

Mercury Injection Capillary Pressure Analysis
Core I.D. 35, D-37-I/94-P-10, 1133.21m

In situ Klinkenberg Permeability = 4.73 md
In situ Porosity = 10.5 %

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	99.4	0.6	0.000	1.0	1.5	0.0	28.4	0.0	97.5	-5.0
3.3	65	98.9	0.5	0.000	1.3	2.0	0.0	28.1	0.0	95.4	-5.0
4.3	50	97.8	1.1	0.000	1.7	2.6	0.1	27.4	0.0	91.1	-6.5
5.5	39	97.1	0.6	0.000	2.2	3.3	0.1	27.0	0.0	88.6	-6.0
7.2	30	96.1	1.1	0.000	2.9	4.3	0.2	26.4	0.0	84.5	-5.5
9.3	23	95.5	0.5	0.000	3.7	5.5	0.3	26.1	0.0	82.5	-5.2
12.0	18	95.5	0.0	0.000	4.8	7.1	0.3	26.1	0.0	82.5	-5.2
15.5	14	94.2	1.3	0.000	6.2	9.2	0.4	25.3	0.0	77.8	-4.8
20	11	92.9	1.3	0.000	8.0	11.9	0.6	24.6	0.0	73.3	-4.4
25	8.6	91.8	1.0	0.001	10.0	14.9	0.8	24.0	0.0	70.0	-4.1
35	6.1	83.5	8.4	0.003	14	21	3.4	19.6	0.1	46.8	-2.7
45	4.8	74.5	9.0	0.006	18	27	8.2	15.4	0.5	28.8	-1.8
55	3.9	67.3	7.2	0.008	22	33	13.5	12.4	1.4	18.7	-1.1
75	2.9	55.7	11.6	0.014	30	45	24.8	8.2	4.6	8.3	-0.3
95	2.3	49.4	6.3	0.018	38	57	32.3	6.3	7.8	4.9	0.2
120	1.8	40.6	8.9	0.026	48	71	44.6	4.1	15.0	2.0	0.9
150	1.4	35.4	5.2	0.024	60	89	52.7	3.0	20.9	1.1	1.3
200	1.1	28.8	6.5	0.033	80	119	63.9	1.9	30.7	0.4	1.9
260	0.82	24.6	4.3	0.041	104	155	71.8	1.3	38.8	0.2	2.3
350	0.61	20.4	4.2	0.051	140	209	80.0	0.8	48.2	0.1	2.8
430	0.50	18.1	2.2	0.058	172	256	84.6	0.6	53.8	0.0	3.1
550	0.39	16.2	2.0	0.065	219	328	88.7	0.4	59.2	0.0	3.4
725	0.30	14.2	1.9	0.075	289	432	92.9	0.3	64.9	0.0	3.8
925	0.23	12.9	1.3	0.083	369	551	95.7	0.2	68.8	0.0	4.0
1200	0.18	11.8	1.1	0.092	479	715	98.1	0.2	72.5	0.0	4.3
1550	0.14	10.7	1.1	0.104	618	923	100.0	0.1	76.1	0.0	4.6
2000	0.11	9.5	1.2	0.121	798	1192	100.0	0.1	80.4	0.0	5.0
2600	0.08	8.5	1.0	0.139	1037	1549	100.0	0.1	83.9	0.0	5.4
3350	0.06	7.9	0.7	0.155	1337	1996	100.0	0.0	86.4	0.0	5.7
4300	0.05	6.9	1.0	0.184	1716	2562	100.0	0.0	90.2	0.0	6.3
5550	0.04	6.2	0.7	0.212	2215	3306	100.0	0.0	93.0	0.0	7.0
7200	0.03	5.3	0.9	0.254	2873	4289	100.0	0.0	96.4	0.0	8.2
9300	0.02	4.4	0.9	0.310	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 = 4.4 4.4 %
Sorw assumed for relative permeability = 0 0 %
In situ Gas/Oil & Brine Density (g/cc)= 0.031/0.80 1.03 g/cc

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