

Mercury Injection Capillary Pressure Analysis
Core I.D. 199, 13-14-118-12W6, 1051.5m

In situ Klinkenberg Permeability = 0.469 md
In situ Porosity = 13.6 %

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	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	99.7	0.3	0.000	5	8	0.0	100.0	0.0	100.0	-5.0
517	2.9	93.5	6.1	0.005	7	9	0.0	29.5	0.0	98.7	-5.0
655	2.3	69.0	24.5	0.028	9	13	0.5	25.9	0.0	76.3	-4.6
827	1.8	46.3	22.6	0.055	12	16	12.1	13.9	1.0	22.1	-1.4
1,034	1.4	37.6	8.8	0.041	15	20	36.3	6.2	8.7	4.3	0.3
1,379	1.1	28.6	9.0	0.059	18	26	49.2	4.0	16.0	1.8	0.9
1,793	0.82	22.5	6.1	0.075	24	34	64.4	2.3	27.4	0.6	1.7
2,413	0.61	17.5	5.0	0.093	32	44	75.9	1.4	38.0	0.2	2.3
2,965	0.50	14.8	2.7	0.105	42	60	86.0	0.8	48.9	0.1	2.8
3,792	0.39	12.3	2.5	0.118	52	73	91.7	0.6	55.5	0.0	3.2
4,999	0.30	9.1	3.2	0.141	67	94	97.1	0.4	62.3	0.0	3.6
6,378	0.23	7.0	2.1	0.161	88	124	104.2	0.2	71.7	0.0	4.2
8,274	0.18	5.9	1.1	0.174	112	158	109.1	0.1	78.7	0.0	4.8
10,687	0.14	4.8	1.2	0.192	146	205	111.7	0.1	82.4	0.0	5.2
13,790	0.11	4.1	0.7	0.206	188	264	114.4	0.0	86.5	0.0	5.7
17,927	0.08	3.4	0.7	0.223	243	341	116.1	0.0	89.0	0.0	6.1
23,098	0.06	2.8	0.7	0.246	315	443	117.7	0.0	91.6	0.0	6.6
29,649	0.05	2.3	0.4	0.264	406	571	119.4	0.0	94.1	0.0	7.3
38,267	0.04	1.9	0.5	0.291	521	733	120.4	0.0	95.7	0.0	7.8
49,644	0.03	1.5	0.3	0.315	673	946	121.6	0.0	97.7	0.0	8.9
64,124	0.02	1.3	0.2	0.338	873	1227	122.4	0.0	99.0	0.0	10.4
					1128	1585	123.0	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 = 0.4212 7.8360 kPa/m
Oil/gas-Brine height assumes brine density gradient = 10.2358 10.2358 kPa/m
Swi assumed for relative permeability = 1.3 1.3 %
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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