

**Mercury Injection Capillary Pressure Analysis**  
**Core I.D. 196, 13-14-118-12W6, 1056.05m**

*In situ* Klinkenberg Permeability = 0.000017 md  
*In situ* Porosity = 3.1 %

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 et al. 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	100.0	0.0	0.000	1.9	2.6	0.0	100.0	0.0	100.0	-5.0
172	8.6	100.0	0.0	0.000	2.4	3.4	0.0	100.0	0.0	100.0	-5.0
241	6.1	100.0	0.0	0.000	3.0	4.3	0.0	100.0	0.0	100.0	-5.0
310	4.8	100.0	0.0	0.000	4	6	0.0	100.0	0.0	100.0	-5.0
379	3.9	100.0	0.0	0.000	5	8	0.0	100.0	0.0	100.0	-5.0
517	2.9	100.0	0.0	0.000	7	9	0.0	100.0	0.0	100.0	-5.0
655	2.3	100.0	0.0	0.000	9	13	0.0	100.0	0.0	100.0	-5.0
827	1.8	100.0	0.0	0.000	12	16	0.0	100.0	0.0	100.0	-5.0
1,034	1.4	100.0	0.0	0.000	15	20	0.0	100.0	0.0	100.0	-5.0
1,379	1.1	99.2	0.8	0.000	18	26	0.0	100.0	0.0	100.0	-5.0
1,793	0.82	98.3	0.9	0.001	24	34	0.0	19.3	0.0	95.5	-5.0
2,413	0.61	97.1	1.2	0.002	32	44	0.0	18.7	0.0	90.3	-6.3
2,965	0.50	96.4	1.4	0.002	42	60	0.1	18.0	0.0	83.7	-5.4
3,792	0.39	95.0	1.6	0.004	52	73	0.2	17.6	0.0	79.7	-4.9
4,999	0.30	91.3	3.6	0.009	67	94	0.3	16.8	0.0	72.8	-4.3
6,378	0.23	86.7	4.6	0.017	88	124	1.0	14.8	0.0	56.9	-3.3
8,274	0.18	82.3	4.4	0.028	112	158	2.2	12.5	0.2	40.7	-2.4
10,687	0.14	77.7	4.6	0.042	146	205	4.0	10.5	0.5	28.7	-1.7
13,790	0.11	73.9	3.8	0.057	188	264	6.3	8.6	1.3	19.2	-1.2
17,927	0.08	68.8	5.1	0.083	243	341	8.6	7.1	2.4	13.4	-0.7
23,098	0.06	62.0	6.8	0.128	315	443	12.3	5.4	5.0	7.7	-0.2
29,649	0.05	55.5	6.5	0.183	406	571	18.2	3.5	10.9	3.3	0.5
38,267	0.04	45.9	9.7	0.290	521	733	24.9	2.1	20.5	1.1	1.3
49,644	0.03	39.7	6.1	0.377	673	946	37.0	0.6	45.1	0.1	2.6
64,124	0.02	33.9	5.8	0.484	873	1227	45.8	0.1	69.1	0.0	4.1
					1128	1585	55.1	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 = 33.9 33.9 %  
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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