

**Mercury Injection Capillary Pressure Analysis**  
**Core I.D. 168, B-86-E/94-P-16, 1166.46m**

*In situ* Klinkenberg Permeability = 0.0029 md  
*In situ* Porosity = 5.1 %

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	100.0	0.0	0.000	0.8	1.1	0.0	100.0	0.0	100.0	-5.0
3.3	65	100.0	0.0	0.000	1.0	1.4	0.0	100.0	0.0	100.0	-5.0
4.3	50	100.0	0.0	0.000	1.3	1.8	0.0	100.0	0.0	100.0	-5.0
5.5	39	100.0	0.0	0.000	1.7	2.4	0.0	100.0	0.0	100.0	-5.0
7.2	30	100.0	0.0	0.000	2.2	3.1	0.0	100.0	0.0	100.0	-5.0
9.3	23	100.0	0.0	0.000	2.9	4.0	0.0	100.0	0.0	100.0	-5.0
12.0	18	100.0	0.0	0.000	3.7	5.2	0.0	100.0	0.0	100.0	-5.0
15.5	14	100.0	0.0	0.000	4.8	6.7	0.0	100.0	0.0	100.0	-5.0
20	11	100.0	0.0	0.000	6.2	8.7	0.0	100.0	0.0	100.0	-5.0
25	8.6	100.0	0.0	0.000	8.0	11.2	0.0	100.0	0.0	100.0	-5.0
35	6.1	100.0	0.0	0.000	9.9	14.0	0.0	100.0	0.0	100.0	-5.0
45	4.8	100.0	0.0	0.000	14	20	0.0	100.0	0.0	100.0	-5.0
55	3.9	100.0	0.0	0.000	18	25	0.0	100.0	0.0	100.0	-5.0
75	2.9	100.0	0.0	0.000	22	31	0.0	100.0	0.0	100.0	-5.0
95	2.3	100.0	0.0	0.000	30	42	0.0	100.0	0.0	100.0	-5.0
120	1.8	98.3	1.7	0.001	38	53	0.0	100.0	0.0	100.0	-5.0
150	1.4	96.1	2.2	0.001	48	67	0.0	26.5	0.0	92.8	-6.9
200	1.1	93.0	3.1	0.003	60	84	0.2	25.2	0.0	84.0	-5.4
260	0.82	89.5	3.6	0.007	80	112	0.6	23.5	0.0	72.9	-4.3
350	0.61	85.7	3.8	0.012	103	145	1.4	21.5	0.0	61.3	-3.5
430	0.50	83.2	2.4	0.015	139	196	2.6	19.5	0.1	50.6	-2.9
550	0.39	80.5	2.7	0.021	171	240	3.5	18.3	0.1	44.6	-2.6
725	0.30	78.4	2.1	0.026	219	308	4.8	17.0	0.2	38.4	-2.3
925	0.23	73.7	4.8	0.042	288	405	5.9	16.0	0.3	34.1	-2.0
1200	0.18	61.2	12.4	0.097	368	517	8.8	13.9	0.7	25.8	-1.6
1550	0.14	45.1	16.2	0.188	477	671	19.0	9.1	3.2	11.1	-0.5
2000	0.11	30.3	14.8	0.296	617	867	38.1	4.4	12.9	2.6	0.7
2600	0.08	23.2	7.1	0.363	796	1119	61.3	1.6	33.5	0.3	2.0
3350	0.06	18.0	5.2	0.426	1034	1454	74.4	0.7	49.4	0.1	2.9
4300	0.05	14.3	3.7	0.485	1333	1874	84.9	0.3	64.2	0.0	3.7
5550	0.04	12.4	1.9	0.523	1711	2405	92.8	0.1	76.7	0.0	4.7
7200	0.03	10.2	2.2	0.580	2208	3104	96.9	0.1	83.8	0.0	5.4
9300	0.02	8.4	1.8	0.641	2864	4027	101.8	0.0	92.4	0.0	6.8
					3700	5201	105.9	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 = 8.4 %  
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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