

**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 (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	99.0	1.0	0.000	0.8	1.2	0.0	100.0	0.0	100.0	-5.0
3.3	65	97.2	1.8	0.000	1.0	1.5	0.0	28.6	0.0	95.8	-5.0
4.3	50	97.1	0.1	0.000	1.3	2.0	0.1	27.5	0.0	88.9	-6.1
5.5	39	96.1	1.1	0.000	1.7	2.6	0.1	27.5	0.0	88.7	-6.1
7.2	30	94.8	1.3	0.000	2.2	3.3	0.2	26.9	0.0	84.8	-5.5
9.3	23	93.7	1.1	0.000	2.9	4.3	0.3	26.1	0.0	80.2	-5.0
12.0	18	93.3	0.4	0.000	3.7	5.5	0.5	25.5	0.0	76.6	-4.6
15.5	14	91.4	1.9	0.001	4.8	7.1	0.6	25.3	0.0	75.2	-4.5
20	11	89.0	2.4	0.001	6.2	9.2	0.9	24.3	0.0	69.2	-4.1
25	8.6	85.2	3.8	0.002	8.0	11.9	1.5	22.9	0.0	61.9	-3.6
35	6.1	77.7	7.5	0.004	10.0	14.9	2.8	20.9	0.1	51.6	-3.0
45	4.8	71.6	6.0	0.006	14	21	6.3	17.3	0.3	35.2	-2.1
55	3.9	65.7	5.9	0.009	18	27	10.1	14.6	0.7	25.2	-1.5
75	2.9	56.0	9.7	0.015	22	33	14.9	12.2	1.6	17.5	-1.1
95	2.3	46.8	9.2	0.022	30	45	24.4	8.7	4.2	9.0	-0.3
120	1.8	35.8	11.0	0.033	38	57	35.7	5.9	9.0	4.2	0.3
150	1.4	29.4	6.5	0.030	48	71	52.0	3.4	19.0	1.3	1.2
200	1.1	22.1	7.3	0.042	60	89	63.0	2.2	27.9	0.6	1.7
260	0.82	17.0	5.1	0.053	80	119	76.7	1.1	41.4	0.2	2.4
350	0.61	14.3	2.7	0.061	104	155	86.9	0.6	53.2	0.0	3.1
430	0.50	12.1	2.2	0.069	140	209	92.7	0.4	60.5	0.0	3.5
550	0.39	10.6	1.4	0.075	172	256	97.6	0.3	67.1	0.0	3.9
725	0.30	9.3	1.3	0.083	219	328	100.0	0.2	71.6	0.0	4.2
925	0.23	8.5	0.8	0.089	289	432	100.0	0.1	75.9	0.0	4.6
1200	0.18	8.0	0.5	0.094	369	551	100.0	0.1	78.6	0.0	4.8
1550	0.14	7.5	0.5	0.100	479	715	100.0	0.1	80.3	0.0	5.0
2000	0.11	6.9	0.7	0.111	618	923	100.0	0.1	82.1	0.0	5.2
2600	0.08	6.1	0.7	0.127	798	1192	100.0	0.0	84.5	0.0	5.5
3350	0.06	5.4	0.7	0.146	1037	1549	100.0	0.0	87.1	0.0	5.8
4300	0.05	4.7	0.7	0.172	1337	1996	100.0	0.0	89.8	0.0	6.3
5550	0.04	4.0	0.8	0.206	1716	2562	100.0	0.0	92.6	0.0	6.8
7200	0.03	3.3	0.7	0.247	2215	3306	100.0	0.0	95.5	0.0	7.8
9300	0.02	2.8	0.4	0.279	2873	4289	100.0	0.0	98.3	0.0	9.4
					3711	5541	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 insitu o/g-brine Tcos0= 64.0000 22.0000 dynes/cm  
Oil/gas-Brine height assumes o/g density gradient = 0.0134 0.3464 psi/ft  
Oil/gas-Brine height assumes brine density gradient = 0.4460 0.4460 psi/ft  
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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