

**Mercury Injection Capillary Pressure Analysis**  
**Core I.D. 194, 8-10-117-12W6, 1008.55m**

*In situ* Klinkenberg Permeability = 0.0480 md  
*In situ* Porosity = 9.0 %

Mercury Injection Capillary Pressure (kPa)	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 (m)	Approx. Oil-Water Height Above Free Water Level (m)	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
13.8	107	100.0	0.0	0.000	0.0	0.0	0.0	100.0	0.0	100.0	-5.0
17.2	86	100.0	0.0	0.000	0.2	0.3	0.0	100.0	0.0	100.0	-5.0
22.8	65	100.0	0.0	0.000	0.3	0.4	0.0	100.0	0.0	100.0	-5.0
29.6	50	100.0	0.0	0.000	0.4	0.6	0.0	100.0	0.0	100.0	-5.0
37.9	39	100.0	0.0	0.000	0.5	0.7	0.0	100.0	0.0	100.0	-5.0
49.6	30	100.0	0.0	0.000	0.7	0.9	0.0	100.0	0.0	100.0	-5.0
64.1	23	100.0	0.0	0.000	0.9	1.2	0.0	100.0	0.0	100.0	-5.0
82.7	18	100.0	0.0	0.000	1.1	1.6	0.0	100.0	0.0	100.0	-5.0
107	14	100.0	0.0	0.000	1.5	2.0	0.0	100.0	0.0	100.0	-5.0
138	11	99.8	0.2	0.000	1.9	2.6	0.0	100.0	0.0	100.0	-5.0
172	8.6	99.8	0.0	0.000	2.4	3.4	0.0	29.3	0.0	99.2	-5.0
241	6.1	99.8	0.0	0.000	3.0	4.3	0.0	29.3	0.0	99.2	-5.0
310	4.8	99.8	0.0	0.000	4	6	0.0	29.3	0.0	99.2	-5.0
379	3.9	99.8	0.0	0.000	5	8	0.0	29.3	0.0	99.2	-5.0
517	2.9	99.8	0.0	0.000	7	9	0.0	29.3	0.0	99.2	-5.0
655	2.3	99.6	0.2	0.000	9	13	0.0	29.3	0.0	99.2	-5.0
827	1.8	98.9	0.7	0.001	12	16	0.0	29.1	0.0	98.3	-5.0
1,034	1.4	97.6	1.3	0.001	15	20	0.0	28.7	0.0	95.5	-5.0
1,379	1.1	93.6	4.0	0.006	18	26	0.1	28.0	0.0	90.6	-6.4
1,793	0.82	69.9	23.7	0.045	24	34	0.5	25.6	0.0	76.3	-4.6
2,413	0.61	41.5	28.4	0.109	32	44	11.4	14.0	0.9	22.9	-1.4
2,965	0.50	29.4	12.0	0.141	42	60	43.2	4.7	12.8	2.6	0.7
3,792	0.39	20.4	9.0	0.173	52	73	62.9	2.3	27.1	0.6	1.7
4,999	0.30	14.9	5.5	0.198	67	94	80.0	1.0	44.0	0.1	2.6
6,378	0.23	11.8	3.1	0.216	88	124	91.5	0.5	57.5	0.0	3.3
8,274	0.18	9.7	2.1	0.232	112	158	98.2	0.3	66.3	0.0	3.9
10,687	0.14	8.3	1.4	0.246	146	205	103.0	0.2	72.8	0.0	4.3
13,790	0.11	7.3	1.0	0.259	188	264	106.3	0.1	77.6	0.0	4.7
17,927	0.08	6.2	1.1	0.277	243	341	108.6	0.1	81.0	0.0	5.1
23,098	0.06	5.0	1.2	0.302	315	443	111.2	0.0	84.9	0.0	5.5
29,649	0.05	4.0	0.9	0.328	406	571	114.0	0.0	89.3	0.0	6.2
38,267	0.04	3.4	0.7	0.351	521	733	116.2	0.0	92.8	0.0	6.9
49,644	0.03	2.7	0.7	0.383	673	946	117.8	0.0	95.4	0.0	7.7
64,124	0.02	2.2	0.4	0.408	873	1227	119.6	0.0	98.3	0.0	9.4
					1128	1585	120.6	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 = 0.4212 7.8360 kPa/m  
Oil/gas-Brine height assumes brine density gradient = 10.2358 10.2358 kPa/m  
Swi assumed for relative permeability = 2.2 %  
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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