.7	0.1	27.7	0.0	88.2	-6.0
20	11	95.3	1.0	0.001	6.2	8.7	0.2	27.2	0.0	85.5	-5.6
25	8.6	94.3	0.9	0.001	8.0	11.2	0.3	26.7	0.0	82.0	-5.2
35	6.1	91.4	2.9	0.002	9.9	14.0	0.4	26.1	0.0	78.8	-4.8
45	4.8	88.4	3.0	0.003	14	20	0.9	24.5	0.0	69.4	-4.1
55	3.9	85.0	3.5	0.005	18	25	1.7	22.9	0.0	60.4	-3.5
75	2.9	76.5	8.4	0.012	22	31	2.9	21.1	0.1	51.3	-3.0
95	2.3	64.7	11.8	0.023	30	42	7.0	17.0	0.3	33.5	-2.0
120	1.8	48.4	16.3	0.043	38	53	15.7	12.0	1.7	16.8	-1.0
150	1.4	39.1	9.3	0.037	48	67	33.6	6.6	7.7	5.0	0.2
200	1.1	28.9	10.1	0.058	60	84	46.9	4.2	14.9	2.0	0.9
260	0.82	21.4	7.6	0.078	80	112	63.8	2.2	27.7	0.6	1.7
350	0.61	15.1	6.3	0.100	103	145	78.0	1.1	41.5	0.2	2.4
430	0.50	12.3	2.8	0.112	139	196	90.9	0.5	56.3	0.0	3.2
550	0.39	10.1	2.2	0.125	171	240	97.1	0.3	64.2	0.0	3.7
725	0.30	8.5	1.5	0.136	219	308	102.1	0.2	71.0	0.0	4.2
925	0.23	7.8	0.7	0.143	288	405	105.6	0.1	76.0	0.0	4.6
1200	0.18	6.9	0.9	0.154	368	517	107.4	0.1	78.5	0.0	4.8
1550	0.14	6.4	0.5	0.162	477	671	109.3	0.1	81.4	0.0	5.1
2000	0.11	5.8	0.6	0.174	617	867	110.6	0.1	83.3	0.0	5.3
2600	0.08	5.0	0.8	0.194	796	1119	112.0	0.0	85.4	0.0	5.6
3350	0.06	4.5	0.5	0.213	1034	1454	113.8	0.0	88.2	0.0	6.0
4300	0.05	3.9	0.6	0.240	1333	1874	115.1	0.0	90.3	0.0	6.3
5550	0.04	3.2	0.7	0.277	1711	2405	116.7	0.0	92.6	0.0	6.9
7200	0.03	2.5	0.7	0.326	2208	3104	118.2	0.0	95.2	0.0	7.6
9300	0.02	2.0	0.5	0.376	2864	4027	119.9	0.0	97.9	0.0	9.1
					3700	5201	121.2	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 = 2.0 2.0 %  
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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