

**Mercury Injection Capillary Pressure Analysis**  
**Core I.D. 88, C-54-I/94-P-10, 1133.49m**

*In situ* Klinkenberg Permeability = 16.0 md  
*In situ* Porosity = 12.0 %

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	99.0	1.0	0.000	0.2	0.3	0.0	100.0	0.0	100.0	-5.0
22.8	65	97.2	1.8	0.000	0.3	0.4	0.0	28.6	0.0	95.8	-5.0
29.6	50	97.1	0.1	0.000	0.4	0.6	0.1	27.5	0.0	88.9	-6.1
37.9	39	96.1	1.1	0.000	0.5	0.7	0.1	27.5	0.0	88.7	-6.1
49.6	30	94.8	1.3	0.000	0.7	0.9	0.2	26.9	0.0	84.8	-5.5
64.1	23	93.7	1.1	0.000	0.9	1.2	0.3	26.1	0.0	80.2	-5.0
82.7	18	93.3	0.4	0.000	1.1	1.6	0.5	25.5	0.0	76.6	-4.6
107	14	91.4	1.9	0.001	1.5	2.0	0.6	25.3	0.0	75.2	-4.5
138	11	89.0	2.4	0.001	1.9	2.6	0.9	24.3	0.0	69.2	-4.1
172	8.6	85.2	3.8	0.002	2.4	3.4	1.5	22.9	0.0	61.9	-3.6
241	6.1	77.7	7.5	0.004	3.0	4.3	2.8	20.9	0.1	51.6	-3.0
310	4.8	71.6	6.0	0.006	4	6	6.3	17.3	0.3	35.2	-2.1
379	3.9	65.7	5.9	0.009	5	8	10.1	14.6	0.7	25.2	-1.5
517	2.9	56.0	9.7	0.015	7	9	14.9	12.2	1.6	17.5	-1.1
655	2.3	46.8	9.2	0.022	9	13	24.4	8.7	4.2	9.0	-0.3
827	1.8	35.8	11.0	0.033	12	16	35.7	5.9	9.0	4.2	0.3
1,034	1.4	29.4	6.5	0.030	15	20	52.0	3.4	19.0	1.3	1.2
1,379	1.1	22.1	7.3	0.042	18	26	63.0	2.2	27.9	0.6	1.7
1,793	0.82	17.0	5.1	0.053	24	34	76.7	1.1	41.4	0.2	2.4
2,413	0.61	14.3	2.7	0.061	32	44	86.9	0.6	53.2	0.0	3.1
2,965	0.50	12.1	2.2	0.069	42	60	92.7	0.4	60.5	0.0	3.5
3,792	0.39	10.6	1.4	0.075	52	73	97.6	0.3	67.1	0.0	3.9
4,999	0.30	9.3	1.3	0.083	67	94	100.0	0.2	71.6	0.0	4.2
6,378	0.23	8.5	0.8	0.089	88	124	100.0	0.1	75.9	0.0	4.6
8,274	0.18	8.0	0.5	0.094	112	158	100.0	0.1	78.6	0.0	4.8
10,687	0.14	7.5	0.5	0.100	146	205	100.0	0.1	80.3	0.0	5.0
13,790	0.11	6.9	0.7	0.111	188	264	100.0	0.1	82.1	0.0	5.2
17,927	0.08	6.1	0.7	0.127	243	341	100.0	0.0	84.5	0.0	5.5
23,098	0.06	5.4	0.7	0.146	315	443	100.0	0.0	87.1	0.0	5.8
29,649	0.05	4.7	0.7	0.172	406	571	100.0	0.0	89.8	0.0	6.3
38,267	0.04	4.0	0.8	0.206	521	733	100.0	0.0	92.6	0.0	6.8
49,644	0.03	3.3	0.7	0.247	673	946	100.0	0.0	95.5	0.0	7.8
64,124	0.02	2.8	0.4	0.279	873	1227	100.0	0.0	98.3	0.0	9.4
					1128	1585	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 *in situ* 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 = 2.8 %  
Sorw assumed for relative permeability = 0 %  
*In situ* Gas/Oil & Brine Density (g/cc)= 0.031/0.80 1.03 g/cc

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