

**Mercury Injection Capillary Pressure Analysis**  
**Core I.D. 126, C-34-A/94-P-15, 1134.49m**

*In situ* Klinkenberg Permeability = 1.34 md  
*In situ* Porosity = 10.1 %

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	99.9	0.1	0.000	0.2	0.3	0.0	100.0	0.0	100.0	-5.0
22.8	65	99.5	0.4	0.000	0.3	0.4	0.0	29.0	0.0	99.6	-5.0
29.6	50	99.2	0.3	0.000	0.4	0.6	0.0	28.7	0.0	98.1	-5.0
37.9	39	98.6	0.6	0.000	0.5	0.7	0.0	28.5	0.0	96.7	-5.0
49.6	30	98.2	0.4	0.000	0.7	0.9	0.0	28.2	0.0	94.4	-5.0
64.1	23	97.9	0.3	0.000	0.9	1.2	0.0	27.9	0.0	92.7	-6.9
82.7	18	97.4	0.5	0.000	1.1	1.6	0.1	27.7	0.0	91.5	-6.6
107	14	96.8	0.6	0.000	1.5	2.0	0.1	27.5	0.0	89.7	-6.2
138	11	95.9	0.8	0.000	1.9	2.6	0.1	27.1	0.0	87.2	-5.8
172	8.6	95.6	0.4	0.000	2.4	3.4	0.2	26.6	0.0	84.2	-5.4
241	6.1	93.5	2.0	0.001	3.0	4.3	0.2	26.4	0.0	82.8	-5.3
310	4.8	92.2	1.3	0.001	4	6	0.5	25.2	0.0	75.8	-4.6
379	3.9	89.0	3.3	0.003	5	8	0.8	24.5	0.0	71.4	-4.2
517	2.9	74.3	14.6	0.010	7	9	1.5	22.7	0.0	61.5	-3.6
655	2.3	49.8	24.5	0.027	9	13	8.3	15.6	0.5	29.0	-1.8
827	1.8	34.7	15.0	0.040	12	16	31.8	6.6	7.3	5.3	0.1
1,034	1.4	29.2	5.5	0.033	15	20	53.8	3.0	20.9	1.1	1.3
1,379	1.1	23.1	6.1	0.042	18	26	63.2	2.1	28.9	0.5	1.8
1,793	0.82	19.1	3.9	0.049	24	34	74.7	1.2	40.4	0.2	2.4
2,413	0.61	15.5	3.7	0.058	32	44	82.5	0.8	49.3	0.1	2.9
2,965	0.50	13.7	1.7	0.063	42	60	90.2	0.4	58.9	0.0	3.4
3,792	0.39	11.9	1.9	0.071	52	73	94.0	0.3	63.9	0.0	3.7
4,999	0.30	10.4	1.5	0.078	67	94	98.1	0.2	69.6	0.0	4.1
6,378	0.23	9.5	0.9	0.084	88	124	101.4	0.1	74.4	0.0	4.5
8,274	0.18	9.0	0.6	0.089	112	158	103.4	0.1	77.3	0.0	4.7
10,687	0.14	8.0	1.0	0.099	146	205	104.6	0.1	79.2	0.0	4.9
13,790	0.11	7.2	0.8	0.111	188	264	106.9	0.1	82.7	0.0	5.2
17,927	0.08	6.5	0.7	0.124	243	341	108.8	0.0	85.7	0.0	5.6
23,098	0.06	5.9	0.5	0.136	315	443	110.5	0.0	88.3	0.0	6.0
29,649	0.05	5.2	0.7	0.158	406	571	111.7	0.0	90.3	0.0	6.3
38,267	0.04	4.7	0.6	0.180	521	733	113.4	0.0	93.0	0.0	7.0
49,644	0.03	4.1	0.6	0.209	673	946	114.7	0.0	95.2	0.0	7.6
64,124	0.02	3.5	0.6	0.249	873	1227	116.1	0.0	97.6	0.0	8.8
					1128	1585	117.6	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 = 3.5 3.5 %  
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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