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**Mercury Injection Capillary Pressure
Youngren K - 3A Well
Hugoton Gas Field**

prepared for

**Anadarko Petroleum, Inc.
The Woodlands, Texas**

August, 2002



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August 29, 2002

Mr. Chris Sembritzky
Anadarko Petroleum Corp.
1201 Lake Robbins Drive
The Woodlands, Texas 77380

Dear Chris,

PetroTech Associates has completed high pressure mercury injection capillary pressure testing of eleven (11) conventional core samples from the Anadarko Youngren K – 3A well, Hugoton Gas Field. The samples consisted of plugs (one inch diameter by approximately one inch in length) that represent various formations penetrated in the well between the depths of 2741 and 2883 feet. Presented in this report, in tabular and graphical format, are the results of the mercury injection testing. The data are also provided on computer disk (Excel format).

During capillary pressure testing, the volume of mercury injected was monitored at 118 pressure points from 1.64 to 59,500 psia. These data were then corrected for closure (i.e., mercury conformance to the sample surface). A table of the data and separate plots of cumulative bulk volume and wetting phase saturation versus capillary pressure, as well as the incremental pore aperture size distribution, are included for each sample. A composite plot of the drainage data and a series of "thumbnail" pore aperture size distribution plots are provided as an aid when comparing samples.

Table 1 contains the porosity and permeability values from conventional core analysis, as well as the same values derived from the capillary pressure data. The porosity values are similar with, on average, less than 0.4 pu difference. The range in core analysis porosity is from 2.2% to 10.9% versus 1.7% to 10.6% based on mercury injection. There is however, some dissimilarity in the permeability (to air) values. For several of the samples (notably 2790.5, 2822 and 2854 feet) the mercury-derived permeability is considerably lower than the reported core analysis value. Conversely, the mercury-derived values are higher at 2845 and 2877 feet.

The capillary pressure data show that the pore structures are defined by a unimodal aperture distribution (bimodal at 2882.5 feet). The intrusion profiles tend to be somewhat broad (occasionally having tails toward smaller apertures), indicating there is some heterogeneity in the aperture size accessing the bulk of the pore volume. The location of the intrusion peaks are consistent with the relatively low permeability values, particularly those that fall well below the core analysis data. Median apertures for the lowest perm samples average 0.033 microns (diameter) versus 0.783 microns.

PetroTech has assigned project code PA – 841 to this study. We appreciate the opportunity to provide these services. Please contact us with any comments or questions regarding the data or analytical procedures.

Sincerely,

A handwritten signature in dark ink, appearing to read "George Bolger", with a long, sweeping underline that extends to the right.

George Bolger

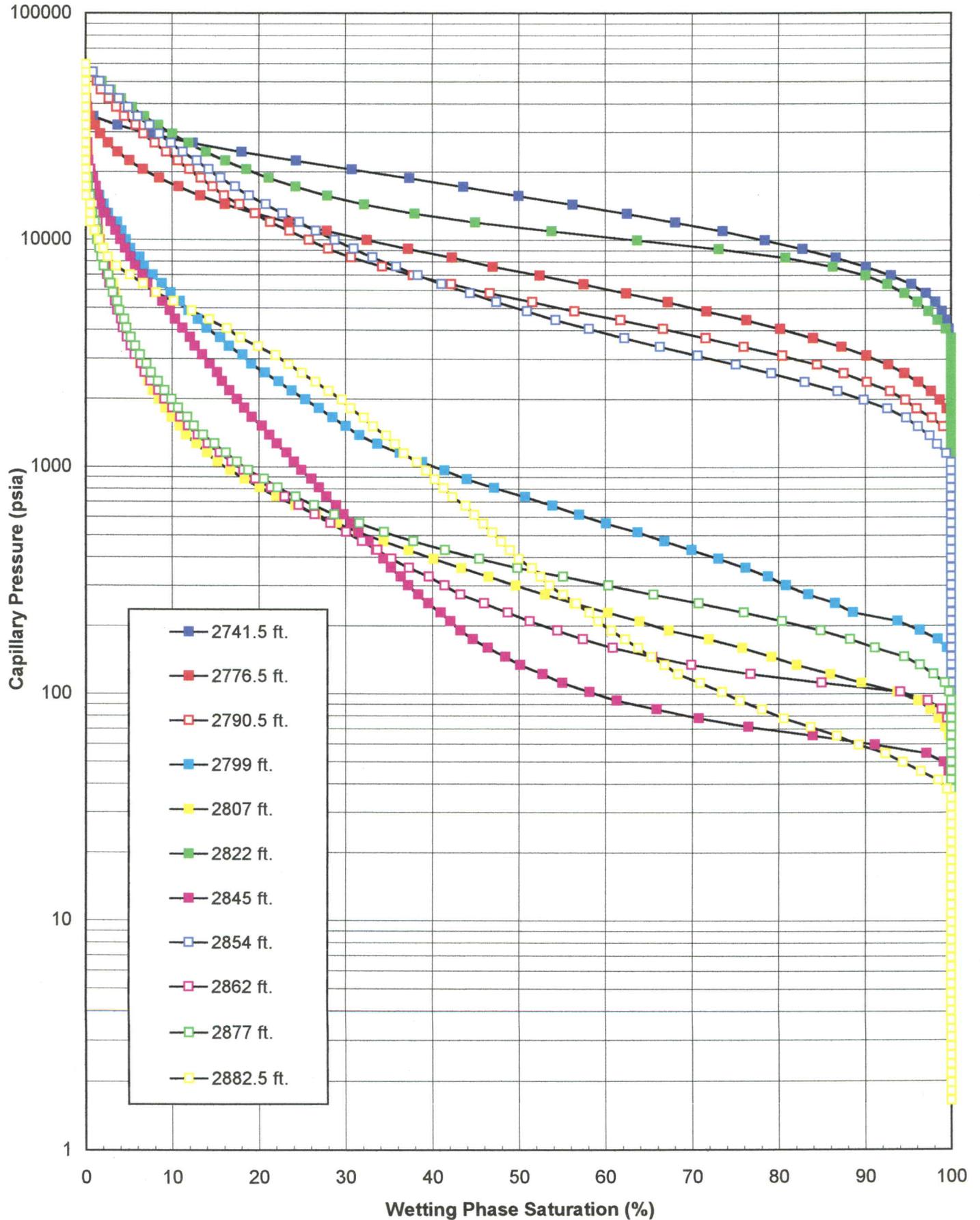
TABLE 1
Anadarko Youngren K - 3A Well

Sample Depth (ft)	Core Analysis		Mercury Derived		Median Aperture	Pore Distribution
	Porosity (%)	Perm (air) (md)	Porosity (%)	Perm (air) (md)		
2741.5	2.2	0.001	1.7	-	0.014	unimodal
2776.5	2.5	<0.0001	2.3	0.0002	0.030	unimodal (broad)
2790.5	5.9	0.012	5.6	0.0016	0.039	unimodal (broad)
2799.0	5.3	0.026	4.9	0.037	0.284	unimodal broad
2807.0	10.3	0.414	10.1	0.469	0.719	unimodal broad
2822.0	4.2	0.025	4.3	0.0003	0.019	unimodal sharp
2845.0	9.1	0.455	8.6	1.58	1.580	unimodal (tail)
2854.0	8.5	0.165	8.9	0.0042	0.043	unimodal broad
2862.0	10.9	0.495	10.6	0.909	0.976	unimodal sharp (tail)
2877.0	9.8	0.282	9.4	2.96	0.595	unimodal (broad)
2882.5	5.8	0.801	5.2	0.393	0.543	bimodal

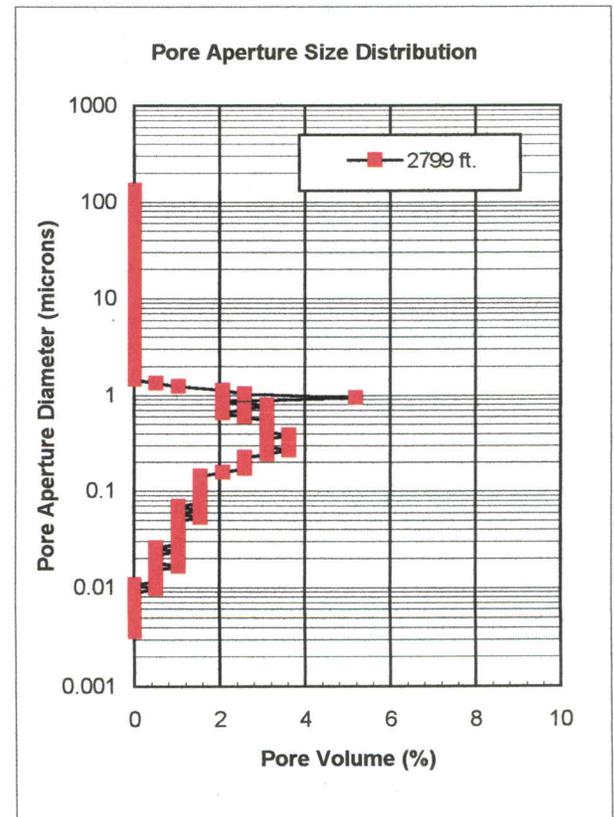
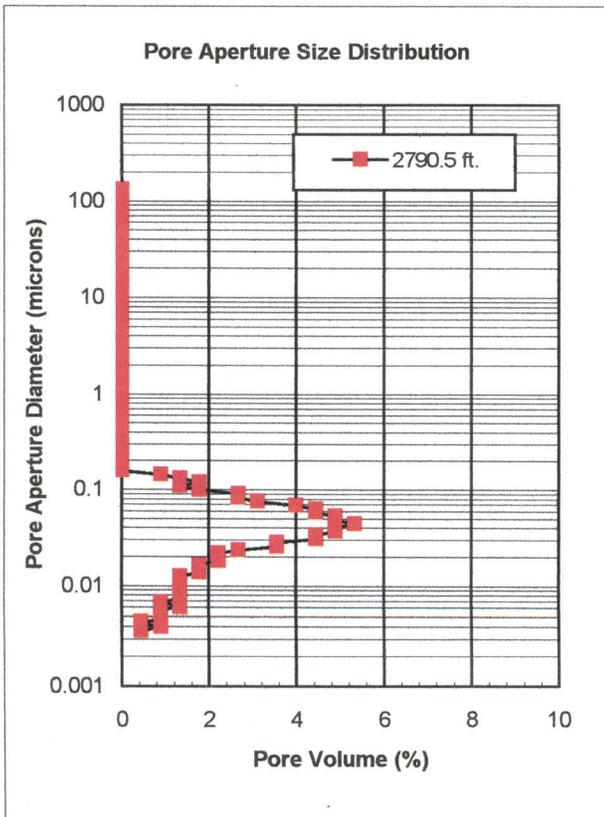
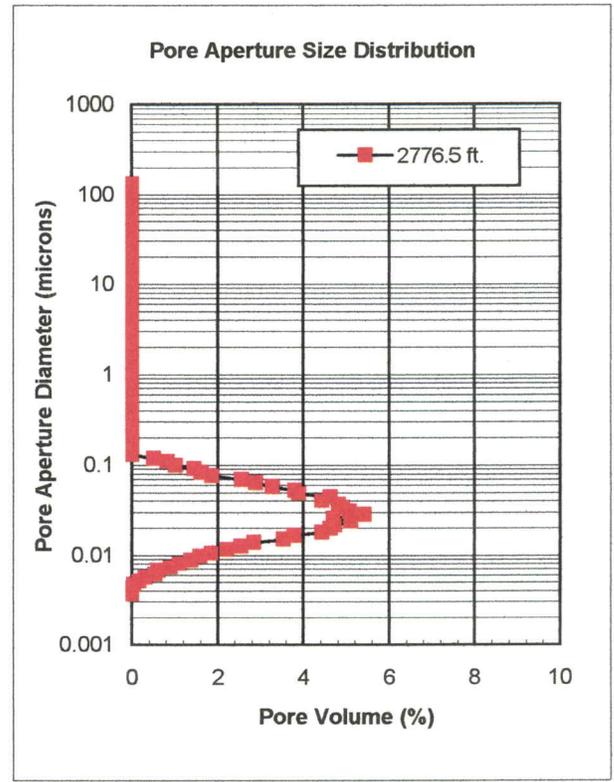
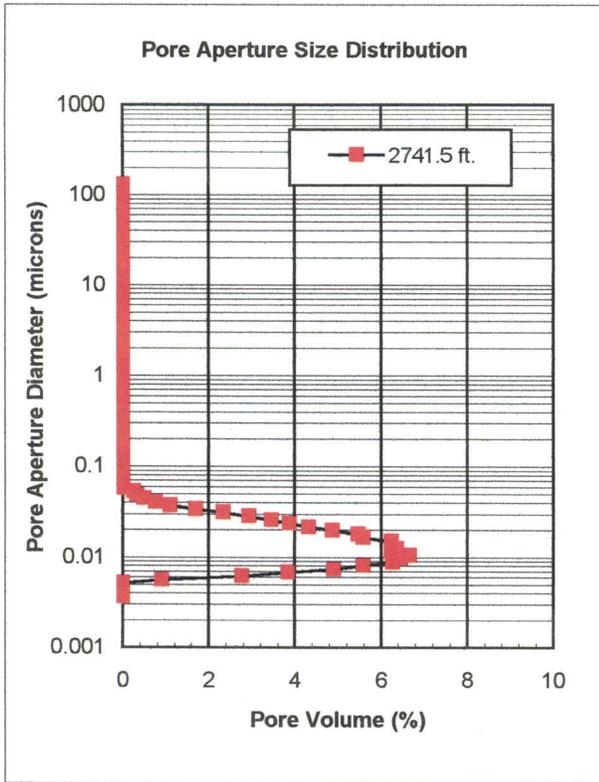
aperture diameter in microns

Youngren K - 3A

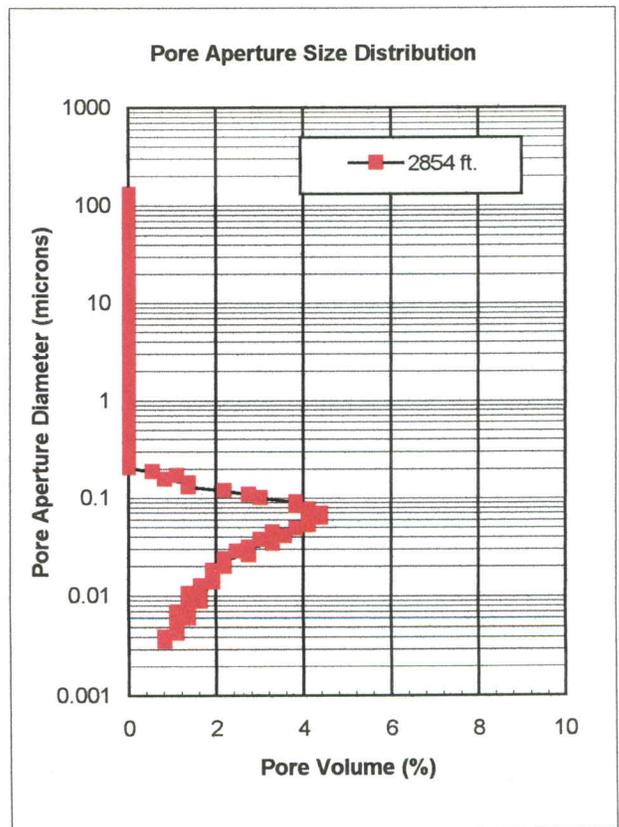
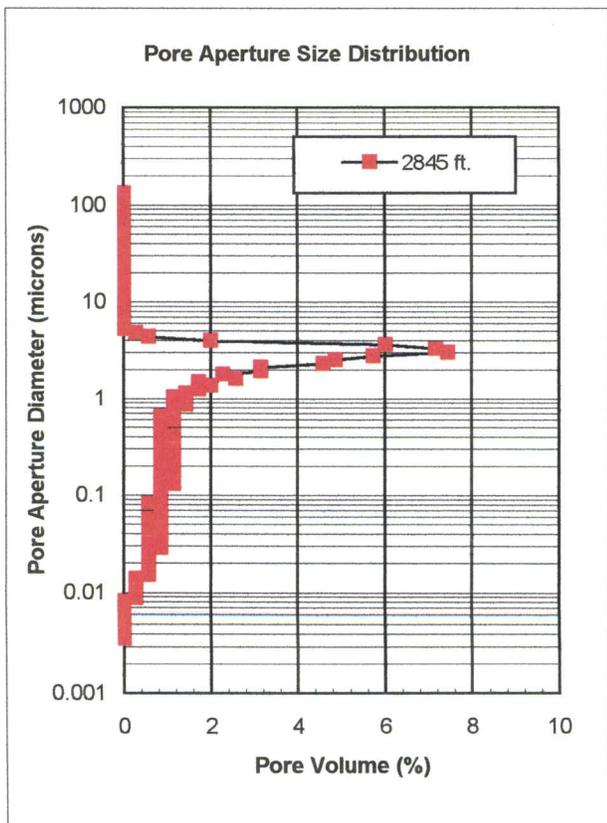
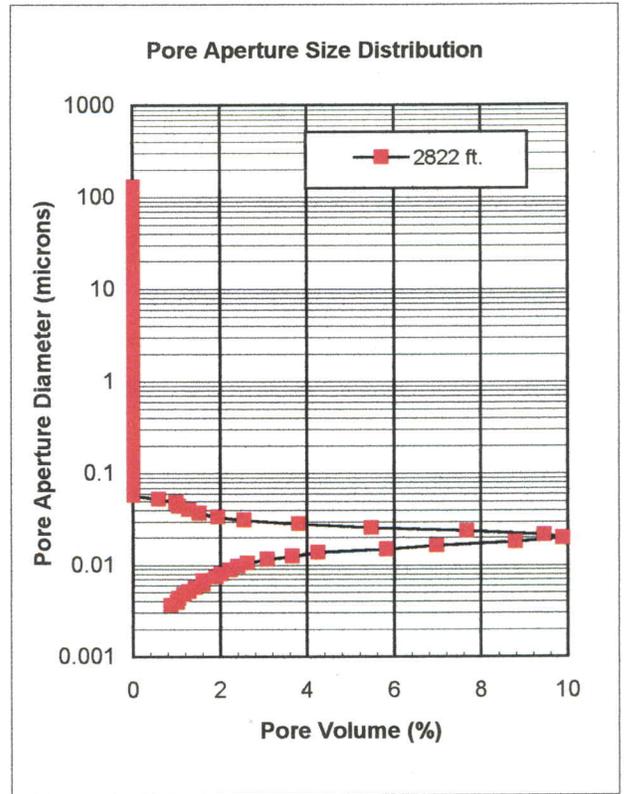
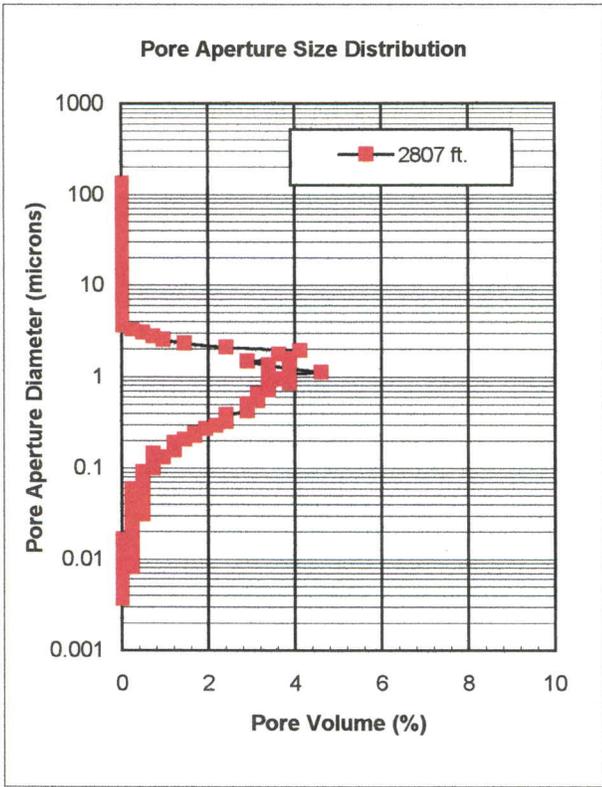
Mercury Injection Capillary Pressure (Pore Volume)



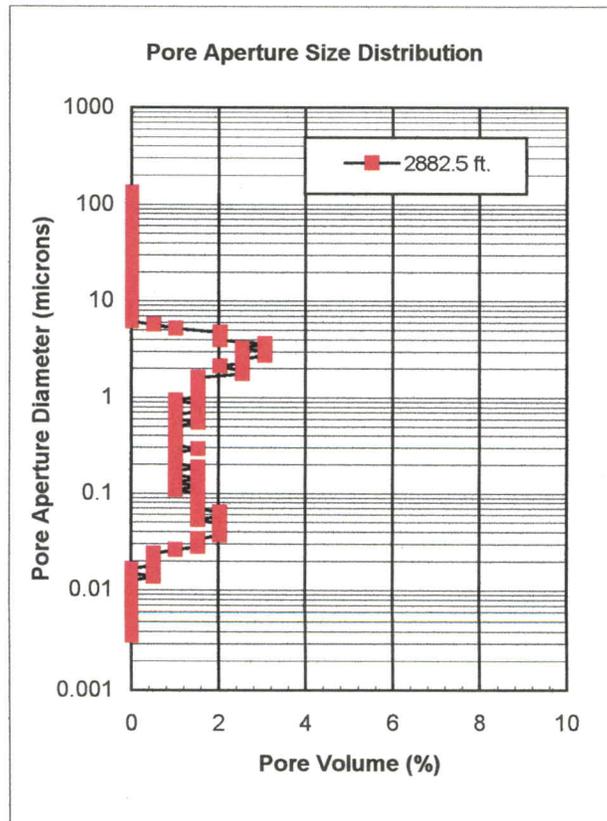
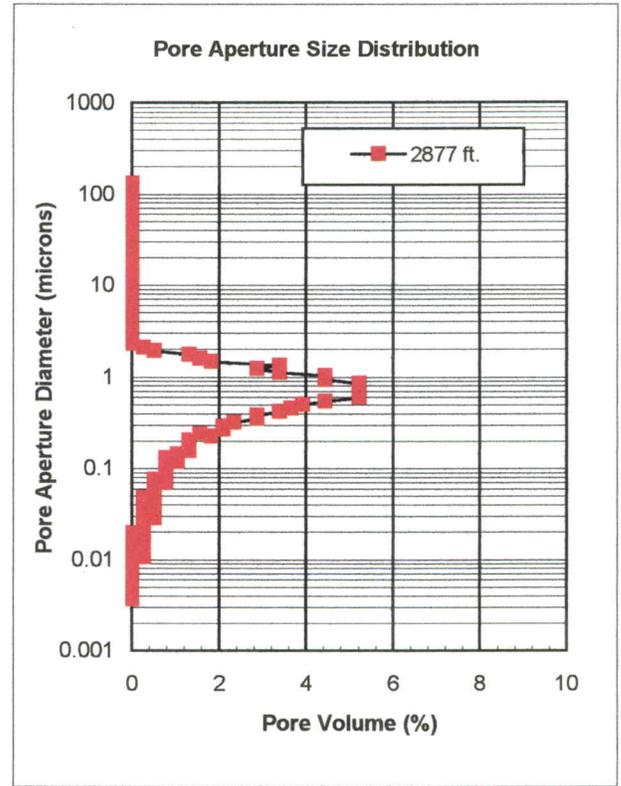
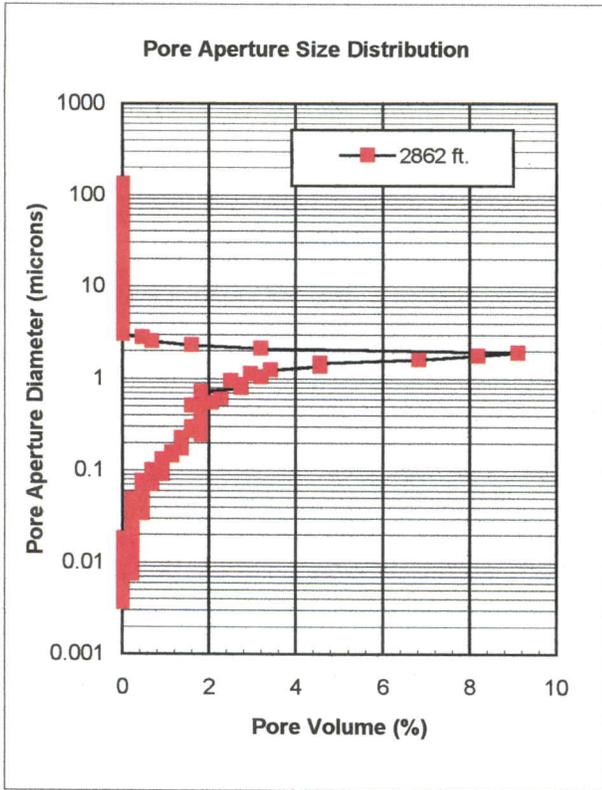
Youngren K - 3A



Youngren K - 3A



Youngren K - 3A



Mercury Injection Capillary Pressure

Youngren K - 3A : 2741.5 feet
File 002-759

Sample Information	
Bulk Volume = 12.6410	Porosity = 1.70% (mercury)
Pore Volume = 0.2153 cc	Permeability = N/A
Closure = 0.19%BV @ 3710 psia	Median Pore Aperture = 0.0137 microns

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1.64	130	0.01	100.0	0.00	0.0000
1.80	119	0.01	100.0	0.00	0.0000
1.96	109	0.02	100.0	0.00	0.0000
2.15	99.2	0.03	100.0	0.00	0.0000
2.35	90.8	0.04	100.0	0.00	0.0000
2.57	83.0	0.05	100.0	0.00	0.0000
2.81	75.9	0.06	100.0	0.00	0.0000
3.08	69.3	0.07	100.0	0.00	0.0000
3.37	63.3	0.07	100.0	0.00	0.0000
3.68	58.0	0.08	100.0	0.00	0.0000
4.03	52.9	0.08	100.0	0.00	0.0000
4.41	48.4	0.09	100.0	0.00	0.0000
4.82	44.3	0.09	100.0	0.00	0.0000
5.27	40.5	0.09	100.0	0.00	0.0000
5.77	37.0	0.09	100.0	0.00	0.0000
6.31	33.8	0.10	100.0	0.00	0.0000
6.90	30.9	0.10	100.0	0.00	0.0000
7.55	28.3	0.10	100.0	0.00	0.0000
8.26	25.8	0.10	100.0	0.00	0.0000
9.04	23.6	0.11	100.0	0.00	0.0000
9.89	21.6	0.11	100.0	0.00	0.0000
10.8	19.8	0.11	100.0	0.00	0.0000
11.8	18.1	0.11	100.0	0.00	0.0000
12.9	16.5	0.11	100.0	0.00	0.0000
14.2	15.0	0.11	100.0	0.00	0.0000
15.5	13.8	0.11	100.0	0.00	0.0000
16.9	12.6	0.11	100.0	0.00	0.0000
18.5	11.5	0.12	100.0	0.00	0.0000
20.3	10.5	0.12	100.0	0.00	0.0000
22.2	9.61	0.12	100.0	0.00	0.0000
24.3	8.78	0.12	100.0	0.00	0.0000
26.6	8.02	0.12	100.0	0.00	0.0000
29.0	7.36	0.13	100.0	0.00	0.0000
31.8	6.71	0.13	100.0	0.00	0.0000
34.8	6.13	0.13	100.0	0.00	0.0000
38.0	5.61	0.14	100.0	0.00	0.0000

Mercury Injection Capillary Pressure

Youngren K - 3A : 2741.5 feet

File 002-759

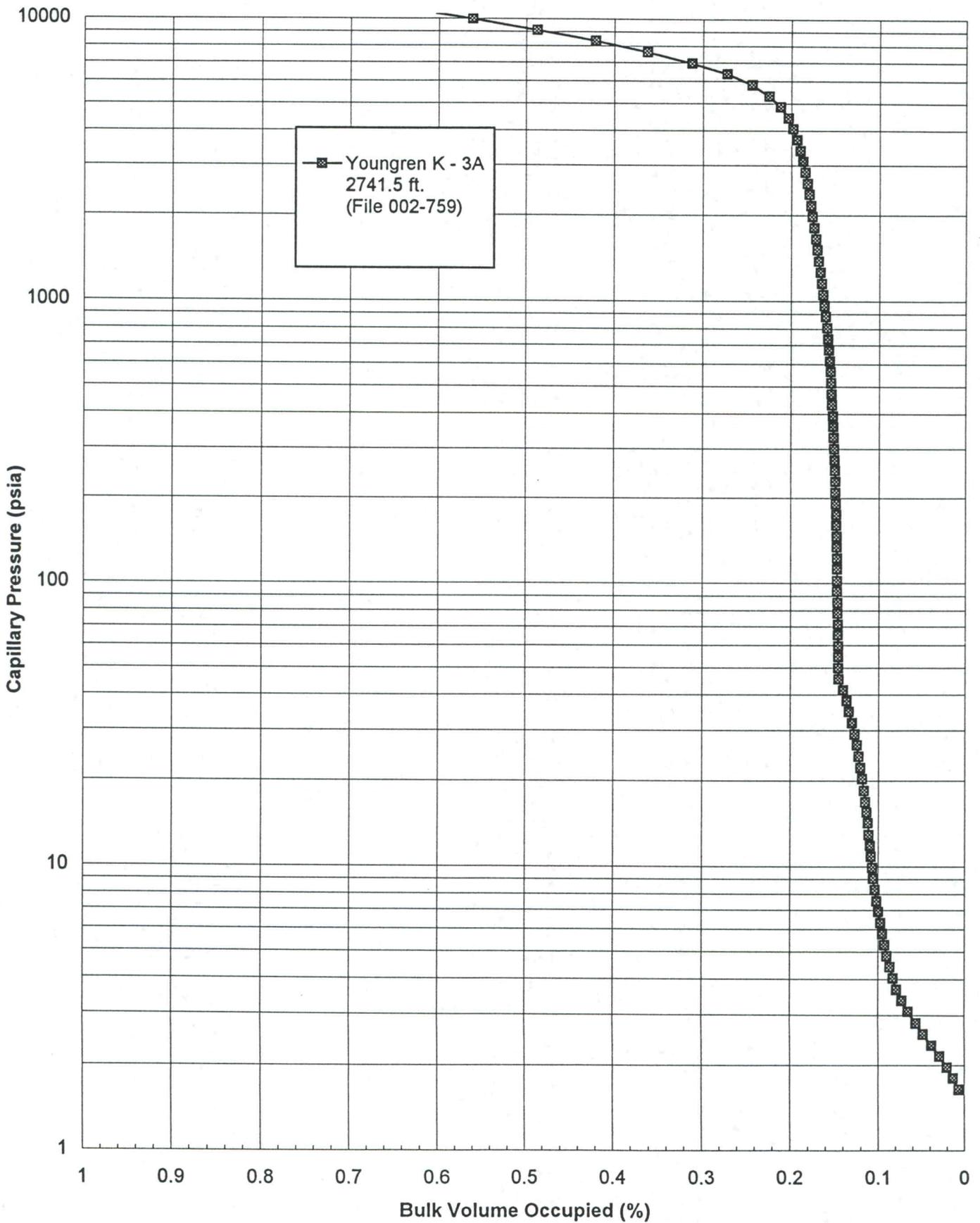
Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
41.6	5.13	0.14	100.0	0.00	0.0000
45.5	4.69	0.15	100.0	0.00	0.0000
49.8	4.28	0.15	100.0	0.00	0.0000
54.5	3.91	0.15	100.0	0.00	0.0000
59.6	3.58	0.15	100.0	0.00	0.0000
65.2	3.27	0.15	100.0	0.00	0.0000
71.3	2.99	0.15	100.0	0.00	0.0000
78.0	2.73	0.15	100.0	0.00	0.0000
85.3	2.50	0.15	100.0	0.00	0.0000
93.4	2.28	0.15	100.0	0.00	0.0000
102	2.09	0.15	100.0	0.00	0.0000
112	1.90	0.15	100.0	0.00	0.0000
122	1.75	0.15	100.0	0.00	0.0000
134	1.59	0.15	100.0	0.00	0.0000
146	1.46	0.15	100.0	0.00	0.0000
160	1.33	0.15	100.0	0.00	0.0000
175	1.22	0.15	100.0	0.00	0.0000
191	1.12	0.15	100.0	0.00	0.0000
209	1.02	0.15	100.0	0.00	0.0000
229	0.932	0.15	100.0	0.00	0.0000
251	0.850	0.15	100.0	0.00	0.0000
274	0.779	0.15	100.0	0.00	0.0000
300	0.711	0.15	100.0	0.00	0.0000
328	0.650	0.15	100.0	0.00	0.0000
359	0.594	0.15	100.0	0.00	0.0000
393	0.543	0.15	100.0	0.00	0.0000
430	0.496	0.15	100.0	0.00	0.0000
470	0.454	0.15	100.0	0.00	0.0000
514	0.415	0.15	100.0	0.00	0.0000
563	0.379	0.16	100.0	0.00	0.0000
615	0.347	0.16	100.0	0.00	0.0000
673	0.317	0.16	100.0	0.00	0.0000
736	0.290	0.16	100.0	0.00	0.0000
806	0.265	0.16	100.0	0.00	0.0000
881	0.242	0.16	100.0	0.00	0.0000
964	0.221	0.16	100.0	0.00	0.0000
1050	0.203	0.16	100.0	0.00	0.0000
1150	0.186	0.17	100.0	0.00	0.0000
1260	0.169	0.17	100.0	0.00	0.0000
1380	0.155	0.17	100.0	0.00	0.0000
1510	0.141	0.17	100.0	0.00	0.0000
1650	0.129	0.17	100.0	0.00	0.0000

Mercury Injection Capillary Pressure

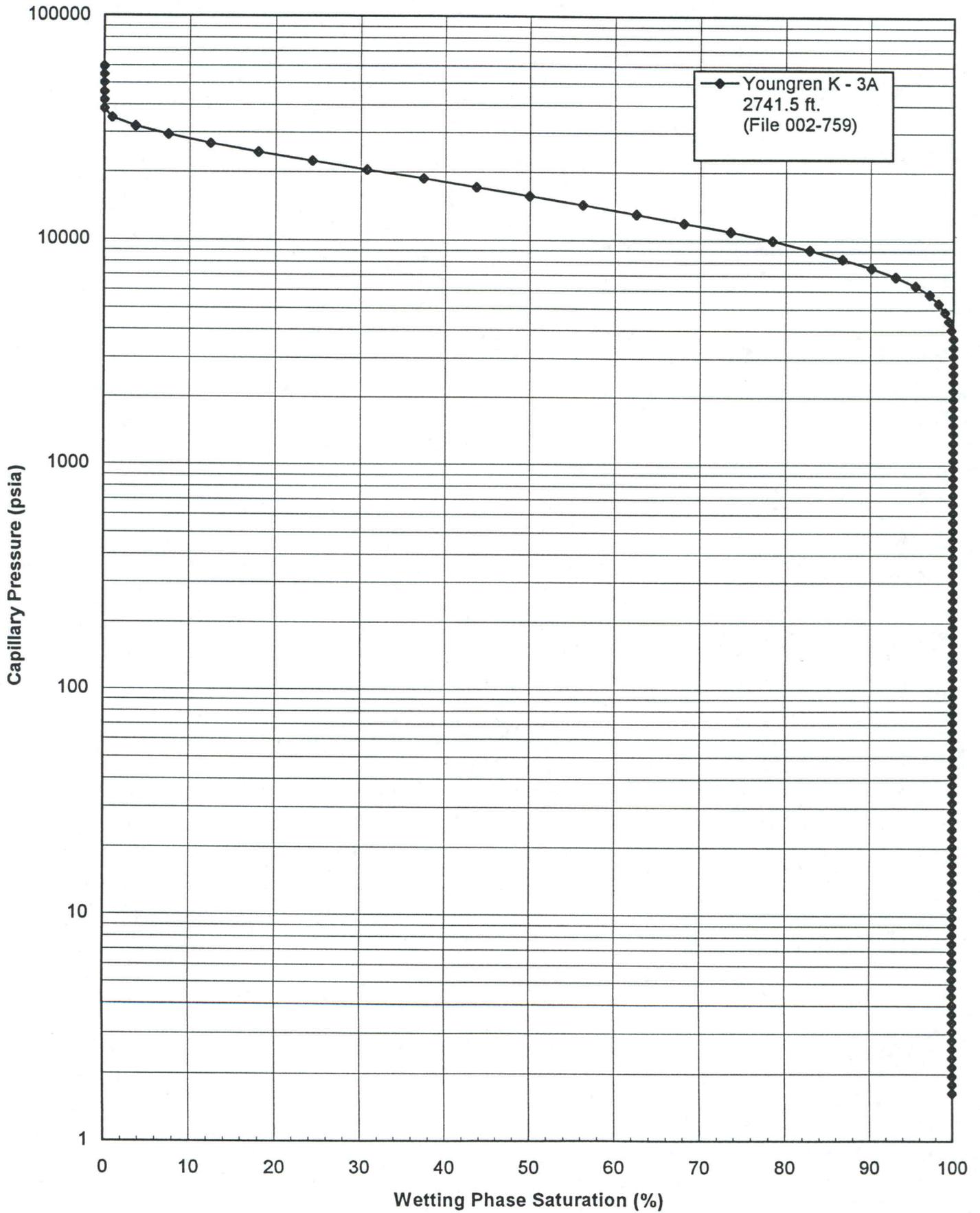
Youngren K - 3A : 2741.5 feet
File 002-759

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1810	0.1179	0.17	100.0	0.00	0.0000
1980	0.1077	0.18	100.0	0.00	0.0000
2160	0.0988	0.18	100.0	0.00	0.0000
2370	0.0900	0.18	100.0	0.00	0.0000
2590	0.0824	0.18	100.0	0.00	0.0000
2830	0.0754	0.18	100.0	0.00	0.0000
3100	0.0688	0.19	100.0	0.00	0.0000
3390	0.0629	0.19	100.0	0.00	0.0000
3710	0.0575	0.19	100.0	0.00	0.0000
4060	0.0525	0.20	99.8	0.25	0.0007
4440	0.0480	0.20	99.4	0.32	0.0009
4850	0.0440	0.21	98.9	0.49	0.0012
5310	0.0402	0.22	98.2	0.77	0.0017
5810	0.0367	0.24	97.1	1.10	0.0022
6360	0.0335	0.27	95.4	1.70	0.0031
6950	0.0307	0.31	93.0	2.34	0.0040
7610	0.0280	0.36	90.1	2.94	0.0045
8320	0.0256	0.42	86.6	3.46	0.0049
9100	0.0234	0.49	82.8	3.88	0.0050
9960	0.0214	0.56	78.4	4.33	0.0050
10900	0.0196	0.64	73.6	4.87	0.0052
11900	0.0179	0.74	68.1	5.47	0.0055
13000	0.0164	0.83	62.5	5.59	0.0051
14300	0.0149	0.94	56.3	6.24	0.0048
15600	0.0137	1.05	50.0	6.25	0.0048
17100	0.0125	1.15	43.6	6.36	0.0042
18700	0.0114	1.26	37.4	6.24	0.0039
20400	0.0105	1.37	30.7	6.66	0.0039
22300	0.0096	1.48	24.3	6.45	0.0034
24400	0.0087	1.59	18.0	6.28	0.0030
26700	0.0080	1.68	12.4	5.59	0.0024
29300	0.0073	1.77	7.5	4.90	0.0019
32000	0.0067	1.83	3.7	3.85	0.0014
35000	0.0061	1.88	0.9	2.77	0.0009
38300	0.0056	1.90	0.0	0.91	0.0003
41900	0.0051	1.90	0.0	0.00	0.0000
45800	0.0047	1.90	0.0	0.00	0.0000
50100	0.0043	1.90	0.0	0.00	0.0000
54800	0.0039	1.90	0.0	0.00	0.0000
59500	0.0036	1.90	0.0	0.00	0.0000

Mercury Injection Capillary Pressure (Bulk Volume)

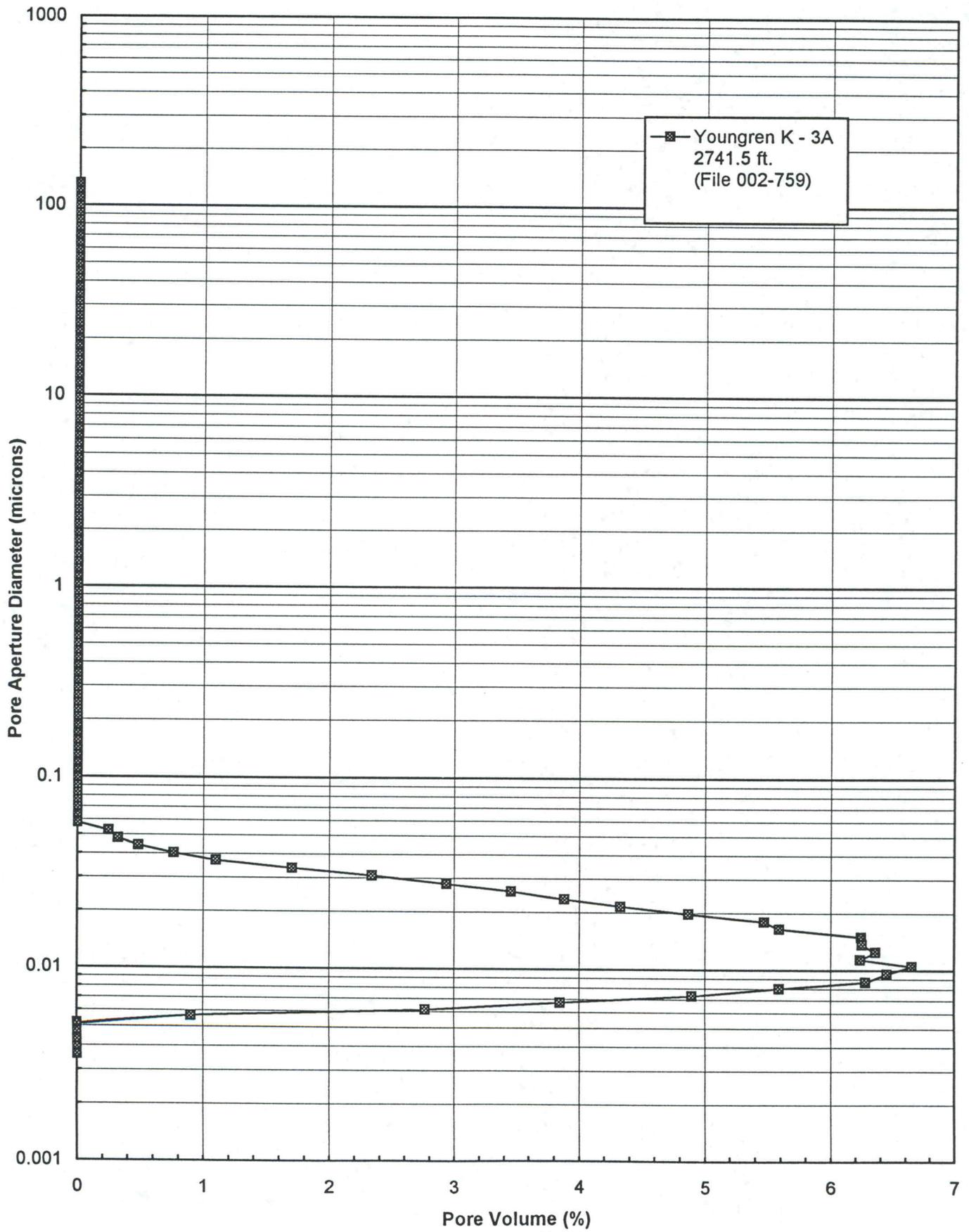


Mercury Injection Capillary Pressure (Pore Volume)



◆ Youngren K - 3A
2741.5 ft.
(File 002-759)

Pore Aperture Size Distribution



Mercury Injection Capillary Pressure

Youngren K - 3A : 2776.5 feet

File 002-755

Sample Information	
Bulk Volume = 12.4943 cc	Porosity = 2.34% (mercury)
Pore Volume = 0.2927 cc	Permeability = 0.0002 md (mercury)
Closure = 0.24%BV @ 1650 psia	Median Pore Aperture = 0.0295 microns

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1.64	130	0.01	100.0	0.00	0.0000
1.80	119	0.02	100.0	0.00	0.0000
1.96	109	0.03	100.0	0.00	0.0000
2.15	99.2	0.04	100.0	0.00	0.0000
2.35	90.8	0.05	100.0	0.00	0.0000
2.57	83.0	0.05	100.0	0.00	0.0000
2.81	75.9	0.06	100.0	0.00	0.0000
3.08	69.3	0.07	100.0	0.00	0.0000
3.37	63.3	0.07	100.0	0.00	0.0000
3.68	58.0	0.07	100.0	0.00	0.0000
4.03	52.9	0.08	100.0	0.00	0.0000
4.41	48.4	0.08	100.0	0.00	0.0000
4.82	44.3	0.09	100.0	0.00	0.0000
5.27	40.5	0.09	100.0	0.00	0.0000
5.77	37.0	0.09	100.0	0.00	0.0000
6.31	33.8	0.09	100.0	0.00	0.0000
6.90	30.9	0.10	100.0	0.00	0.0000
7.55	28.3	0.10	100.0	0.00	0.0000
8.26	25.8	0.10	100.0	0.00	0.0000
9.04	23.6	0.10	100.0	0.00	0.0000
9.89	21.6	0.11	100.0	0.00	0.0000
10.8	19.8	0.11	100.0	0.00	0.0000
11.8	18.1	0.11	100.0	0.00	0.0000
12.9	16.5	0.11	100.0	0.00	0.0000
14.2	15.0	0.12	100.0	0.00	0.0000
15.5	13.8	0.12	100.0	0.00	0.0000
16.9	12.6	0.12	100.0	0.00	0.0000
18.5	11.5	0.12	100.0	0.00	0.0000
20.3	10.5	0.13	100.0	0.00	0.0000
22.2	9.61	0.13	100.0	0.00	0.0000
24.3	8.78	0.13	100.0	0.00	0.0000
26.6	8.02	0.13	100.0	0.00	0.0000
29.0	7.36	0.13	100.0	0.00	0.0000
31.8	6.71	0.13	100.0	0.00	0.0000
34.8	6.13	0.13	100.0	0.00	0.0000
38.0	5.61	0.13	100.0	0.00	0.0000

Mercury Injection Capillary Pressure

Youngren K - 3A : 2776.5 feet
File 002-755

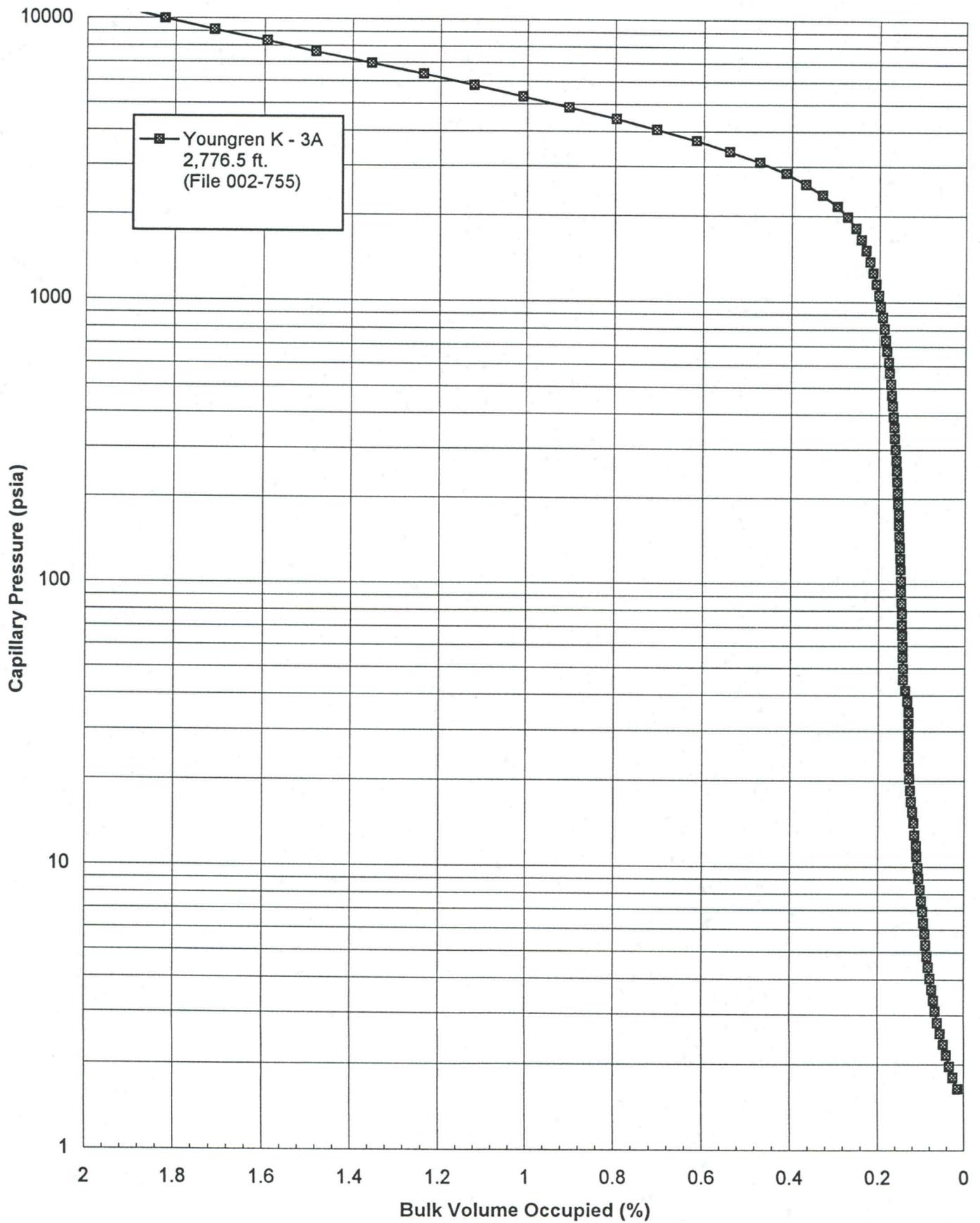
Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
41.6	5.13	0.14	100.0	0.00	0.0000
45.5	4.69	0.14	100.0	0.00	0.0000
49.8	4.28	0.14	100.0	0.00	0.0000
54.5	3.91	0.14	100.0	0.00	0.0000
59.6	3.58	0.14	100.0	0.00	0.0000
65.2	3.27	0.14	100.0	0.00	0.0000
71.3	2.99	0.14	100.0	0.00	0.0000
78.0	2.73	0.15	100.0	0.00	0.0000
85.3	2.50	0.15	100.0	0.00	0.0000
93.4	2.28	0.15	100.0	0.00	0.0000
102	2.09	0.15	100.0	0.00	0.0000
112	1.90	0.15	100.0	0.00	0.0000
122	1.75	0.15	100.0	0.00	0.0000
134	1.59	0.15	100.0	0.00	0.0000
146	1.46	0.15	100.0	0.00	0.0000
160	1.33	0.15	100.0	0.00	0.0000
175	1.22	0.15	100.0	0.00	0.0000
191	1.12	0.15	100.0	0.00	0.0000
209	1.02	0.16	100.0	0.00	0.0000
229	0.932	0.16	100.0	0.00	0.0000
251	0.850	0.16	100.0	0.00	0.0000
274	0.779	0.16	100.0	0.00	0.0000
300	0.711	0.16	100.0	0.00	0.0000
328	0.650	0.16	100.0	0.00	0.0000
359	0.594	0.16	100.0	0.00	0.0000
393	0.543	0.17	100.0	0.00	0.0000
430	0.496	0.17	100.0	0.00	0.0000
470	0.454	0.17	100.0	0.00	0.0000
514	0.415	0.17	100.0	0.00	0.0000
563	0.379	0.17	100.0	0.00	0.0000
615	0.347	0.18	100.0	0.00	0.0000
673	0.317	0.18	100.0	0.00	0.0000
736	0.290	0.18	100.0	0.00	0.0000
806	0.265	0.19	100.0	0.00	0.0000
881	0.242	0.19	100.0	0.00	0.0000
964	0.221	0.20	100.0	0.00	0.0000
1050	0.203	0.20	100.0	0.00	0.0000
1150	0.186	0.21	100.0	0.00	0.0000
1260	0.169	0.21	100.0	0.00	0.0000
1380	0.155	0.22	100.0	0.00	0.0000
1510	0.141	0.23	100.0	0.00	0.0000
1650	0.129	0.24	100.0	0.00	0.0000

Mercury Injection Capillary Pressure

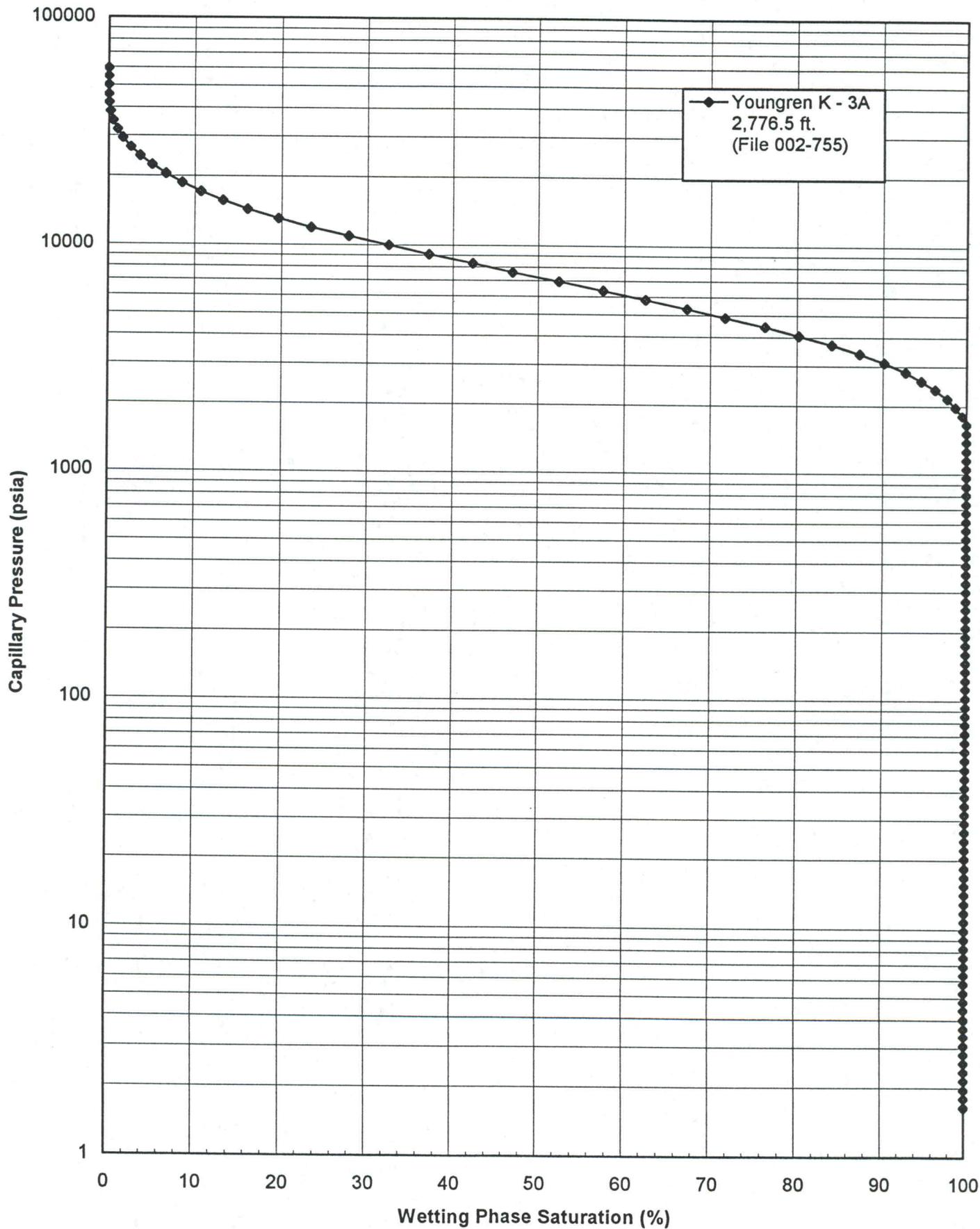
Youngren K - 3A : 2776.5 feet
File 002-755

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1810	0.1179	0.25	99.5	0.51	0.0032
1980	0.1077	0.27	98.7	0.83	0.0049
2160	0.0988	0.30	97.6	1.01	0.0056
2370	0.0900	0.33	96.2	1.45	0.0069
2590	0.0824	0.37	94.6	1.61	0.0073
2830	0.0754	0.41	92.7	1.87	0.0078
3100	0.0688	0.47	90.2	2.56	0.0095
3390	0.0629	0.54	87.3	2.89	0.0100
3710	0.0575	0.62	84.0	3.28	0.0102
4060	0.0525	0.71	80.2	3.80	0.0109
4440	0.0480	0.80	76.3	3.89	0.0102
4850	0.0440	0.91	71.7	4.62	0.0113
5310	0.0402	1.01	67.2	4.43	0.0096
5810	0.0367	1.12	62.4	4.83	0.0097
6360	0.0335	1.24	57.5	4.92	0.0089
6950	0.0307	1.36	52.4	5.08	0.0086
7610	0.0280	1.48	47.0	5.41	0.0082
8320	0.0256	1.59	42.3	4.70	0.0066
9100	0.0234	1.71	37.2	5.10	0.0065
9960	0.0214	1.82	32.5	4.73	0.0055
10900	0.0196	1.93	27.9	4.62	0.0049
11900	0.0179	2.04	23.4	4.42	0.0044
13000	0.0164	2.12	19.6	3.79	0.0034
14300	0.0149	2.21	16.1	3.53	0.0027
15600	0.0137	2.27	13.3	2.85	0.0022
17100	0.0125	2.33	10.7	2.54	0.0017
18700	0.0114	2.38	8.5	2.21	0.0014
20400	0.0105	2.43	6.7	1.86	0.0011
22300	0.0096	2.47	5.1	1.59	0.0008
24400	0.0087	2.50	3.7	1.38	0.0007
26700	0.0080	2.52	2.6	1.11	0.0005
29300	0.0073	2.55	1.7	0.90	0.0003
32000	0.0067	2.56	1.1	0.62	0.0002
35000	0.0061	2.57	0.5	0.53	0.0002
38300	0.0056	2.58	0.2	0.31	0.0001
41900	0.0051	2.58	0.0	0.17	0.0000
45800	0.0047	2.58	0.0	0.05	0.0000
50100	0.0043	2.58	0.0	0.00	0.0000
54800	0.0039	2.58	0.0	0.00	0.0000
59500	0.0036	2.58	0.0	0.00	0.0000

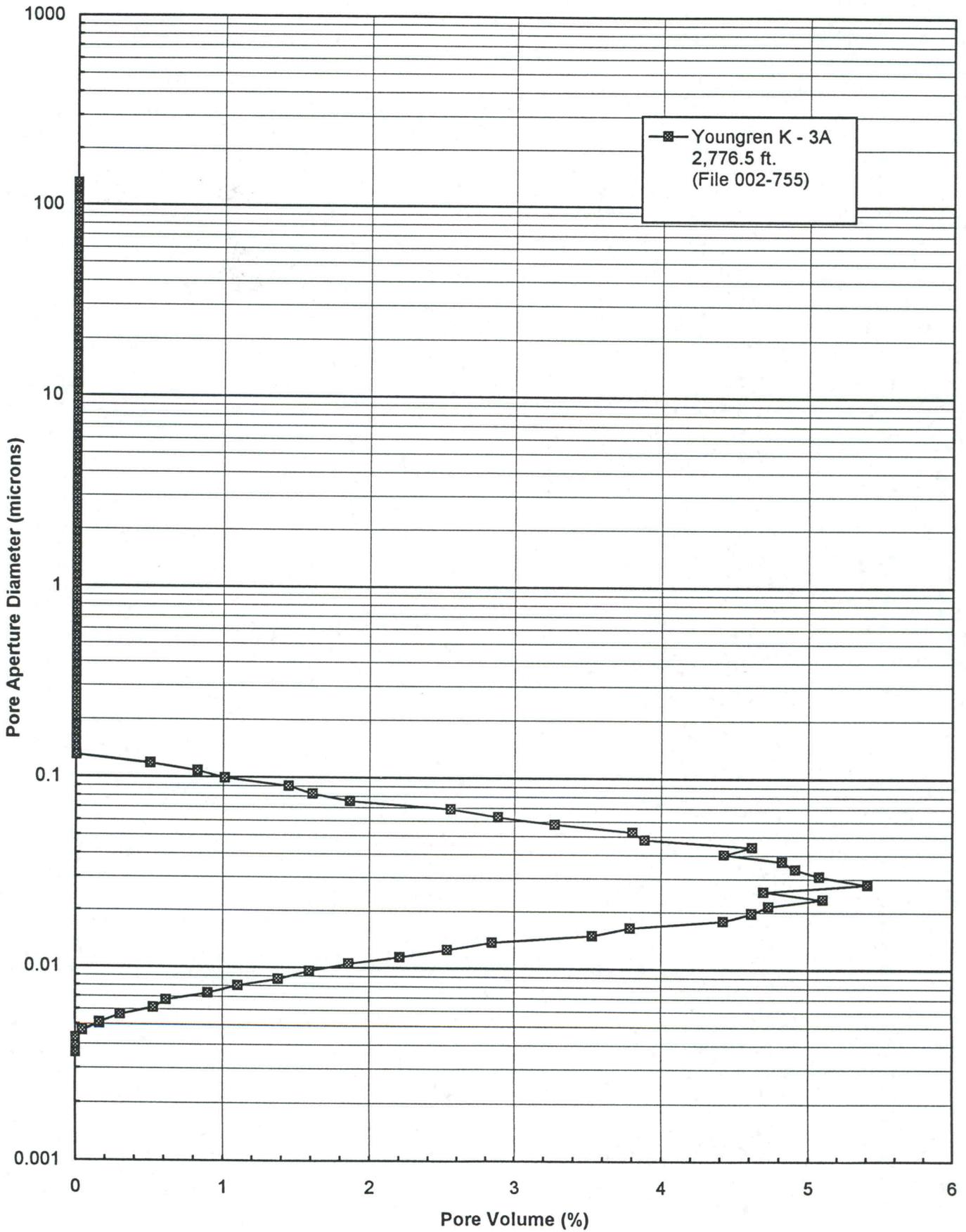
Mercury Injection Capillary Pressure (Bulk Volume)



Mercury Injection Capillary Pressure (Pore Volume)



Pore Aperture Size Distribution



Mercury Injection Capillary Pressure

Youngren K - 3A : 2790.5 feet

File 002-743

Sample Information	
Bulk Volume = 12.5046 cc	Porosity = 5.64% (mercury)
Pore Volume = 0.7049 cc	Permeability = 0.0016 md (mercury)
Closure = 0.65%BV @ 1380 psia	Median Pore Aperture = 0.0391 microns

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1.64	130	0.03	100.0	0.00	0.0000
1.80	119	0.03	100.0	0.00	0.0000
1.96	109	0.05	100.0	0.00	0.0000
2.15	99.2	0.08	100.0	0.00	0.0000
2.35	90.8	0.08	100.0	0.00	0.0000
2.57	83.0	0.10	100.0	0.00	0.0000
2.81	75.9	0.10	100.0	0.00	0.0000
3.08	69.3	0.13	100.0	0.00	0.0000
3.37	63.3	0.13	100.0	0.00	0.0000
3.68	58.0	0.13	100.0	0.00	0.0000
4.03	52.9	0.15	100.0	0.00	0.0000
4.41	48.4	0.15	100.0	0.00	0.0000
4.82	44.3	0.15	100.0	0.00	0.0000
5.27	40.5	0.18	100.0	0.00	0.0000
5.77	37.0	0.18	100.0	0.00	0.0000
6.31	33.8	0.18	100.0	0.00	0.0000
6.90	30.9	0.18	100.0	0.00	0.0000
7.55	28.3	0.18	100.0	0.00	0.0000
8.26	25.8	0.20	100.0	0.00	0.0000
9.04	23.6	0.20	100.0	0.00	0.0000
9.89	21.6	0.20	100.0	0.00	0.0000
10.8	19.8	0.20	100.0	0.00	0.0000
11.8	18.1	0.20	100.0	0.00	0.0000
12.9	16.5	0.20	100.0	0.00	0.0000
14.2	15.0	0.20	100.0	0.00	0.0000
15.5	13.8	0.20	100.0	0.00	0.0000
16.9	12.6	0.20	100.0	0.00	0.0000
18.5	11.5	0.20	100.0	0.00	0.0000
20.3	10.5	0.23	100.0	0.00	0.0000
22.2	9.61	0.23	100.0	0.00	0.0000
24.3	8.78	0.23	100.0	0.00	0.0000
26.6	8.02	0.23	100.0	0.00	0.0000
29.0	7.36	0.23	100.0	0.00	0.0000
31.8	6.71	0.25	100.0	0.00	0.0000
34.8	6.13	0.25	100.0	0.00	0.0000
38.0	5.61	0.25	100.0	0.00	0.0000

Mercury Injection Capillary Pressure

Youngren K - 3A : 2790.5 feet

File 002-743

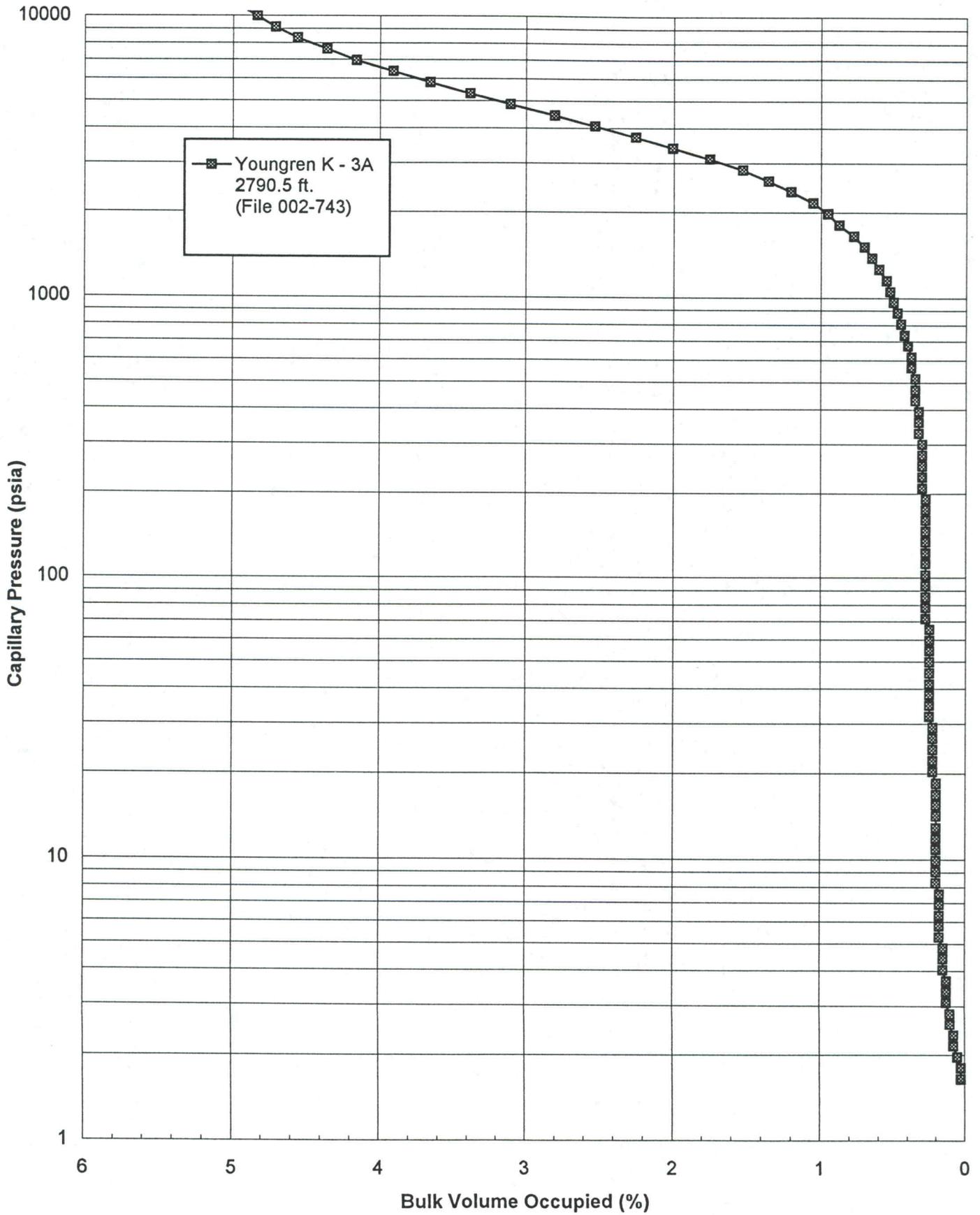
Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
41.6	5.13	0.25	100.0	0.00	0.0000
45.5	4.69	0.25	100.0	0.00	0.0000
49.8	4.28	0.25	100.0	0.00	0.0000
54.5	3.91	0.25	100.0	0.00	0.0000
59.6	3.58	0.25	100.0	0.00	0.0000
65.2	3.27	0.25	100.0	0.00	0.0000
71.3	2.99	0.28	100.0	0.00	0.0000
78.0	2.73	0.28	100.0	0.00	0.0000
85.3	2.50	0.28	100.0	0.00	0.0000
93.4	2.28	0.28	100.0	0.00	0.0000
102	2.09	0.28	100.0	0.00	0.0000
112	1.90	0.28	100.0	0.00	0.0000
122	1.75	0.28	100.0	0.00	0.0000
134	1.59	0.28	100.0	0.00	0.0000
146	1.46	0.28	100.0	0.00	0.0000
160	1.33	0.28	100.0	0.00	0.0000
175	1.22	0.28	100.0	0.00	0.0000
191	1.12	0.28	100.0	0.00	0.0000
209	1.02	0.30	100.0	0.00	0.0000
229	0.932	0.30	100.0	0.00	0.0000
251	0.850	0.30	100.0	0.00	0.0000
274	0.779	0.30	100.0	0.00	0.0000
300	0.711	0.30	100.0	0.00	0.0000
328	0.650	0.33	100.0	0.00	0.0000
359	0.594	0.33	100.0	0.00	0.0000
393	0.543	0.33	100.0	0.00	0.0000
430	0.496	0.35	100.0	0.00	0.0000
470	0.454	0.35	100.0	0.00	0.0000
514	0.415	0.35	100.0	0.00	0.0000
563	0.379	0.38	100.0	0.00	0.0000
615	0.347	0.38	100.0	0.00	0.0000
673	0.317	0.40	100.0	0.00	0.0000
736	0.290	0.43	100.0	0.00	0.0000
806	0.265	0.45	100.0	0.00	0.0000
881	0.242	0.48	100.0	0.00	0.0000
964	0.221	0.50	100.0	0.00	0.0000
1050	0.203	0.53	100.0	0.00	0.0000
1150	0.186	0.55	100.0	0.00	0.0000
1260	0.169	0.60	100.0	0.00	0.0000
1380	0.155	0.65	100.0	0.00	0.0000
1510	0.141	0.70	99.1	0.89	0.0068
1650	0.129	0.78	97.8	1.33	0.0095

Mercury Injection Capillary Pressure

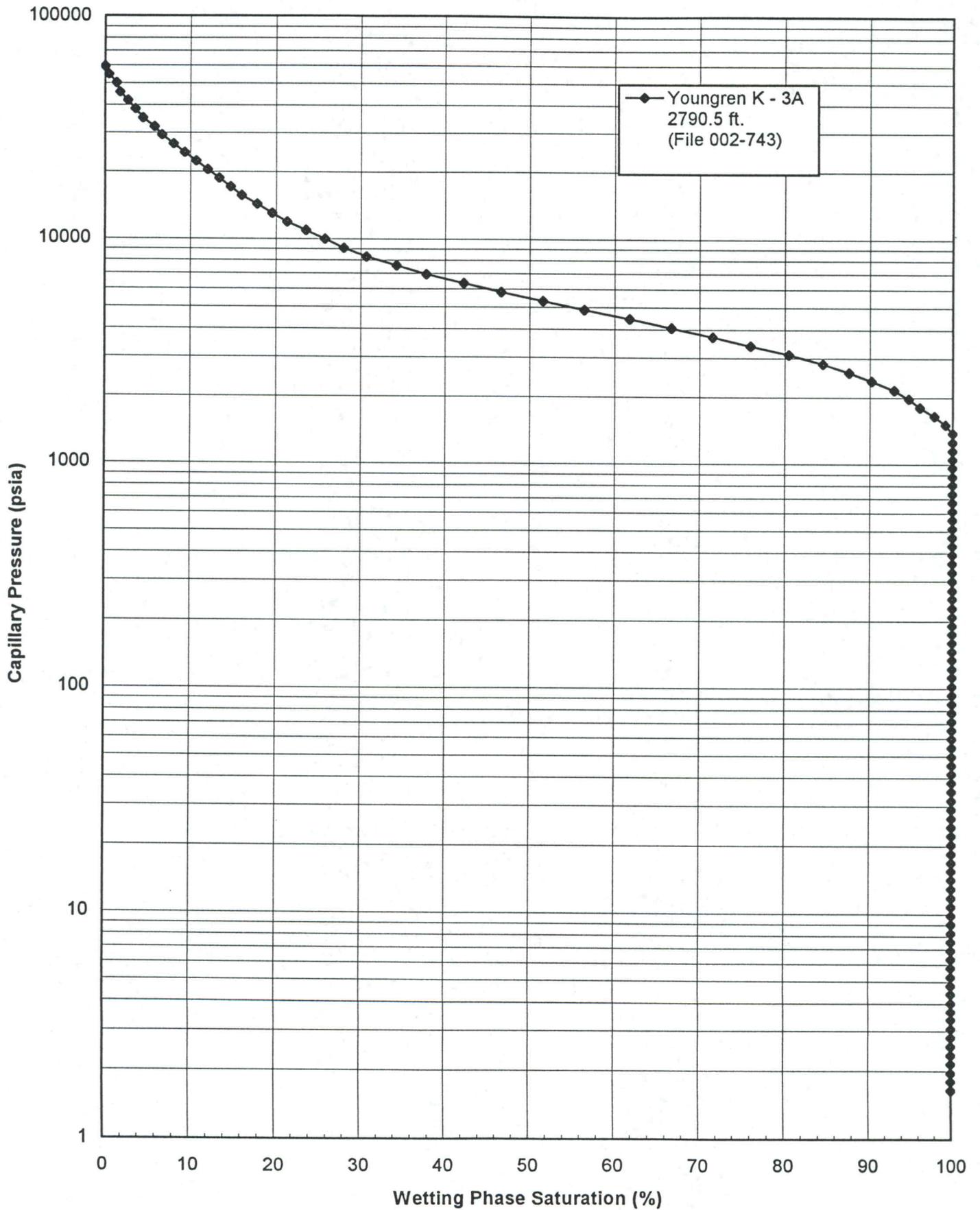
Youngren K - 3A : 2790.5 feet
File 002-743

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1810	0.1179	0.88	96.0	1.78	0.0111
1980	0.1077	0.95	94.7	1.33	0.0078
2160	0.0988	1.05	92.9	1.78	0.0099
2370	0.0900	1.20	90.2	2.67	0.0127
2590	0.0824	1.35	87.6	2.67	0.0121
2830	0.0754	1.53	84.4	3.11	0.0130
3100	0.0688	1.75	80.4	4.00	0.0148
3390	0.0629	2.00	76.0	4.44	0.0153
3710	0.0575	2.26	71.6	4.44	0.0139
4060	0.0525	2.53	66.7	4.89	0.0140
4440	0.0480	2.81	61.8	4.89	0.0129
4850	0.0440	3.11	56.4	5.33	0.0130
5310	0.0402	3.38	51.6	4.89	0.0106
5810	0.0367	3.66	46.7	4.89	0.0098
6360	0.0335	3.91	42.2	4.44	0.0081
6950	0.0307	4.16	37.8	4.44	0.0075
7610	0.0280	4.36	34.2	3.56	0.0054
8320	0.0256	4.56	30.7	3.56	0.0050
9100	0.0234	4.71	28.0	2.67	0.0034
9960	0.0214	4.84	25.8	2.22	0.0026
10900	0.0196	4.96	23.6	2.22	0.0024
11900	0.0179	5.09	21.3	2.22	0.0022
13000	0.0164	5.19	19.6	1.78	0.0016
14300	0.0149	5.29	17.8	1.78	0.0014
15600	0.0137	5.39	16.0	1.78	0.0014
17100	0.0125	5.46	14.7	1.33	0.0009
18700	0.0114	5.54	13.3	1.33	0.0008
20400	0.0105	5.61	12.0	1.33	0.0008
22300	0.0096	5.69	10.7	1.33	0.0007
24400	0.0087	5.76	9.3	1.33	0.0006
26700	0.0080	5.84	8.0	1.33	0.0006
29300	0.0073	5.91	6.7	1.33	0.0005
32000	0.0067	5.96	5.8	0.89	0.0003
35000	0.0061	6.04	4.4	1.33	0.0004
38300	0.0056	6.09	3.6	0.89	0.0003
41900	0.0051	6.14	2.7	0.89	0.0002
45800	0.0047	6.19	1.8	0.89	0.0002
50100	0.0043	6.21	1.3	0.44	0.0001
54800	0.0039	6.26	0.4	0.89	0.0002
59500	0.0036	6.29	0.0	0.44	0.0001

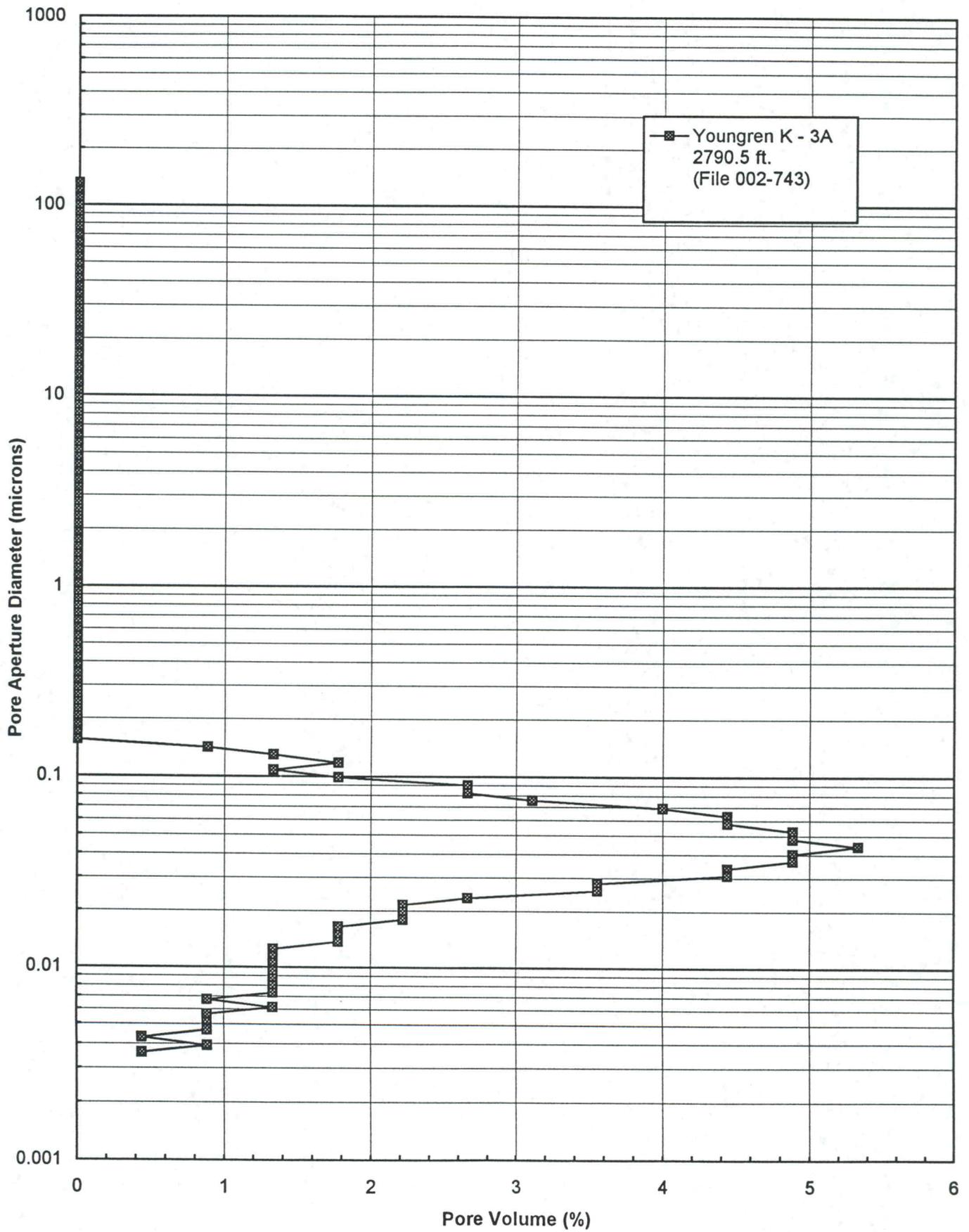
Mercury Injection Capillary Pressure (Bulk Volume)



Mercury Injection Capillary Pressure (Pore Volume)



Pore Aperture Size Distribution



Mercury Injection Capillary Pressure

Youngren K - 3A : 2799.0 feet

File 002-744

Sample Information	
Bulk Volume = 12.3999 cc	Porosity = 4.94% (mercury)
Pore Volume = 0.6129 cc	Permeability = 0.0366 md (mercury)
Closure = 0.28%BV @ 146 psia	Median Pore Aperture = 0.2844 microns

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1.64	130	0.00	100.0	0.00	0.0000
1.80	119	0.03	100.0	0.00	0.0000
1.96	109	0.03	100.0	0.00	0.0000
2.15	99.2	0.03	100.0	0.00	0.0000
2.35	90.8	0.05	100.0	0.00	0.0000
2.57	83.0	0.05	100.0	0.00	0.0000
2.81	75.9	0.05	100.0	0.00	0.0000
3.08	69.3	0.08	100.0	0.00	0.0000
3.37	63.3	0.08	100.0	0.00	0.0000
3.68	58.0	0.08	100.0	0.00	0.0000
4.03	52.9	0.08	100.0	0.00	0.0000
4.41	48.4	0.08	100.0	0.00	0.0000
4.82	44.3	0.08	100.0	0.00	0.0000
5.27	40.5	0.10	100.0	0.00	0.0000
5.77	37.0	0.10	100.0	0.00	0.0000
6.31	33.8	0.10	100.0	0.00	0.0000
6.90	30.9	0.10	100.0	0.00	0.0000
7.55	28.3	0.10	100.0	0.00	0.0000
8.26	25.8	0.10	100.0	0.00	0.0000
9.04	23.6	0.10	100.0	0.00	0.0000
9.89	21.6	0.10	100.0	0.00	0.0000
10.8	19.8	0.10	100.0	0.00	0.0000
11.8	18.1	0.10	100.0	0.00	0.0000
12.9	16.5	0.10	100.0	0.00	0.0000
14.2	15.0	0.13	100.0	0.00	0.0000
15.5	13.8	0.13	100.0	0.00	0.0000
16.9	12.6	0.13	100.0	0.00	0.0000
18.5	11.5	0.13	100.0	0.00	0.0000
20.3	10.5	0.13	100.0	0.00	0.0000
22.2	9.61	0.13	100.0	0.00	0.0000
24.3	8.78	0.13	100.0	0.00	0.0000
26.6	8.02	0.13	100.0	0.00	0.0000
29.0	7.36	0.15	100.0	0.00	0.0000
31.8	6.71	0.15	100.0	0.00	0.0000
34.8	6.13	0.15	100.0	0.00	0.0000
38.0	5.61	0.15	100.0	0.00	0.0000

Mercury Injection Capillary Pressure

Youngren K - 3A : 2799.0 feet

File 002-744

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
41.6	5.13	0.15	100.0	0.00	0.0000
45.5	4.69	0.18	100.0	0.00	0.0000
49.8	4.28	0.18	100.0	0.00	0.0000
54.5	3.91	0.18	100.0	0.00	0.0000
59.6	3.58	0.18	100.0	0.00	0.0000
65.2	3.27	0.18	100.0	0.00	0.0000
71.3	2.99	0.18	100.0	0.00	0.0000
78.0	2.73	0.18	100.0	0.00	0.0000
85.3	2.50	0.18	100.0	0.00	0.0000
93.4	2.28	0.18	100.0	0.00	0.0000
102	2.09	0.20	100.0	0.00	0.0000
112	1.90	0.20	100.0	0.00	0.0000
122	1.75	0.23	100.0	0.00	0.0000
134	1.59	0.26	100.0	0.00	0.0000
146	1.46	0.28	100.0	0.00	0.0000
160	1.33	0.31	99.5	0.52	0.0370
175	1.22	0.36	98.4	1.04	0.0691
191	1.12	0.46	96.4	2.07	0.1295
209	1.02	0.59	93.8	2.59	0.1439
229	0.932	0.85	88.6	5.18	0.2591
251	0.850	0.95	86.5	2.07	0.0942
274	0.779	1.10	83.4	3.11	0.1352
300	0.711	1.23	80.8	2.59	0.0996
328	0.650	1.33	78.8	2.07	0.0740
359	0.594	1.46	76.2	2.59	0.0836
393	0.543	1.61	73.1	3.11	0.0914
430	0.496	1.77	69.9	3.11	0.0840
470	0.454	1.92	66.8	3.11	0.0777
514	0.415	2.07	63.7	3.11	0.0707
563	0.379	2.25	60.1	3.63	0.0740
615	0.347	2.41	57.0	3.11	0.0598
673	0.317	2.56	53.9	3.11	0.0536
736	0.290	2.71	50.8	3.11	0.0493
806	0.265	2.89	47.2	3.63	0.0518
881	0.242	3.05	44.0	3.11	0.0415
964	0.221	3.18	41.5	2.59	0.0312
1050	0.203	3.30	38.9	2.59	0.0301
1150	0.186	3.43	36.3	2.59	0.0259
1260	0.169	3.56	33.7	2.59	0.0236
1380	0.155	3.66	31.6	2.07	0.0173
1510	0.141	3.74	30.1	1.55	0.0120
1650	0.129	3.82	28.5	1.55	0.0111



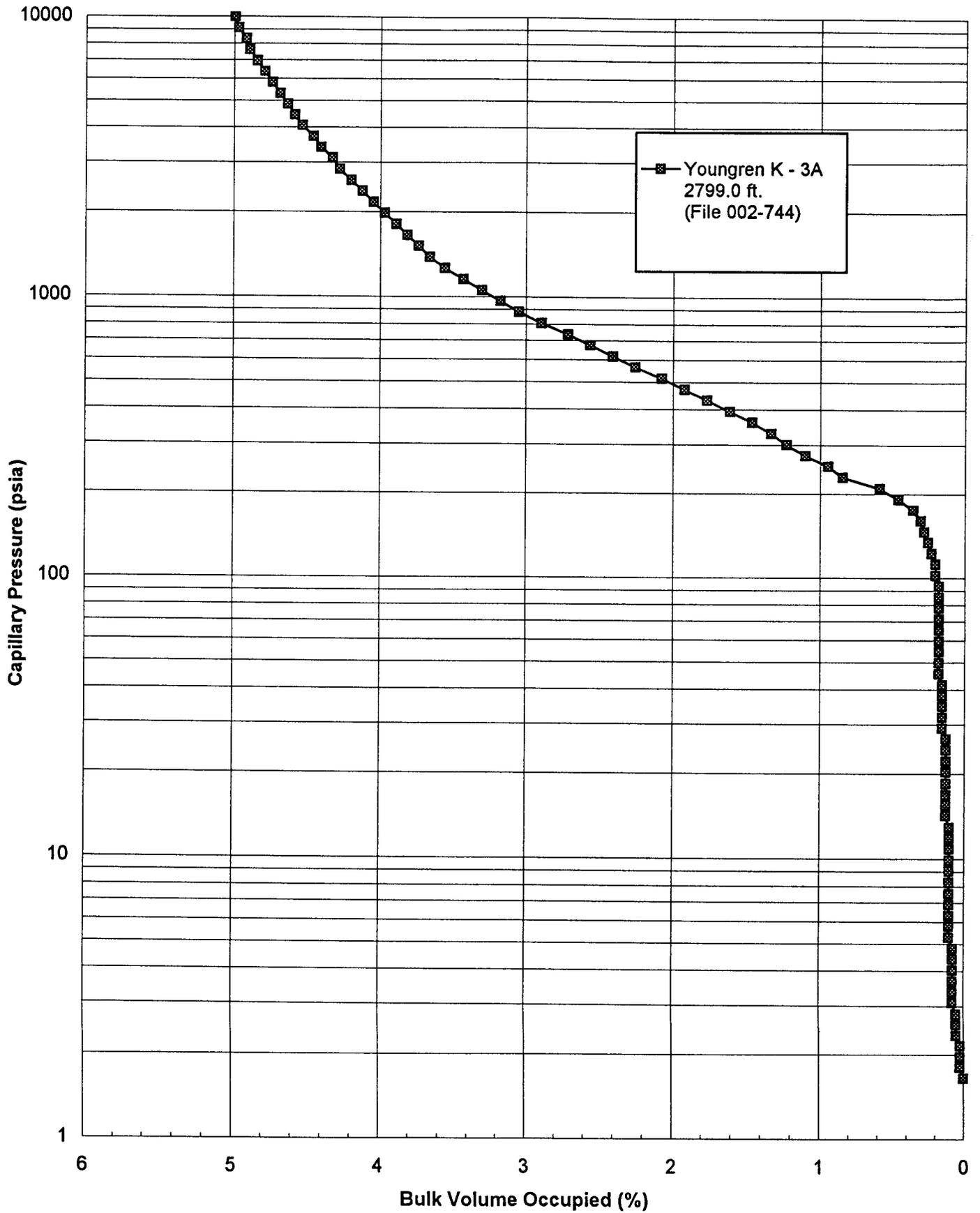
Mercury Injection Capillary Pressure

Youngren K - 3A : 2799.0 feet

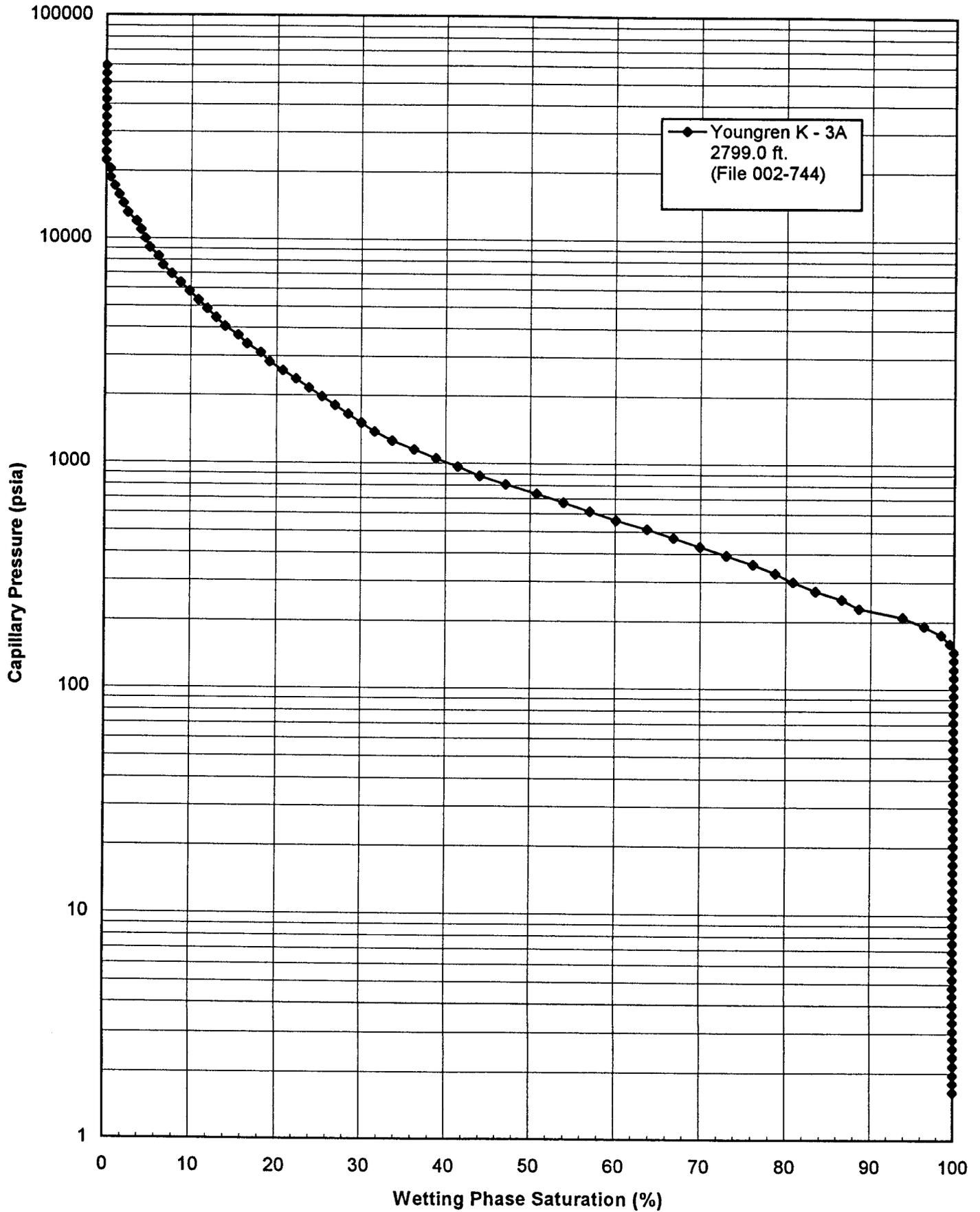
File 002-744

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1810	0.1179	3.89	26.9	1.55	0.0097
1980	0.1077	3.97	25.4	1.55	0.0091
2160	0.0988	4.05	23.8	1.55	0.0086
2370	0.0900	4.12	22.3	1.55	0.0074
2590	0.0824	4.20	20.7	1.55	0.0071
2830	0.0754	4.28	19.2	1.55	0.0065
3100	0.0688	4.33	18.1	1.04	0.0038
3390	0.0629	4.40	16.6	1.55	0.0054
3710	0.0575	4.46	15.5	1.04	0.0032
4060	0.0525	4.53	14.0	1.55	0.0044
4440	0.0480	4.58	13.0	1.04	0.0027
4850	0.0440	4.64	11.9	1.04	0.0025
5310	0.0402	4.69	10.9	1.04	0.0023
5810	0.0367	4.74	9.8	1.04	0.0021
6360	0.0335	4.79	8.8	1.04	0.0019
6950	0.0307	4.84	7.8	1.04	0.0018
7610	0.0280	4.89	6.7	1.04	0.0016
8320	0.0256	4.92	6.2	0.52	0.0007
9100	0.0234	4.97	5.2	1.04	0.0013
9960	0.0214	4.99	4.7	0.52	0.0006
10900	0.0196	5.02	4.1	0.52	0.0006
11900	0.0179	5.04	3.6	0.52	0.0005
13000	0.0164	5.10	2.6	1.04	0.0009
14300	0.0149	5.12	2.1	0.52	0.0004
15600	0.0137	5.15	1.6	0.52	0.0004
17100	0.0125	5.17	1.0	0.52	0.0003
18700	0.0114	5.20	0.5	0.52	0.0003
20400	0.0105	5.20	0.5	0.00	0.0000
22300	0.0096	5.22	0.0	0.52	0.0003
24400	0.0087	5.22	0.0	0.00	0.0000
26700	0.0080	5.22	0.0	0.00	0.0000
29300	0.0073	5.22	0.0	0.00	0.0000
32000	0.0067	5.22	0.0	0.00	0.0000
35000	0.0061	5.22	0.0	0.00	0.0000
38300	0.0056	5.22	0.0	0.00	0.0000
41900	0.0051	5.22	0.0	0.00	0.0000
45800	0.0047	5.22	0.0	0.00	0.0000
50100	0.0043	5.22	0.0	0.00	0.0000
54800	0.0039	5.22	0.0	0.00	0.0000
59500	0.0036	5.22	0.0	0.00	0.0000

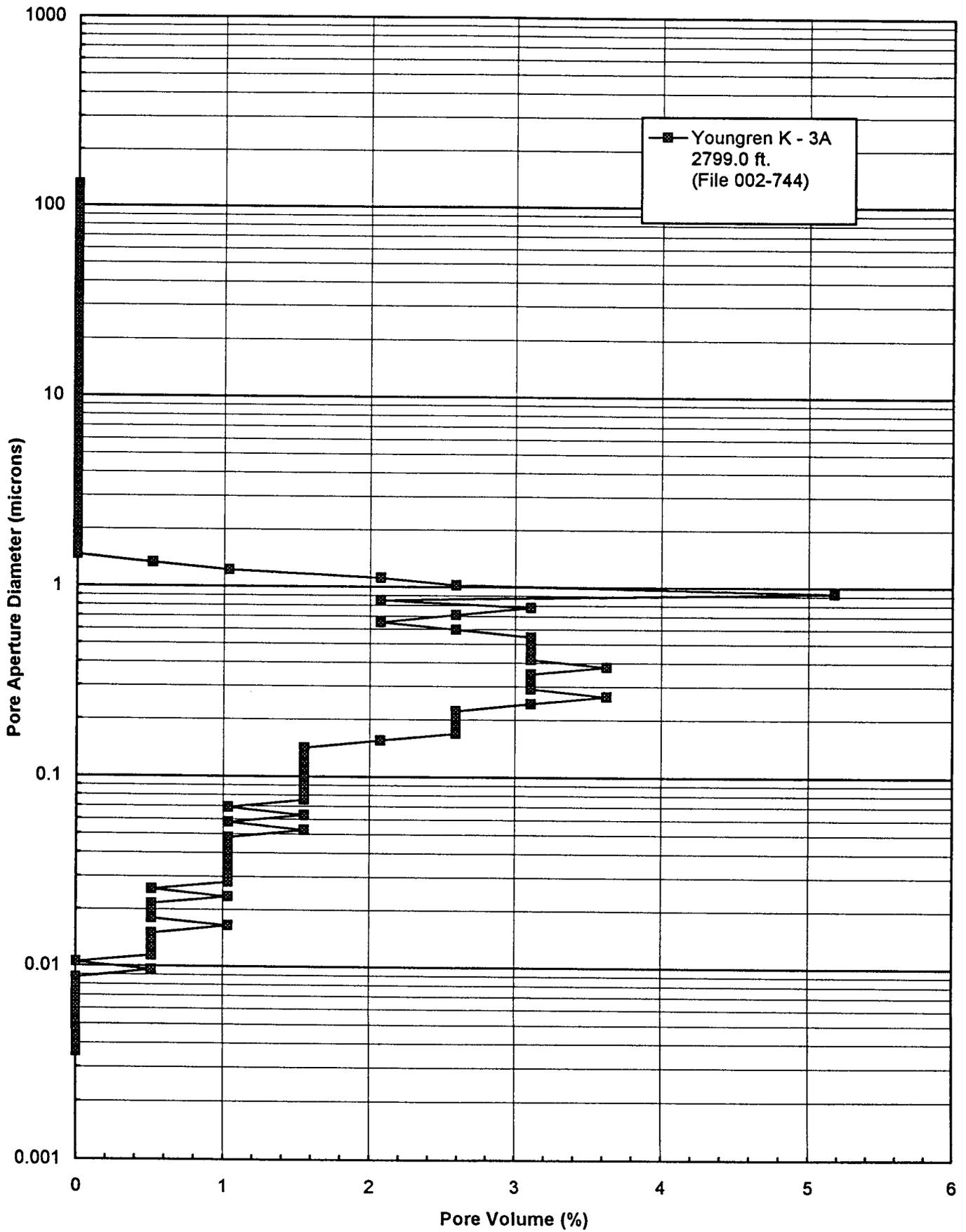
Mercury Injection Capillary Pressure (Bulk Volume)



Mercury Injection Capillary Pressure (Pore Volume)



Pore Aperture Size Distribution



Mercury Injection Capillary Pressure

Youngren K - 3A : 2807.0 feet

File 002-741

Sample Information	
Bulk Volume = 12.4451 cc	Porosity = 10.1% (mercury)
Pore Volume = 1.2505 cc	Permeability = 0.469 md (mercury)
Closure = 0.24%BV @ 59.6 psia	Median Pore Aperture = 0.719 microns

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1.64	130	0.02	100.0	0.00	0.0000
1.80	119	0.02	100.0	0.00	0.0000
1.96	109	0.05	100.0	0.00	0.0000
2.15	99.2	0.05	100.0	0.00	0.0000
2.35	90.8	0.07	100.0	0.00	0.0000
2.57	83.0	0.07	100.0	0.00	0.0000
2.81	75.9	0.07	100.0	0.00	0.0000
3.08	69.3	0.07	100.0	0.00	0.0000
3.37	63.3	0.10	100.0	0.00	0.0000
3.68	58.0	0.10	100.0	0.00	0.0000
4.03	52.9	0.10	100.0	0.00	0.0000
4.41	48.4	0.10	100.0	0.00	0.0000
4.82	44.3	0.10	100.0	0.00	0.0000
5.27	40.5	0.10	100.0	0.00	0.0000
5.77	37.0	0.10	100.0	0.00	0.0000
6.31	33.8	0.10	100.0	0.00	0.0000
6.90	30.9	0.10	100.0	0.00	0.0000
7.55	28.3	0.10	100.0	0.00	0.0000
8.26	25.8	0.12	100.0	0.00	0.0000
9.04	23.6	0.12	100.0	0.00	0.0000
9.89	21.6	0.12	100.0	0.00	0.0000
10.8	19.8	0.12	100.0	0.00	0.0000
11.8	18.1	0.15	100.0	0.00	0.0000
12.9	16.5	0.15	100.0	0.00	0.0000
14.2	15.0	0.15	100.0	0.00	0.0000
15.5	13.8	0.15	100.0	0.00	0.0000
16.9	12.6	0.15	100.0	0.00	0.0000
18.5	11.5	0.15	100.0	0.00	0.0000
20.3	10.5	0.17	100.0	0.00	0.0000
22.2	9.61	0.17	100.0	0.00	0.0000
24.3	8.78	0.17	100.0	0.00	0.0000
26.6	8.02	0.17	100.0	0.00	0.0000
29.0	7.36	0.17	100.0	0.00	0.0000
31.8	6.71	0.19	100.0	0.00	0.0000
34.8	6.13	0.19	100.0	0.00	0.0000
38.0	5.61	0.19	100.0	0.00	0.0000

Mercury Injection Capillary Pressure

Youngren K - 3A : 2807.0 feet
File 002-741

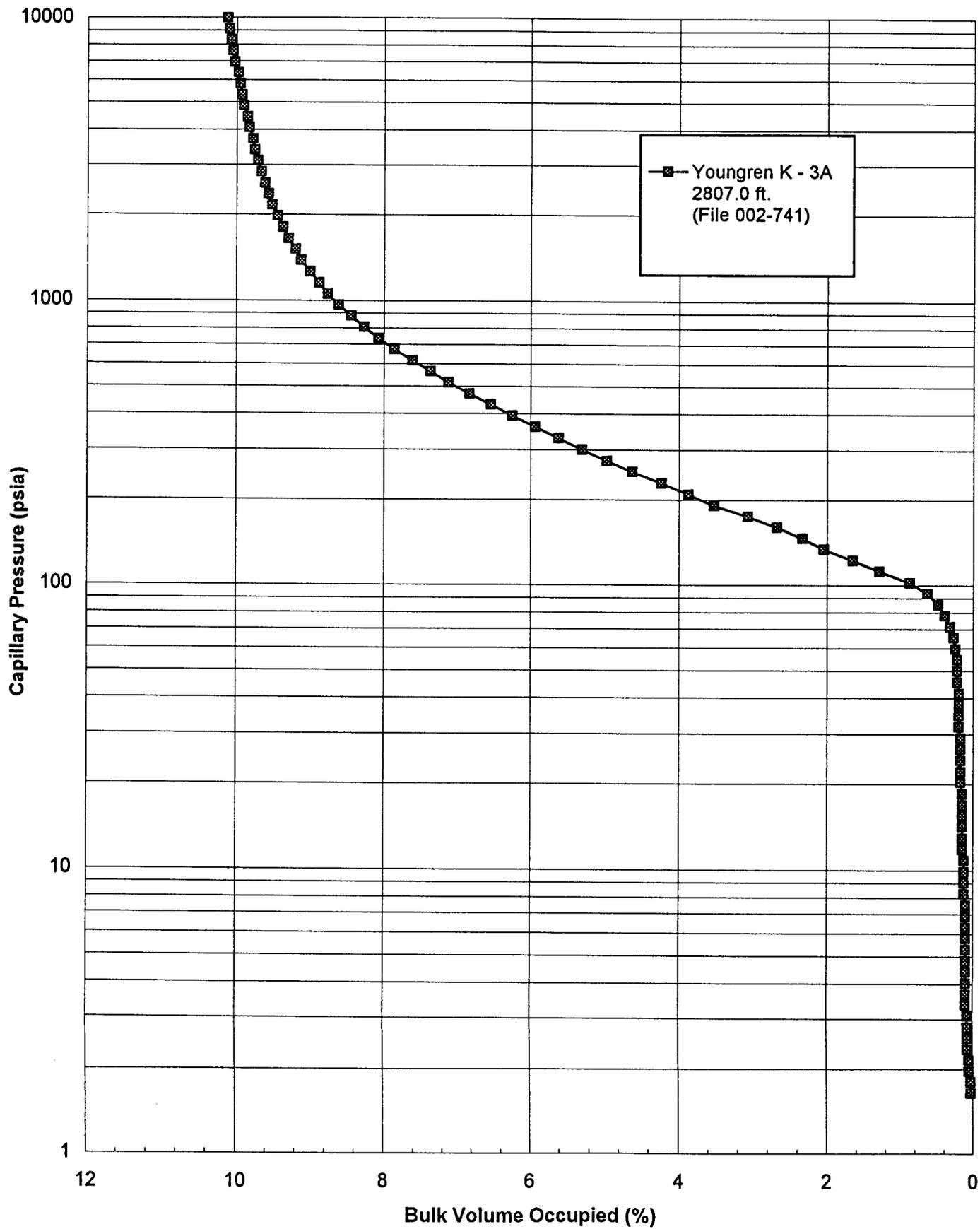
Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
41.6	5.13	0.19	100.0	0.00	0.0000
45.5	4.69	0.22	100.0	0.00	0.0000
49.8	4.28	0.22	100.0	0.00	0.0000
54.5	3.91	0.22	100.0	0.00	0.0000
59.6	3.58	0.24	100.0	0.00	0.0000
65.2	3.27	0.27	99.8	0.24	0.0432
71.3	2.99	0.32	99.3	0.48	0.0794
78.0	2.73	0.39	98.5	0.73	0.1084
85.3	2.50	0.49	97.6	0.97	0.1327
93.4	2.28	0.63	96.1	1.45	0.1794
102	2.09	0.88	93.7	2.42	0.2815
112	1.90	1.29	89.6	4.12	0.4116
122	1.75	1.65	86.0	3.63	0.3632
134	1.59	2.04	82.1	3.87	0.3228
146	1.46	2.34	79.2	2.91	0.2421
160	1.33	2.68	75.8	3.39	0.2421
175	1.22	3.07	71.9	3.87	0.2583
191	1.12	3.53	67.3	4.60	0.2875
209	1.02	3.87	63.9	3.39	0.1883
229	0.932	4.23	60.3	3.63	0.1816
251	0.850	4.62	56.4	3.87	0.1761
274	0.779	4.96	53.0	3.39	0.1474
300	0.711	5.30	49.6	3.39	0.1304
328	0.650	5.62	46.5	3.15	0.1124
359	0.594	5.94	43.3	3.15	0.1015
393	0.543	6.25	40.2	3.15	0.0926
430	0.496	6.54	37.3	2.91	0.0785
470	0.454	6.84	34.4	2.91	0.0726
514	0.415	7.13	31.5	2.91	0.0660
563	0.379	7.37	29.1	2.42	0.0494
615	0.347	7.62	26.6	2.42	0.0466
673	0.317	7.86	24.2	2.42	0.0417
736	0.290	8.08	22.0	2.18	0.0346
806	0.265	8.27	20.1	1.94	0.0277
881	0.242	8.44	18.4	1.69	0.0226
964	0.221	8.61	16.7	1.69	0.0204
1050	0.203	8.76	15.3	1.45	0.0169
1150	0.186	8.88	14.0	1.21	0.0121
1260	0.169	9.00	12.8	1.21	0.0110
1380	0.155	9.12	11.6	1.21	0.0101
1510	0.141	9.20	10.9	0.73	0.0056
1650	0.129	9.29	9.9	0.97	0.0069

Mercury Injection Capillary Pressure

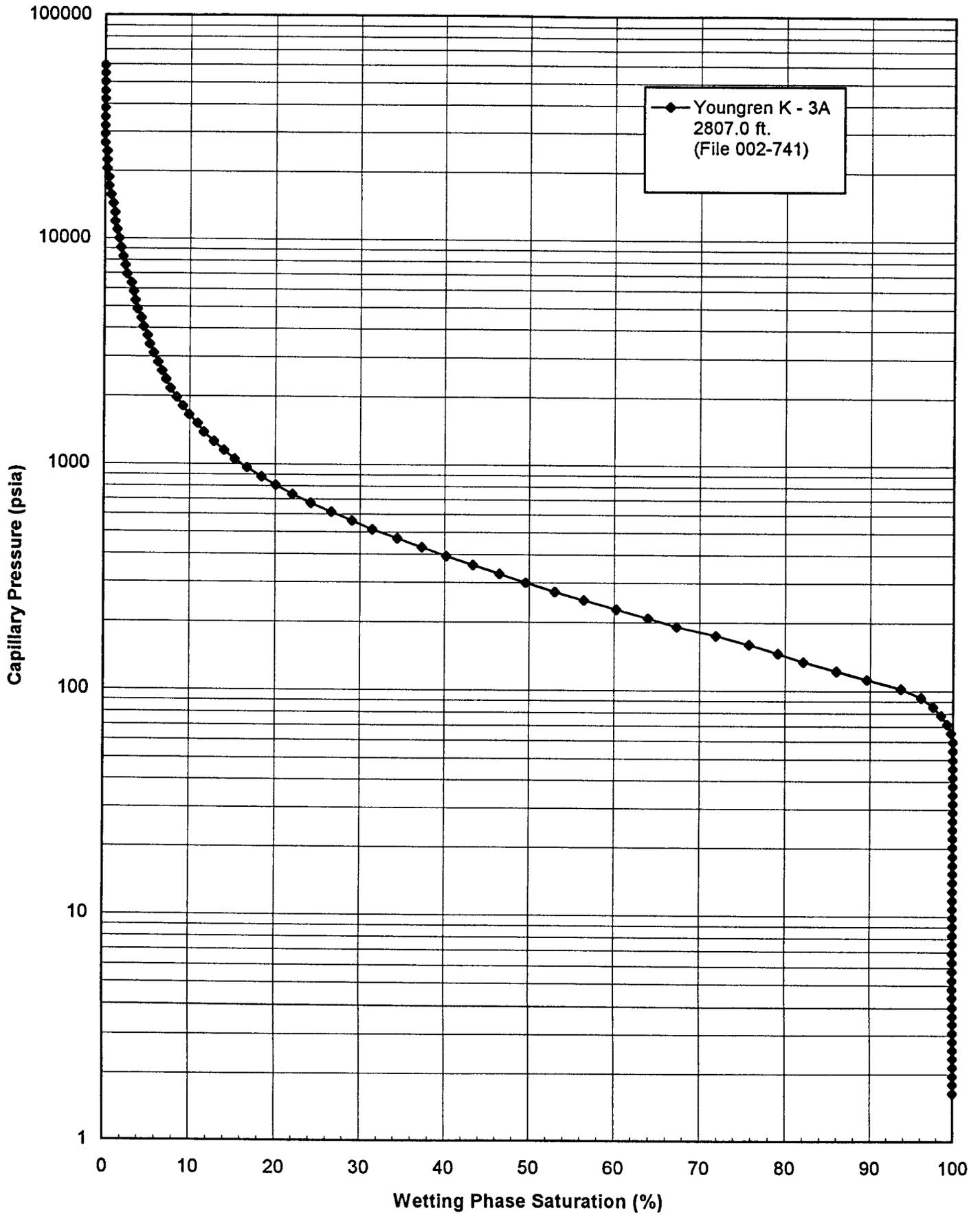
Youngren K - 3A : 2807.0 feet
File 002-741

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1810	0.1179	9.37	9.2	0.73	0.0045
1980	0.1077	9.44	8.5	0.73	0.0043
2160	0.0988	9.51	7.7	0.73	0.0040
2370	0.0900	9.56	7.3	0.48	0.0023
2590	0.0824	9.61	6.8	0.48	0.0022
2830	0.0754	9.66	6.3	0.48	0.0020
3100	0.0688	9.71	5.8	0.48	0.0018
3390	0.0629	9.76	5.3	0.48	0.0017
3710	0.0575	9.78	5.1	0.24	0.0008
4060	0.0525	9.83	4.6	0.48	0.0014
4440	0.0480	9.85	4.4	0.24	0.0006
4850	0.0440	9.90	3.9	0.48	0.0012
5310	0.0402	9.93	3.6	0.24	0.0005
5810	0.0367	9.95	3.4	0.24	0.0005
6360	0.0335	9.97	3.1	0.24	0.0004
6950	0.0307	10.02	2.7	0.48	0.0008
7610	0.0280	10.05	2.4	0.24	0.0004
8320	0.0256	10.07	2.2	0.24	0.0003
9100	0.0234	10.10	1.9	0.24	0.0003
9960	0.0214	10.12	1.7	0.24	0.0003
10900	0.0196	10.15	1.5	0.24	0.0003
11900	0.0179	10.17	1.2	0.24	0.0002
13000	0.0164	10.17	1.2	0.00	0.0000
14300	0.0149	10.19	1.0	0.24	0.0002
15600	0.0137	10.22	0.7	0.24	0.0002
17100	0.0125	10.24	0.5	0.24	0.0002
18700	0.0114	10.24	0.5	0.00	0.0000
20400	0.0105	10.27	0.2	0.24	0.0001
22300	0.0096	10.27	0.2	0.00	0.0000
24400	0.0087	10.27	0.2	0.00	0.0000
26700	0.0080	10.29	0.0	0.24	0.0001
29300	0.0073	10.29	0.0	0.00	0.0000
32000	0.0067	10.29	0.0	0.00	0.0000
35000	0.0061	10.29	0.0	0.00	0.0000
38300	0.0056	10.29	0.0	0.00	0.0000
41900	0.0051	10.29	0.0	0.00	0.0000
45800	0.0047	10.29	0.0	0.00	0.0000
50100	0.0043	10.29	0.0	0.00	0.0000
54800	0.0039	10.29	0.0	0.00	0.0000
59500	0.0036	10.29	0.0	0.00	0.0000

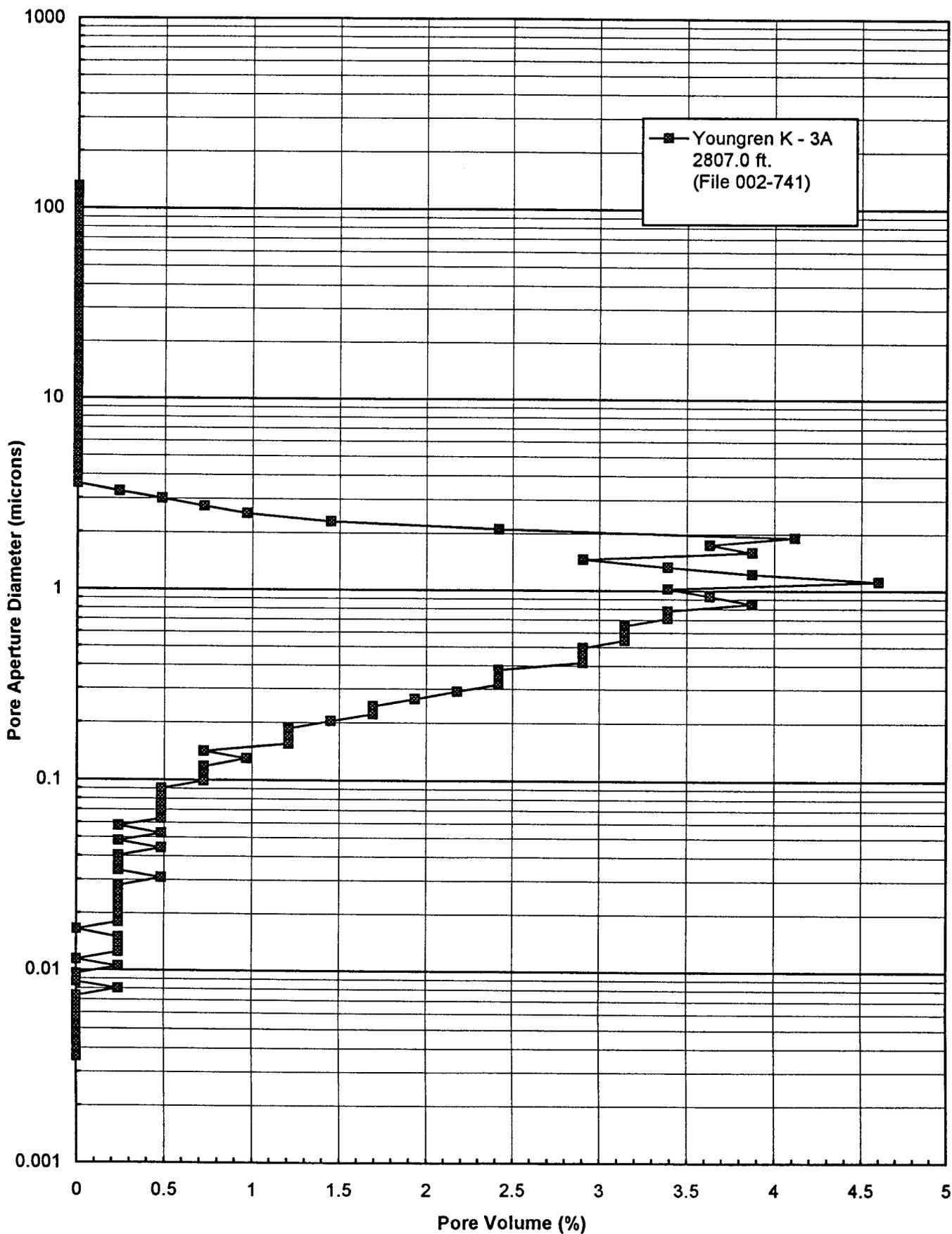
Mercury Injection Capillary Pressure (Bulk Volume)



Mercury Injection Capillary Pressure (Pore Volume)



Pore Aperture Size Distribution



Mercury Injection Capillary Pressure

Youngren K - 3A : 2822.0 feet
File 002-756

Sample Information	
Bulk Volume = 12.5784 cc	Porosity = 4.26% (mercury)
Pore Volume = 0.5362 cc	Permeability = 0.0004 md (mercury)
Closure = 0.76%BV@ 3710 psia	Median Pore Aperture = 0.0189 microns

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1.64	130	0.02	100.0	0.00	0.0000
1.80	119	0.03	100.0	0.00	0.0000
1.96	109	0.04	100.0	0.00	0.0000
2.15	99.2	0.04	100.0	0.00	0.0000
2.35	90.8	0.05	100.0	0.00	0.0000
2.57	83.0	0.06	100.0	0.00	0.0000
2.81	75.9	0.08	100.0	0.00	0.0000
3.08	69.3	0.09	100.0	0.00	0.0000
3.37	63.3	0.10	100.0	0.00	0.0000
3.68	58.0	0.11	100.0	0.00	0.0000
4.03	52.9	0.13	100.0	0.00	0.0000
4.41	48.4	0.13	100.0	0.00	0.0000
4.82	44.3	0.14	100.0	0.00	0.0000
5.27	40.5	0.14	100.0	0.00	0.0000
5.77	37.0	0.14	100.0	0.00	0.0000
6.31	33.8	0.15	100.0	0.00	0.0000
6.90	30.9	0.15	100.0	0.00	0.0000
7.55	28.3	0.15	100.0	0.00	0.0000
8.26	25.8	0.16	100.0	0.00	0.0000
9.04	23.6	0.16	100.0	0.00	0.0000
9.89	21.6	0.16	100.0	0.00	0.0000
10.8	19.8	0.17	100.0	0.00	0.0000
11.8	18.1	0.17	100.0	0.00	0.0000
12.9	16.5	0.18	100.0	0.00	0.0000
14.2	15.0	0.19	100.0	0.00	0.0000
15.5	13.8	0.19	100.0	0.00	0.0000
16.9	12.6	0.20	100.0	0.00	0.0000
18.5	11.5	0.22	100.0	0.00	0.0000
20.3	10.5	0.23	100.0	0.00	0.0000
22.2	9.61	0.24	100.0	0.00	0.0000
24.3	8.78	0.25	100.0	0.00	0.0000
26.6	8.02	0.25	100.0	0.00	0.0000
29.0	7.36	0.26	100.0	0.00	0.0000
31.8	6.71	0.27	100.0	0.00	0.0000
34.8	6.13	0.27	100.0	0.00	0.0000
38.0	5.61	0.28	100.0	0.00	0.0000

Mercury Injection Capillary Pressure

Youngren K - 3A : 2822.0 feet
File 002-756

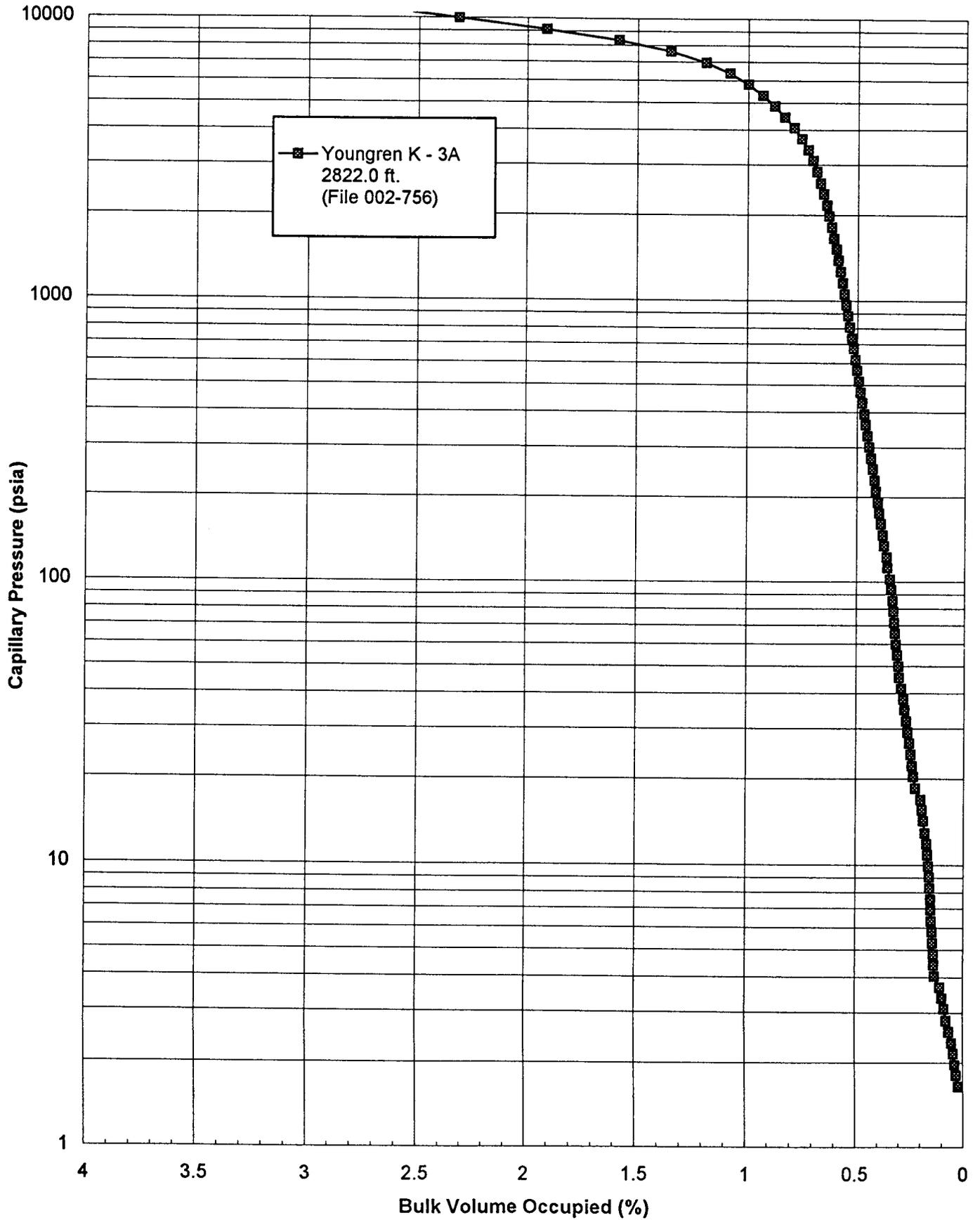
Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
41.6	5.13	0.29	100.0	0.00	0.0000
45.5	4.69	0.30	100.0	0.00	0.0000
49.8	4.28	0.30	100.0	0.00	0.0000
54.5	3.91	0.31	100.0	0.00	0.0000
59.6	3.58	0.31	100.0	0.00	0.0000
65.2	3.27	0.32	100.0	0.00	0.0000
71.3	2.99	0.32	100.0	0.00	0.0000
78.0	2.73	0.33	100.0	0.00	0.0000
85.3	2.50	0.33	100.0	0.00	0.0000
93.4	2.28	0.34	100.0	0.00	0.0000
102	2.09	0.34	100.0	0.00	0.0000
112	1.90	0.36	100.0	0.00	0.0000
122	1.75	0.36	100.0	0.00	0.0000
134	1.59	0.37	100.0	0.00	0.0000
146	1.46	0.38	100.0	0.00	0.0000
160	1.33	0.39	100.0	0.00	0.0000
175	1.22	0.39	100.0	0.00	0.0000
191	1.12	0.40	100.0	0.00	0.0000
209	1.02	0.41	100.0	0.00	0.0000
229	0.932	0.42	100.0	0.00	0.0000
251	0.850	0.43	100.0	0.00	0.0000
274	0.779	0.43	100.0	0.00	0.0000
300	0.711	0.44	100.0	0.00	0.0000
328	0.650	0.45	100.0	0.00	0.0000
359	0.594	0.46	100.0	0.00	0.0000
393	0.543	0.47	100.0	0.00	0.0000
430	0.496	0.47	100.0	0.00	0.0000
470	0.454	0.48	100.0	0.00	0.0000
514	0.415	0.49	100.0	0.00	0.0000
563	0.379	0.50	100.0	0.00	0.0000
615	0.347	0.51	100.0	0.00	0.0000
673	0.317	0.52	100.0	0.00	0.0000
736	0.290	0.52	100.0	0.00	0.0000
806	0.265	0.53	100.0	0.00	0.0000
881	0.242	0.54	100.0	0.00	0.0000
964	0.221	0.55	100.0	0.00	0.0000
1050	0.203	0.56	100.0	0.00	0.0000
1150	0.186	0.57	100.0	0.00	0.0000
1260	0.169	0.58	100.0	0.00	0.0000
1380	0.155	0.59	100.0	0.00	0.0000
1510	0.141	0.60	100.0	0.00	0.0000
1650	0.129	0.61	100.0	0.00	0.0000

Mercury Injection Capillary Pressure

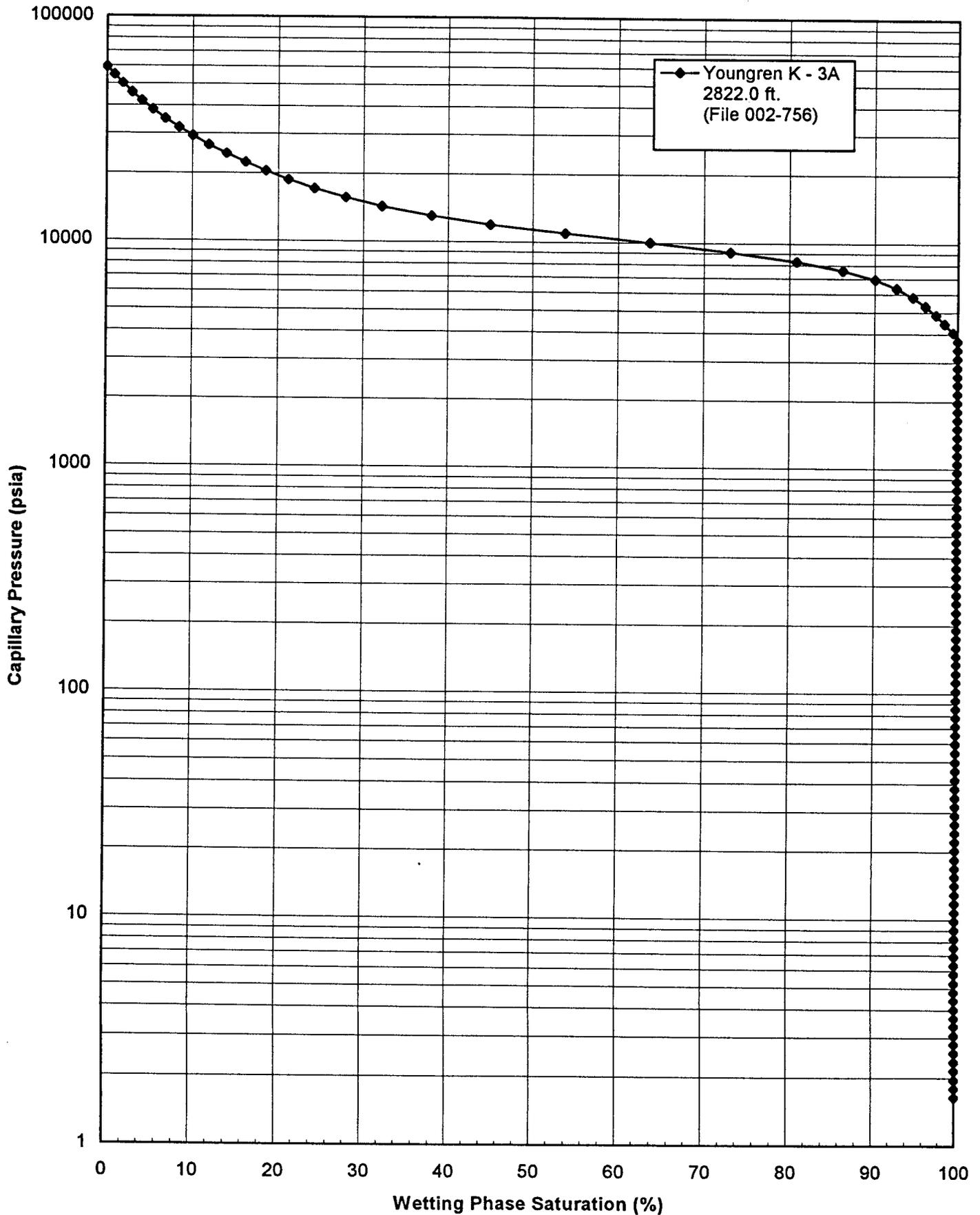
Youngren K - 3A : 2822.0 feet
File 002-756

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1810	0.1179	0.62	100.0	0.00	0.0000
1980	0.1077	0.63	100.0	0.00	0.0000
2160	0.0988	0.64	100.0	0.00	0.0000
2370	0.0900	0.65	100.0	0.00	0.0000
2590	0.0824	0.67	100.0	0.00	0.0000
2830	0.0754	0.69	100.0	0.00	0.0000
3100	0.0688	0.70	100.0	0.00	0.0000
3390	0.0629	0.73	100.0	0.00	0.0000
3710	0.0575	0.76	100.0	0.00	0.0000
4060	0.0525	0.79	99.4	0.59	0.0017
4440	0.0480	0.83	98.4	0.99	0.0026
4850	0.0440	0.88	97.4	1.04	0.0025
5310	0.0402	0.93	96.1	1.28	0.0028
5810	0.0367	1.00	94.6	1.52	0.0030
6360	0.0335	1.08	92.6	1.95	0.0035
6950	0.0307	1.19	90.1	2.55	0.0043
7610	0.0280	1.35	86.3	3.81	0.0058
8320	0.0256	1.58	80.8	5.47	0.0077
9100	0.0234	1.91	73.1	7.67	0.0098
9960	0.0214	2.31	63.7	9.46	0.0110
10900	0.0196	2.74	53.8	9.88	0.0105
11900	0.0179	3.11	45.0	8.79	0.0088
13000	0.0164	3.41	38.0	6.97	0.0063
14300	0.0149	3.66	32.2	5.83	0.0045
15600	0.0137	3.84	27.9	4.25	0.0033
17100	0.0125	3.99	24.3	3.66	0.0024
18700	0.0114	4.12	21.2	3.08	0.0019
20400	0.0105	4.24	18.6	2.62	0.0015
22300	0.0096	4.34	16.2	2.40	0.0013
24400	0.0087	4.43	13.9	2.23	0.0011
26700	0.0080	4.52	11.9	2.03	0.0009
29300	0.0073	4.60	10.0	1.90	0.0007
32000	0.0067	4.67	8.4	1.61	0.0006
35000	0.0061	4.74	6.8	1.60	0.0005
38300	0.0056	4.80	5.4	1.43	0.0004
41900	0.0051	4.85	4.1	1.29	0.0004
45800	0.0047	4.90	2.9	1.16	0.0003
50100	0.0043	4.95	1.9	1.05	0.0002
54800	0.0039	4.99	0.9	1.01	0.0002
59500	0.0036	5.03	0.0	0.87	0.0002

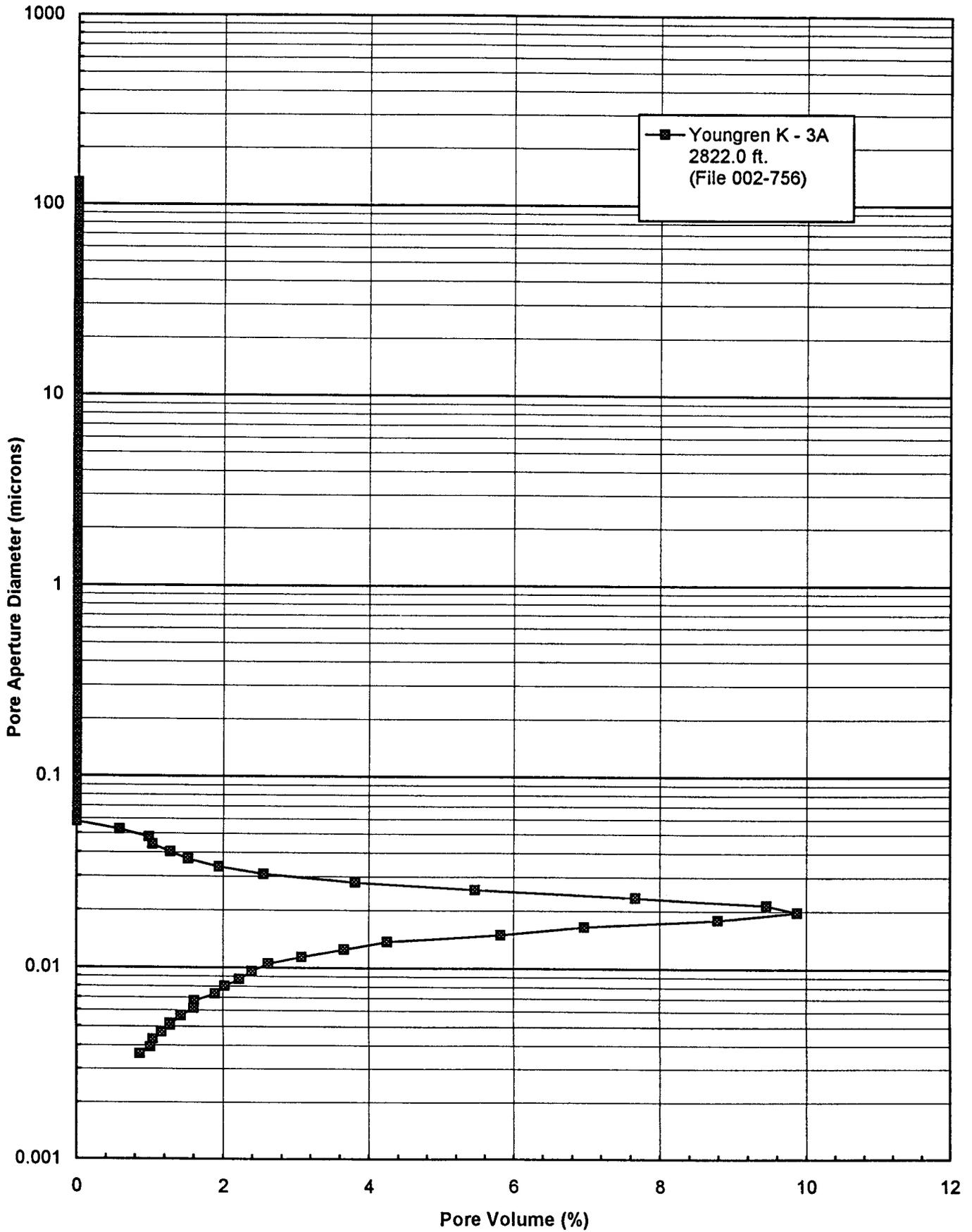
Mercury Injection Capillary Pressure (Bulk Volume)



Mercury Injection Capillary Pressure (Pore Volume)



Pore Aperture Size Distribution



Mercury Injection Capillary Pressure

Youngren K - 3A : 2845.0 feet
File 002-742

Sample Information	
Bulk Volume = 12.5375 cc	Porosity = 8.61% (mercury)
Pore Volume = 1.0790 cc	Permeability = 1.58 md (mercury)
Closure = 0.22%BV @ 41.6 psia	Median Pore Aperture = 1.58 microns

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1.64	130	0.00	100.0	0.00	0.0000
1.80	119	0.02	100.0	0.00	0.0000
1.96	109	0.02	100.0	0.00	0.0000
2.15	99.2	0.02	100.0	0.00	0.0000
2.35	90.8	0.05	100.0	0.00	0.0000
2.57	83.0	0.05	100.0	0.00	0.0000
2.81	75.9	0.05	100.0	0.00	0.0000
3.08	69.3	0.05	100.0	0.00	0.0000
3.37	63.3	0.05	100.0	0.00	0.0000
3.68	58.0	0.07	100.0	0.00	0.0000
4.03	52.9	0.07	100.0	0.00	0.0000
4.41	48.4	0.07	100.0	0.00	0.0000
4.82	44.3	0.07	100.0	0.00	0.0000
5.27	40.5	0.07	100.0	0.00	0.0000
5.77	37.0	0.10	100.0	0.00	0.0000
6.31	33.8	0.10	100.0	0.00	0.0000
6.90	30.9	0.10	100.0	0.00	0.0000
7.55	28.3	0.10	100.0	0.00	0.0000
8.26	25.8	0.10	100.0	0.00	0.0000
9.04	23.6	0.10	100.0	0.00	0.0000
9.89	21.6	0.10	100.0	0.00	0.0000
10.8	19.8	0.10	100.0	0.00	0.0000
11.8	18.1	0.10	100.0	0.00	0.0000
12.9	16.5	0.12	100.0	0.00	0.0000
14.2	15.0	0.12	100.0	0.00	0.0000
15.5	13.8	0.12	100.0	0.00	0.0000
16.9	12.6	0.12	100.0	0.00	0.0000
18.5	11.5	0.12	100.0	0.00	0.0000
20.3	10.5	0.12	100.0	0.00	0.0000
22.2	9.61	0.12	100.0	0.00	0.0000
24.3	8.78	0.15	100.0	0.00	0.0000
26.6	8.02	0.15	100.0	0.00	0.0000
29.0	7.36	0.15	100.0	0.00	0.0000
31.8	6.71	0.17	100.0	0.00	0.0000
34.8	6.13	0.17	100.0	0.00	0.0000
38.0	5.61	0.20	100.0	0.00	0.0000

Mercury Injection Capillary Pressure

Youngren K - 3A : 2845.0 feet

File 002-742

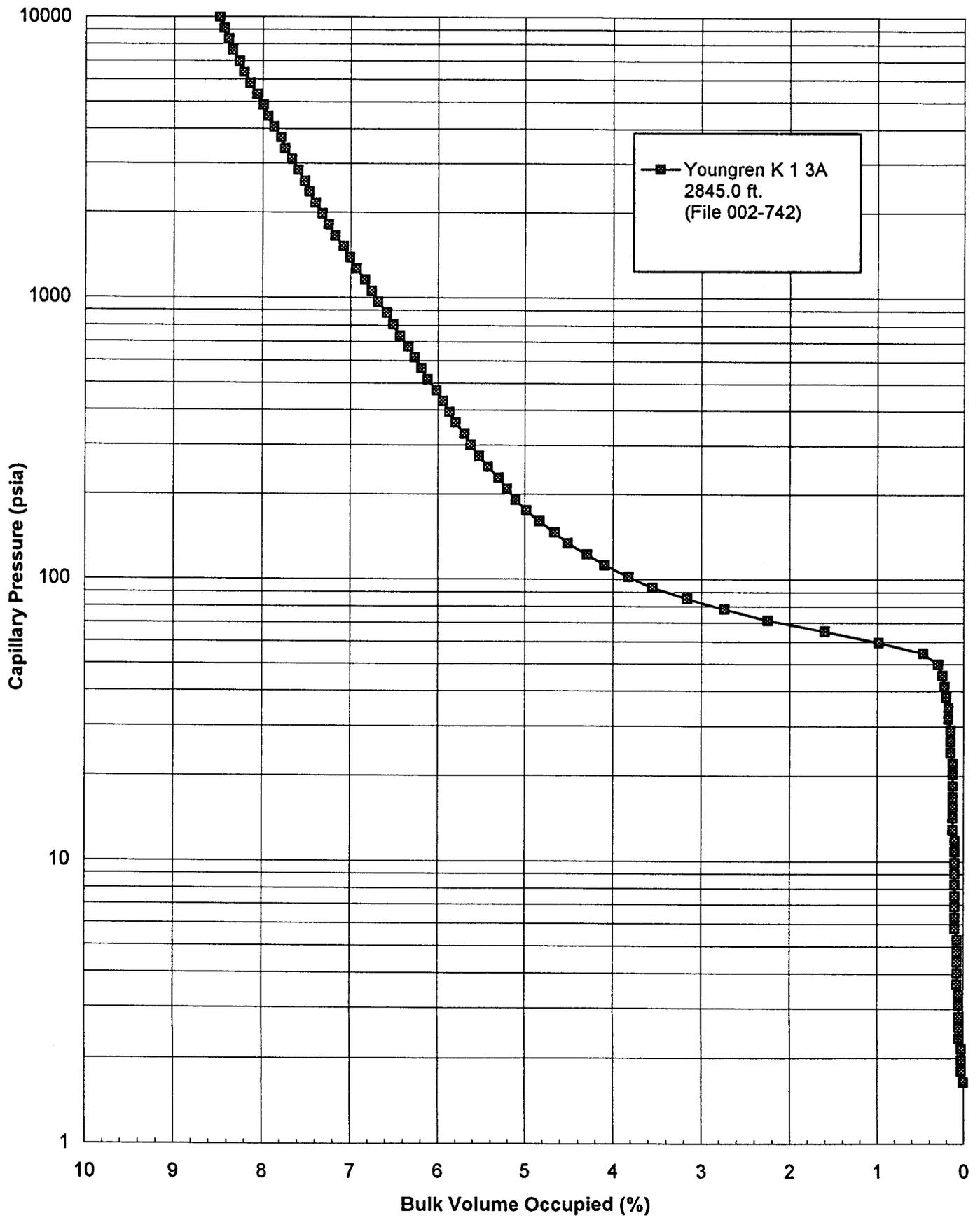
Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
41.6	5.13	0.22	100.0	0.00	0.0000
45.5	4.69	0.25	99.7	0.29	0.0735
49.8	4.28	0.30	99.1	0.57	0.1333
54.5	3.91	0.47	97.1	2.01	0.4268
59.6	3.58	0.99	91.1	6.02	1.1798
65.2	3.27	1.60	84.0	7.16	1.2792
71.3	2.99	2.24	76.5	7.45	1.2213
78.0	2.73	2.74	70.8	5.73	0.8553
85.3	2.50	3.16	65.9	4.87	0.6673
93.4	2.28	3.55	61.3	4.58	0.5660
102	2.09	3.82	58.2	3.15	0.3665
112	1.90	4.09	55.0	3.15	0.3152
122	1.75	4.29	52.7	2.29	0.2292
134	1.59	4.51	50.1	2.58	0.2149
146	1.46	4.66	48.4	1.72	0.1433
160	1.33	4.83	46.4	2.01	0.1433
175	1.22	4.98	44.7	1.72	0.1146
191	1.12	5.10	43.3	1.43	0.0895
209	1.02	5.20	42.1	1.15	0.0637
229	0.932	5.30	41.0	1.15	0.0573
251	0.850	5.42	39.5	1.43	0.0651
274	0.779	5.52	38.4	1.15	0.0498
300	0.711	5.62	37.2	1.15	0.0441
328	0.650	5.70	36.4	0.86	0.0307
359	0.594	5.79	35.2	1.15	0.0370
393	0.543	5.87	34.4	0.86	0.0253
430	0.496	5.94	33.5	0.86	0.0232
470	0.454	6.02	32.7	0.86	0.0215
514	0.415	6.12	31.5	1.15	0.0260
563	0.379	6.19	30.7	0.86	0.0175
615	0.347	6.26	29.8	0.86	0.0165
673	0.317	6.34	28.9	0.86	0.0148
736	0.290	6.44	27.8	1.15	0.0182
806	0.265	6.51	26.9	0.86	0.0123
881	0.242	6.58	26.1	0.86	0.0115
964	0.221	6.68	24.9	1.15	0.0138
1050	0.203	6.76	24.1	0.86	0.0100
1150	0.186	6.83	23.2	0.86	0.0086
1260	0.169	6.93	22.1	1.15	0.0104
1380	0.155	7.00	21.2	0.86	0.0072
1510	0.141	7.08	20.3	0.86	0.0066
1650	0.129	7.18	19.2	1.15	0.0082

Mercury Injection Capillary Pressure

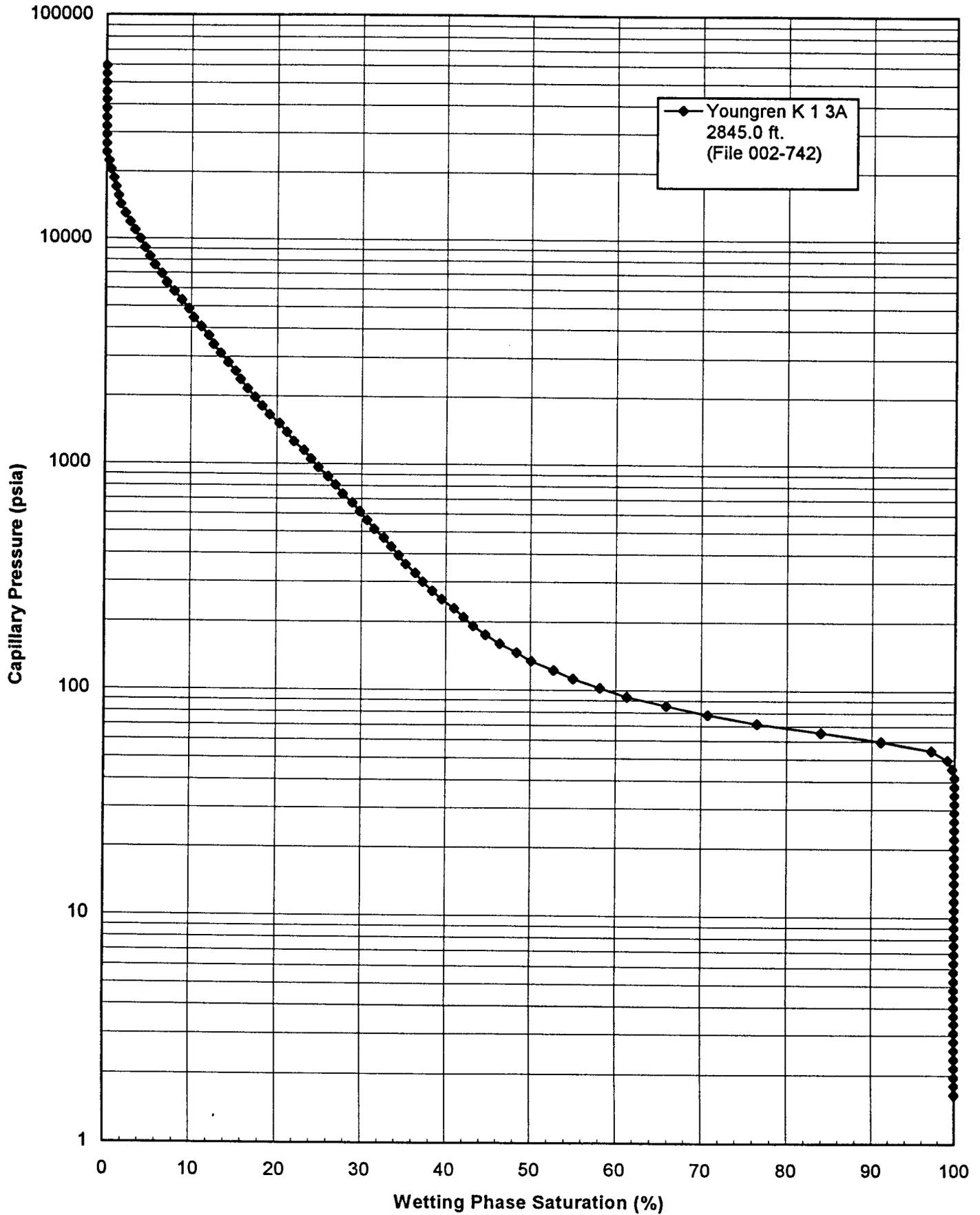
Youngren K - 3A : 2845.0 feet
File 002-742

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1810	0.1179	7.25	18.3	0.86	0.0054
1980	0.1077	7.32	17.5	0.86	0.0051
2160	0.0988	7.40	16.6	0.86	0.0048
2370	0.0900	7.47	15.8	0.86	0.0041
2590	0.0824	7.52	15.2	0.57	0.0026
2830	0.0754	7.59	14.3	0.86	0.0036
3100	0.0688	7.67	13.5	0.86	0.0032
3390	0.0629	7.74	12.6	0.86	0.0030
3710	0.0575	7.79	12.0	0.57	0.0018
4060	0.0525	7.87	11.2	0.86	0.0025
4440	0.0480	7.94	10.3	0.86	0.0023
4850	0.0440	7.99	9.7	0.57	0.0014
5310	0.0402	8.06	8.9	0.86	0.0019
5810	0.0367	8.14	8.0	0.86	0.0017
6360	0.0335	8.21	7.2	0.86	0.0016
6950	0.0307	8.26	6.6	0.57	0.0010
7610	0.0280	8.33	5.7	0.86	0.0013
8320	0.0256	8.38	5.2	0.57	0.0008
9100	0.0234	8.43	4.6	0.57	0.0007
9960	0.0214	8.48	4.0	0.57	0.0007
10900	0.0196	8.53	3.4	0.57	0.0006
11900	0.0179	8.58	2.9	0.57	0.0006
13000	0.0164	8.63	2.3	0.57	0.0005
14300	0.0149	8.68	1.7	0.57	0.0004
15600	0.0137	8.70	1.4	0.29	0.0002
17100	0.0125	8.73	1.1	0.29	0.0002
18700	0.0114	8.75	0.9	0.29	0.0002
20400	0.0105	8.78	0.6	0.29	0.0002
22300	0.0096	8.80	0.3	0.29	0.0002
24400	0.0087	8.83	0.0	0.29	0.0001
26700	0.0080	8.83	0.0	0.00	0.0000
29300	0.0073	8.83	0.0	0.00	0.0000
32000	0.0067	8.83	0.0	0.00	0.0000
35000	0.0061	8.83	0.0	0.00	0.0000
38300	0.0056	8.83	0.0	0.00	0.0000
41900	0.0051	8.83	0.0	0.00	0.0000
45800	0.0047	8.83	0.0	0.00	0.0000
50100	0.0043	8.83	0.0	0.00	0.0000
54800	0.0039	8.83	0.0	0.00	0.0000
59500	0.0036	8.83	0.0	0.00	0.0000

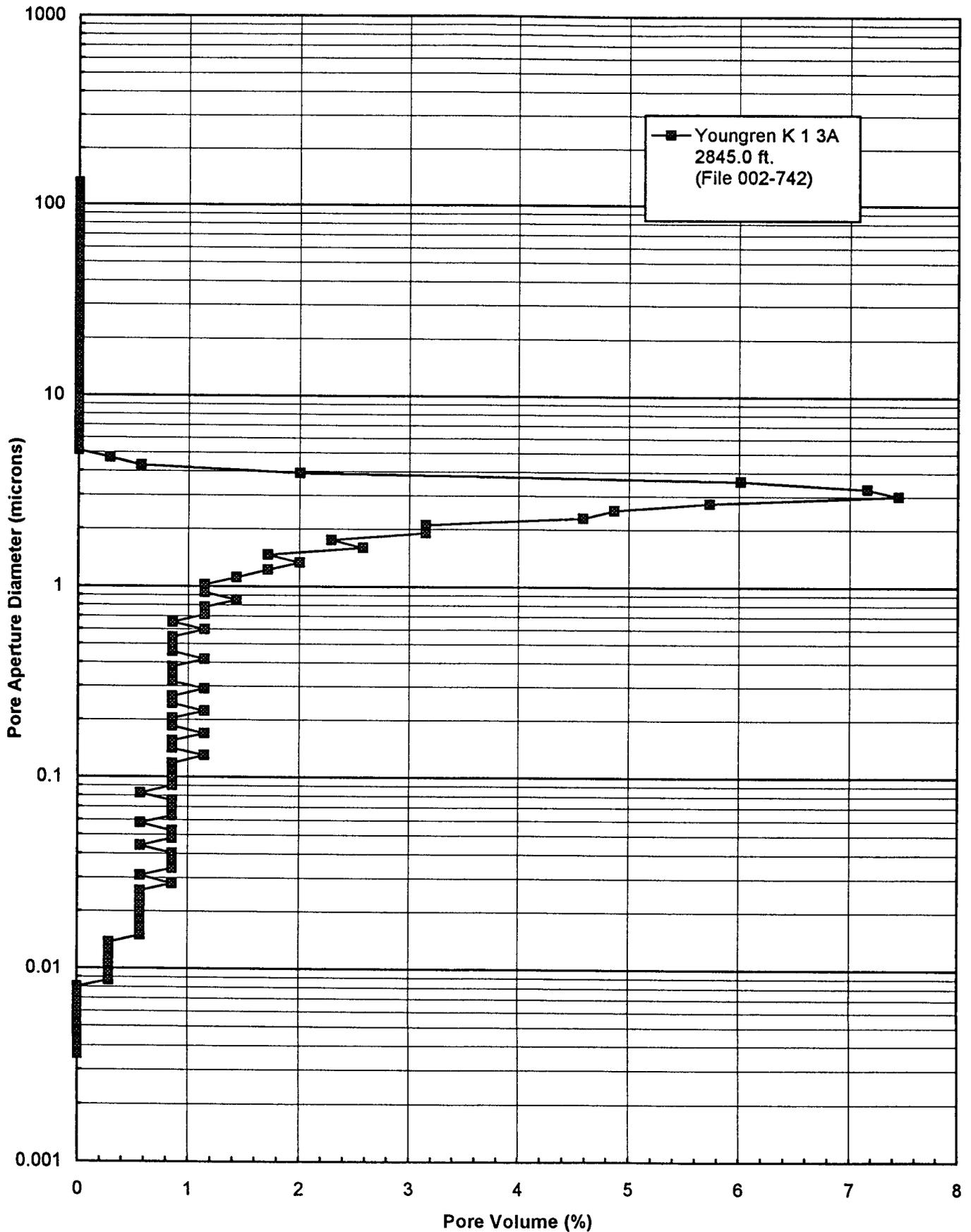
Mercury Injection Capillary Pressure (Bulk Volume)



Mercury Injection Capillary Pressure (Pore Volume)



Pore Aperture Size Distribution



Mercury Injection Capillary Pressure

Youngren K - 3A : 2854.0 feet

File 002-749

Sample Information	
Bulk Volume = 12.3944 cc	Porosity = 8.87% (mercury)
Pore Volume = 1.0991 cc	Permeability = 0.0042 md (mercury)
Closure = 0.90%BV @ 1050 psia	Median Pore Aperture = 0.0429 microns

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1.64	130	0.02	100.0	0.00	0.0000
1.80	119	0.02	100.0	0.00	0.0000
1.96	109	0.05	100.0	0.00	0.0000
2.15	99.2	0.05	100.0	0.00	0.0000
2.35	90.8	0.05	100.0	0.00	0.0000
2.57	83.0	0.07	100.0	0.00	0.0000
2.81	75.9	0.07	100.0	0.00	0.0000
3.08	69.3	0.07	100.0	0.00	0.0000
3.37	63.3	0.10	100.0	0.00	0.0000
3.68	58.0	0.10	100.0	0.00	0.0000
4.03	52.9	0.10	100.0	0.00	0.0000
4.41	48.4	0.12	100.0	0.00	0.0000
4.82	44.3	0.12	100.0	0.00	0.0000
5.27	40.5	0.12	100.0	0.00	0.0000
5.77	37.0	0.12	100.0	0.00	0.0000
6.31	33.8	0.12	100.0	0.00	0.0000
6.90	30.9	0.15	100.0	0.00	0.0000
7.55	28.3	0.15	100.0	0.00	0.0000
8.26	25.8	0.15	100.0	0.00	0.0000
9.04	23.6	0.15	100.0	0.00	0.0000
9.89	21.6	0.15	100.0	0.00	0.0000
10.8	19.8	0.17	100.0	0.00	0.0000
11.8	18.1	0.17	100.0	0.00	0.0000
12.9	16.5	0.17	100.0	0.00	0.0000
14.2	15.0	0.17	100.0	0.00	0.0000
15.5	13.8	0.17	100.0	0.00	0.0000
16.9	12.6	0.19	100.0	0.00	0.0000
18.5	11.5	0.19	100.0	0.00	0.0000
20.3	10.5	0.19	100.0	0.00	0.0000
22.2	9.61	0.19	100.0	0.00	0.0000
24.3	8.78	0.19	100.0	0.00	0.0000
26.6	8.02	0.22	100.0	0.00	0.0000
29.0	7.36	0.22	100.0	0.00	0.0000
31.8	6.71	0.22	100.0	0.00	0.0000
34.8	6.13	0.22	100.0	0.00	0.0000
38.0	5.61	0.24	100.0	0.00	0.0000

Mercury Injection Capillary Pressure

Youngren K - 3A : 2854.0 feet
File 002-749

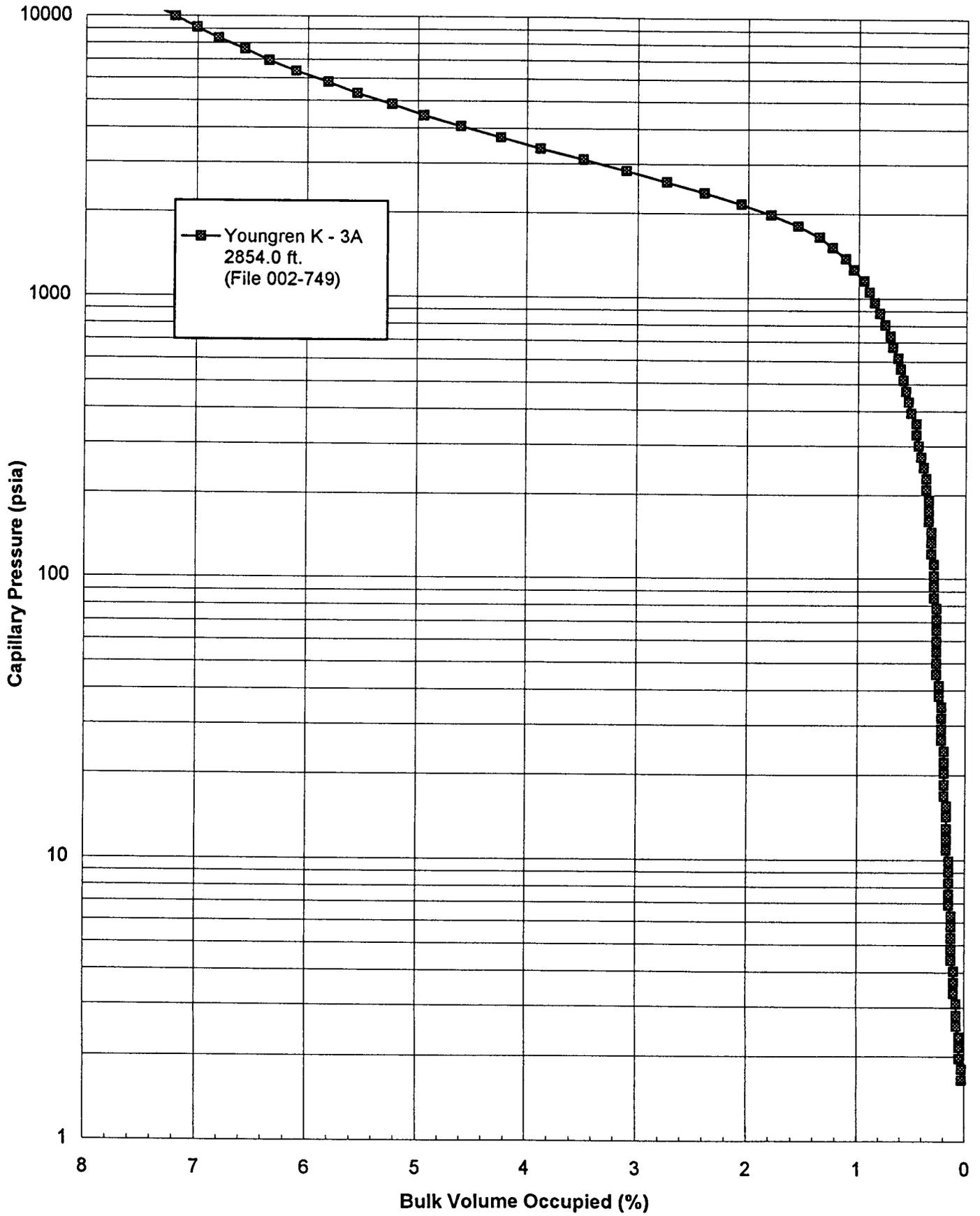
Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
41.6	5.13	0.24	100.0	0.00	0.0000
45.5	4.69	0.27	100.0	0.00	0.0000
49.8	4.28	0.27	100.0	0.00	0.0000
54.5	3.91	0.27	100.0	0.00	0.0000
59.6	3.58	0.27	100.0	0.00	0.0000
65.2	3.27	0.27	100.0	0.00	0.0000
71.3	2.99	0.27	100.0	0.00	0.0000
78.0	2.73	0.27	100.0	0.00	0.0000
85.3	2.50	0.29	100.0	0.00	0.0000
93.4	2.28	0.29	100.0	0.00	0.0000
102	2.09	0.29	100.0	0.00	0.0000
112	1.90	0.29	100.0	0.00	0.0000
122	1.75	0.31	100.0	0.00	0.0000
134	1.59	0.31	100.0	0.00	0.0000
146	1.46	0.31	100.0	0.00	0.0000
160	1.33	0.34	100.0	0.00	0.0000
175	1.22	0.34	100.0	0.00	0.0000
191	1.12	0.34	100.0	0.00	0.0000
209	1.02	0.36	100.0	0.00	0.0000
229	0.932	0.36	100.0	0.00	0.0000
251	0.850	0.39	100.0	0.00	0.0000
274	0.779	0.41	100.0	0.00	0.0000
300	0.711	0.44	100.0	0.00	0.0000
328	0.650	0.46	100.0	0.00	0.0000
359	0.594	0.46	100.0	0.00	0.0000
393	0.543	0.51	100.0	0.00	0.0000
430	0.496	0.53	100.0	0.00	0.0000
470	0.454	0.56	100.0	0.00	0.0000
514	0.415	0.58	100.0	0.00	0.0000
563	0.379	0.61	100.0	0.00	0.0000
615	0.347	0.63	100.0	0.00	0.0000
673	0.317	0.68	100.0	0.00	0.0000
736	0.290	0.70	100.0	0.00	0.0000
806	0.265	0.75	100.0	0.00	0.0000
881	0.242	0.80	100.0	0.00	0.0000
964	0.221	0.85	100.0	0.00	0.0000
1050	0.203	0.90	100.0	0.00	0.0000
1150	0.186	0.94	99.5	0.55	0.0055
1260	0.169	1.04	98.4	1.10	0.0100
1380	0.155	1.11	97.5	0.82	0.0068
1510	0.141	1.24	96.2	1.37	0.0105
1650	0.129	1.36	94.8	1.37	0.0098

Mercury Injection Capillary Pressure

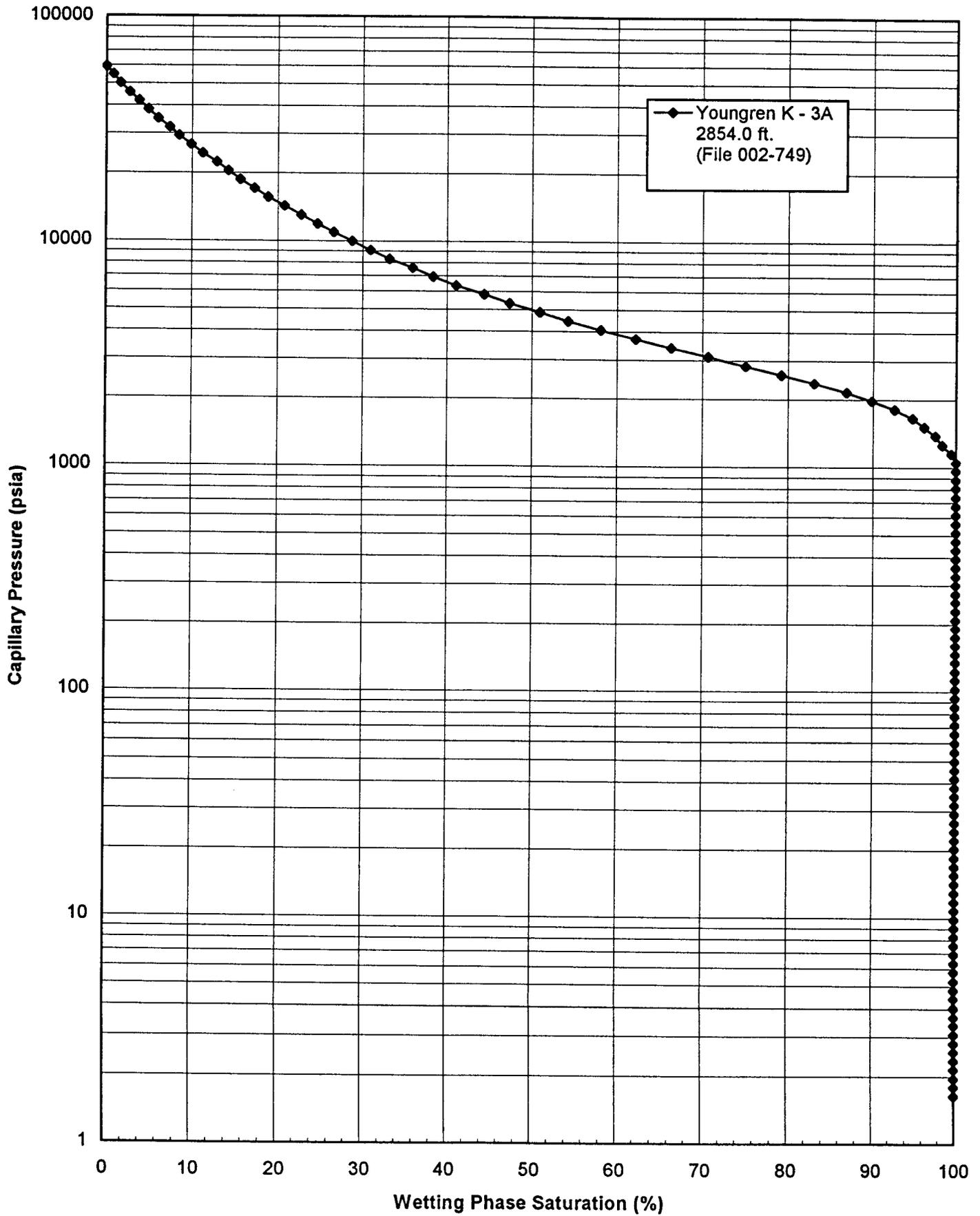
Youngren K - 3A : 2854.0 feet
File 002-749

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1810	0.1179	1.55	92.6	2.19	0.0137
1980	0.1077	1.79	89.9	2.74	0.0161
2160	0.0988	2.06	86.8	3.01	0.0167
2370	0.0900	2.40	83.0	3.84	0.0183
2590	0.0824	2.74	79.2	3.84	0.0174
2830	0.0754	3.10	75.1	4.11	0.0171
3100	0.0688	3.49	70.7	4.38	0.0162
3390	0.0629	3.88	66.3	4.38	0.0151
3710	0.0575	4.24	62.2	4.11	0.0128
4060	0.0525	4.60	58.1	4.11	0.0117
4440	0.0480	4.94	54.2	3.84	0.0101
4850	0.0440	5.23	51.0	3.29	0.0080
5310	0.0402	5.55	47.4	3.56	0.0077
5810	0.0367	5.82	44.4	3.01	0.0060
6360	0.0335	6.11	41.1	3.29	0.0060
6950	0.0307	6.35	38.4	2.74	0.0046
7610	0.0280	6.57	35.9	2.47	0.0037
8320	0.0256	6.81	33.2	2.74	0.0039
9100	0.0234	7.00	31.0	2.19	0.0028
9960	0.0214	7.20	28.8	2.19	0.0025
10900	0.0196	7.39	26.6	2.19	0.0023
11900	0.0179	7.56	24.7	1.92	0.0019
13000	0.0164	7.73	22.7	1.92	0.0017
14300	0.0149	7.90	20.8	1.92	0.0015
15600	0.0137	8.07	18.9	1.92	0.0015
17100	0.0125	8.21	17.3	1.64	0.0011
18700	0.0114	8.36	15.6	1.64	0.0010
20400	0.0105	8.48	14.2	1.37	0.0008
22300	0.0096	8.60	12.9	1.37	0.0007
24400	0.0087	8.75	11.2	1.64	0.0008
26700	0.0080	8.87	9.9	1.37	0.0006
29300	0.0073	8.99	8.5	1.37	0.0005
32000	0.0067	9.09	7.4	1.10	0.0004
35000	0.0061	9.21	6.0	1.37	0.0005
38300	0.0056	9.30	4.9	1.10	0.0003
41900	0.0051	9.40	3.8	1.10	0.0003
45800	0.0047	9.50	2.7	1.10	0.0003
50100	0.0043	9.59	1.6	1.10	0.0003
54800	0.0039	9.67	0.8	0.82	0.0002
59500	0.0036	9.74	0.0	0.82	0.0002

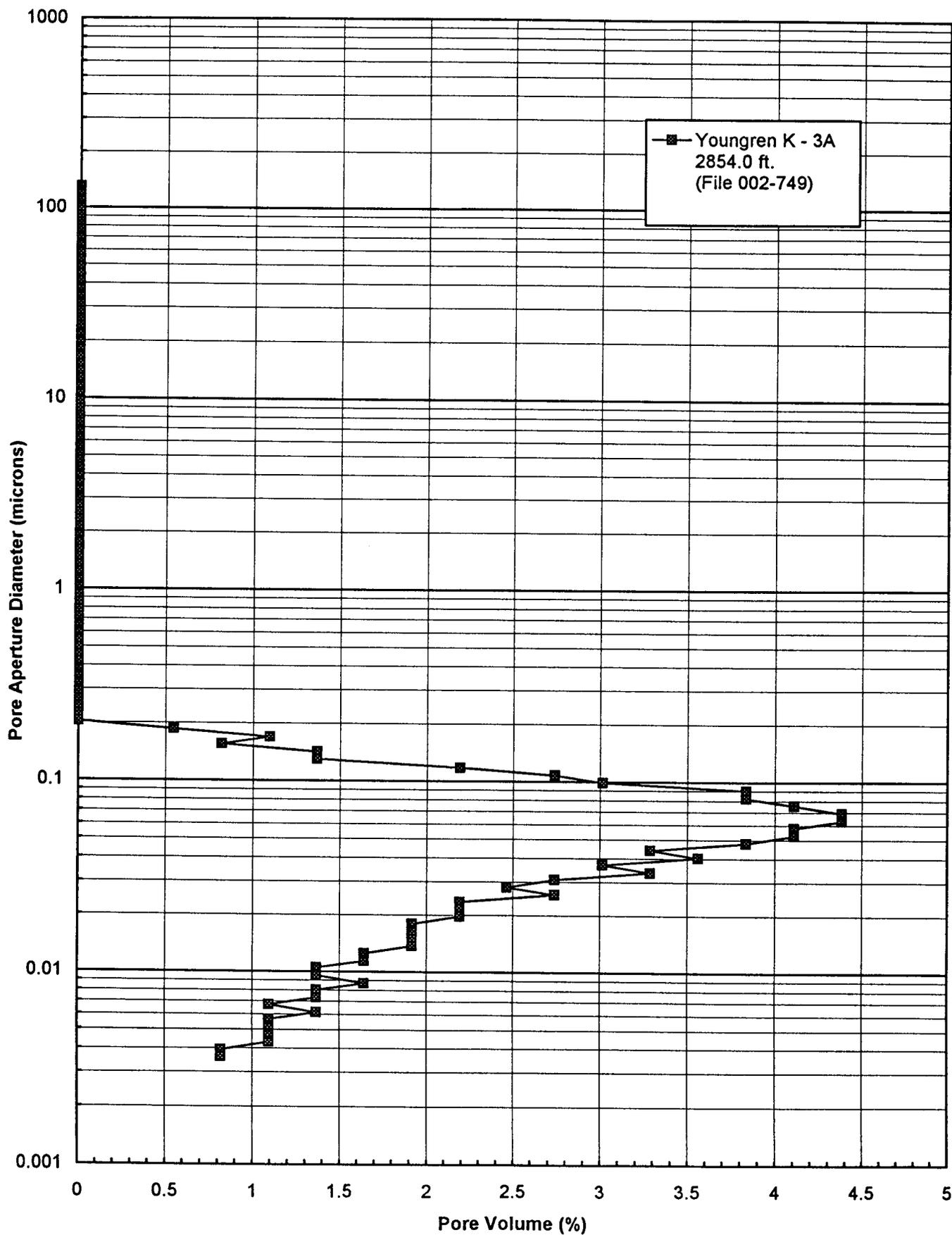
Mercury Injection Capillary Pressure (Bulk Volume)



Mercury Injection Capillary Pressure (Pore Volume)



Pore Aperture Size Distribution



Mercury Injection Capillary Pressure

Youngren K - 3A : 2862.0 feet

File 002-750

Sample Information	
Bulk Volume = 12.6939 cc	Porosity = 10.6% (mercury)
Pore Volume = 1.3414 cc	Permeability = 0.909 md (mercury)
Closure = 0.24%BV @ 71.3 psia	Median Pore Aperture = 0.976 microns

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1.64	130	0.00	100.0	0.00	0.0000
1.80	119	0.02	100.0	0.00	0.0000
1.96	109	0.02	100.0	0.00	0.0000
2.15	99.2	0.05	100.0	0.00	0.0000
2.35	90.8	0.05	100.0	0.00	0.0000
2.57	83.0	0.07	100.0	0.00	0.0000
2.81	75.9	0.07	100.0	0.00	0.0000
3.08	69.3	0.10	100.0	0.00	0.0000
3.37	63.3	0.10	100.0	0.00	0.0000
3.68	58.0	0.10	100.0	0.00	0.0000
4.03	52.9	0.10	100.0	0.00	0.0000
4.41	48.4	0.10	100.0	0.00	0.0000
4.82	44.3	0.12	100.0	0.00	0.0000
5.27	40.5	0.12	100.0	0.00	0.0000
5.77	37.0	0.12	100.0	0.00	0.0000
6.31	33.8	0.12	100.0	0.00	0.0000
6.90	30.9	0.12	100.0	0.00	0.0000
7.55	28.3	0.12	100.0	0.00	0.0000
8.26	25.8	0.12	100.0	0.00	0.0000
9.04	23.6	0.12	100.0	0.00	0.0000
9.89	21.6	0.14	100.0	0.00	0.0000
10.8	19.8	0.14	100.0	0.00	0.0000
11.8	18.1	0.14	100.0	0.00	0.0000
12.9	16.5	0.14	100.0	0.00	0.0000
14.2	15.0	0.14	100.0	0.00	0.0000
15.5	13.8	0.14	100.0	0.00	0.0000
16.9	12.6	0.14	100.0	0.00	0.0000
18.5	11.5	0.14	100.0	0.00	0.0000
20.3	10.5	0.14	100.0	0.00	0.0000
22.2	9.61	0.14	100.0	0.00	0.0000
24.3	8.78	0.17	100.0	0.00	0.0000
26.6	8.02	0.17	100.0	0.00	0.0000
29.0	7.36	0.17	100.0	0.00	0.0000
31.8	6.71	0.17	100.0	0.00	0.0000
34.8	6.13	0.17	100.0	0.00	0.0000
38.0	5.61	0.17	100.0	0.00	0.0000

Mercury Injection Capillary Pressure

Youngren K - 3A : 2862.0 feet
File 002-750

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
41.6	5.13	0.19	100.0	0.00	0.0000
45.5	4.69	0.19	100.0	0.00	0.0000
49.8	4.28	0.19	100.0	0.00	0.0000
54.5	3.91	0.22	100.0	0.00	0.0000
59.6	3.58	0.22	100.0	0.00	0.0000
65.2	3.27	0.24	100.0	0.00	0.0000
71.3	2.99	0.24	100.0	0.00	0.0000
78.0	2.73	0.29	99.5	0.46	0.0680
85.3	2.50	0.36	98.9	0.68	0.0936
93.4	2.28	0.53	97.3	1.59	0.1969
102	2.09	0.87	94.1	3.19	0.3708
112	1.90	1.83	85.0	9.11	0.9112
122	1.75	2.70	76.8	8.20	0.8200
134	1.59	3.42	69.9	6.83	0.5695
146	1.46	3.90	65.4	4.56	0.3797
160	1.33	4.38	60.8	4.56	0.3254
175	1.22	4.74	57.4	3.42	0.2278
191	1.12	5.05	54.4	2.96	0.1851
209	1.02	5.39	51.3	3.19	0.1772
229	0.932	5.66	48.7	2.51	0.1253
251	0.850	5.95	46.0	2.73	0.1242
274	0.779	6.23	43.3	2.73	0.1188
300	0.711	6.43	41.5	1.82	0.0701
328	0.650	6.62	39.6	1.82	0.0651
359	0.594	6.86	37.4	2.28	0.0735
393	0.543	7.08	35.3	2.05	0.0603
430	0.496	7.25	33.7	1.59	0.0431
470	0.454	7.44	31.9	1.82	0.0456
514	0.415	7.63	30.1	1.82	0.0414
563	0.379	7.82	28.2	1.82	0.0372
615	0.347	8.02	26.4	1.82	0.0350
673	0.317	8.21	24.6	1.82	0.0314
736	0.290	8.38	23.0	1.59	0.0253
806	0.265	8.55	21.4	1.59	0.0228
881	0.242	8.74	19.6	1.82	0.0243
964	0.221	8.88	18.2	1.37	0.0165
1050	0.203	9.03	16.9	1.37	0.0159
1150	0.186	9.17	15.5	1.37	0.0137
1260	0.169	9.32	14.1	1.37	0.0124
1380	0.155	9.44	13.0	1.14	0.0095
1510	0.141	9.56	11.8	1.14	0.0088
1650	0.129	9.65	10.9	0.91	0.0065

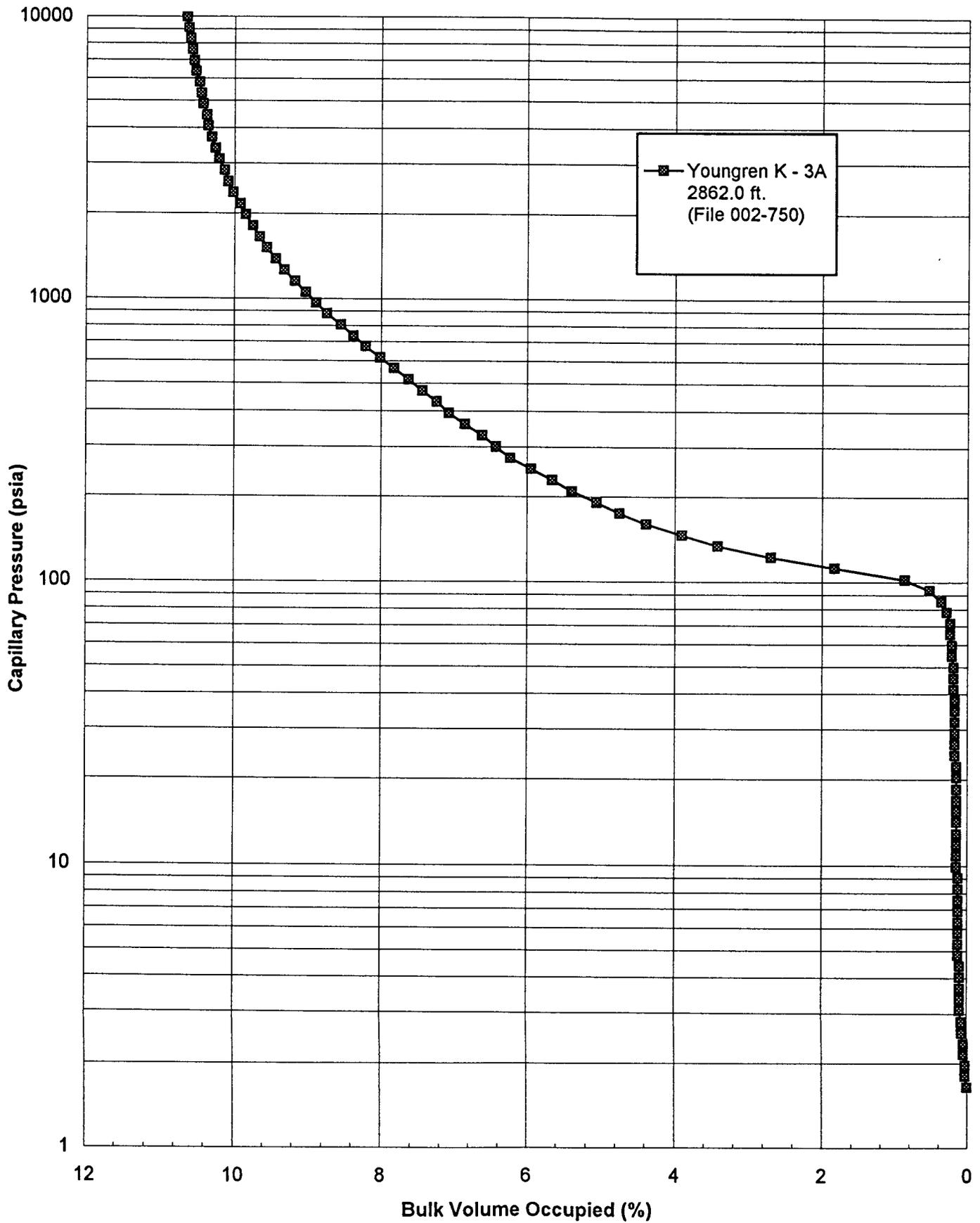
Mercury Injection Capillary Pressure

Youngren K - 3A : 2862.0 feet

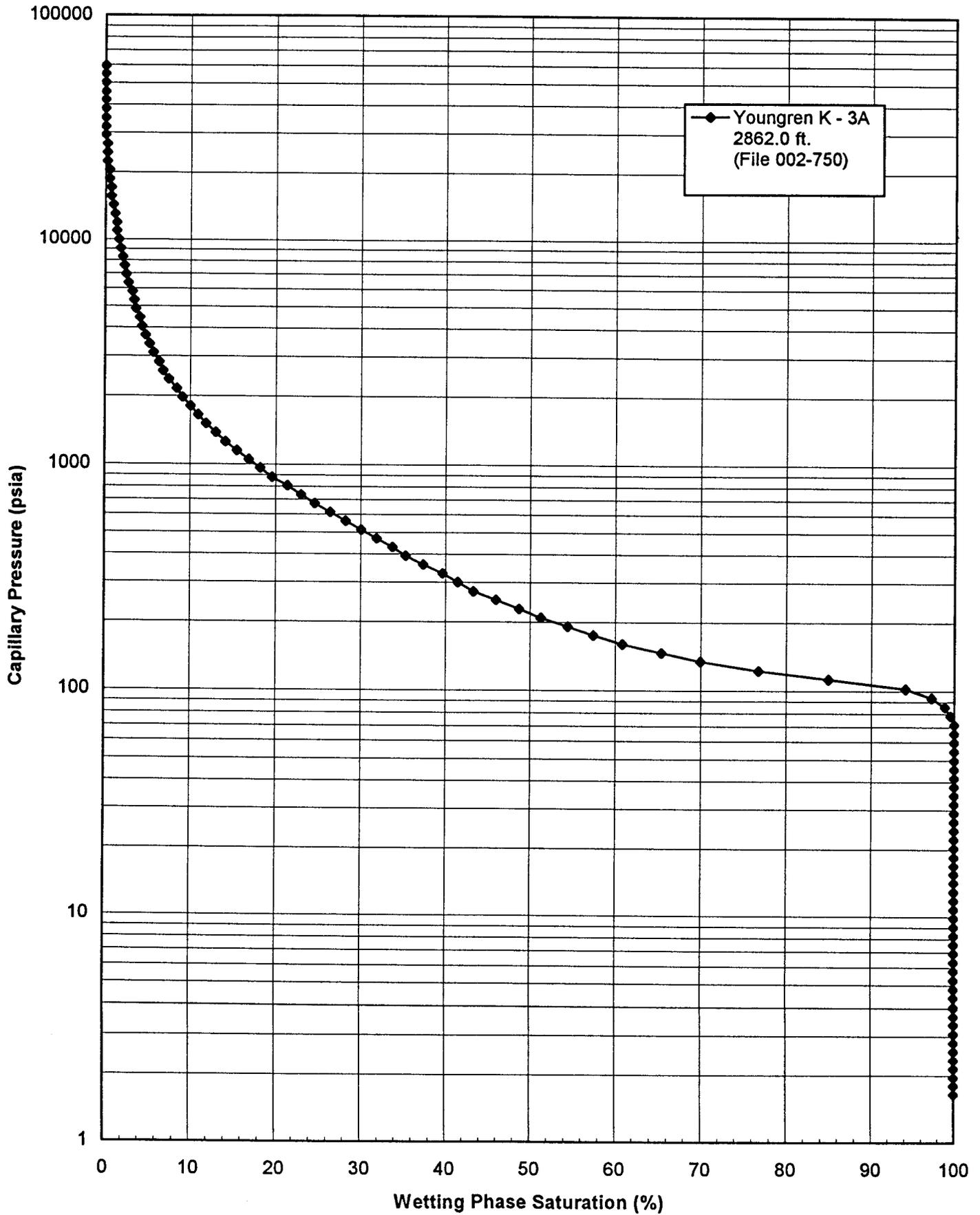
File 002-750

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1810	0.1179	9.75	10.0	0.91	0.0057
1980	0.1077	9.84	9.1	0.91	0.0054
2160	0.0988	9.92	8.4	0.68	0.0038
2370	0.0900	10.01	7.5	0.91	0.0043
2590	0.0824	10.09	6.8	0.68	0.0031
2830	0.0754	10.13	6.4	0.46	0.0019
3100	0.0688	10.21	5.7	0.68	0.0025
3390	0.0629	10.25	5.2	0.46	0.0016
3710	0.0575	10.30	4.8	0.46	0.0014
4060	0.0525	10.35	4.3	0.46	0.0013
4440	0.0480	10.37	4.1	0.23	0.0006
4850	0.0440	10.42	3.6	0.46	0.0011
5310	0.0402	10.45	3.4	0.23	0.0005
5810	0.0367	10.47	3.2	0.23	0.0005
6360	0.0335	10.52	2.7	0.46	0.0008
6950	0.0307	10.54	2.5	0.23	0.0004
7610	0.0280	10.57	2.3	0.23	0.0003
8320	0.0256	10.59	2.1	0.23	0.0003
9100	0.0234	10.62	1.8	0.23	0.0003
9960	0.0214	10.64	1.6	0.23	0.0003
10900	0.0196	10.66	1.4	0.23	0.0002
11900	0.0179	10.66	1.4	0.00	0.0000
13000	0.0164	10.69	1.1	0.23	0.0002
14300	0.0149	10.71	0.9	0.23	0.0002
15600	0.0137	10.74	0.7	0.23	0.0002
17100	0.0125	10.74	0.7	0.00	0.0000
18700	0.0114	10.76	0.5	0.23	0.0001
20400	0.0105	10.76	0.5	0.00	0.0000
22300	0.0096	10.78	0.2	0.23	0.0001
24400	0.0087	10.78	0.2	0.00	0.0000
26700	0.0080	10.78	0.2	0.00	0.0000
29300	0.0073	10.81	0.0	0.23	0.0001
32000	0.0067	10.81	0.0	0.00	0.0000
35000	0.0061	10.81	0.0	0.00	0.0000
38300	0.0056	10.81	0.0	0.00	0.0000
41900	0.0051	10.81	0.0	0.00	0.0000
45800	0.0047	10.81	0.0	0.00	0.0000
50100	0.0043	10.81	0.0	0.00	0.0000
54800	0.0039	10.81	0.0	0.00	0.0000
59500	0.0036	10.81	0.0	0.00	0.0000

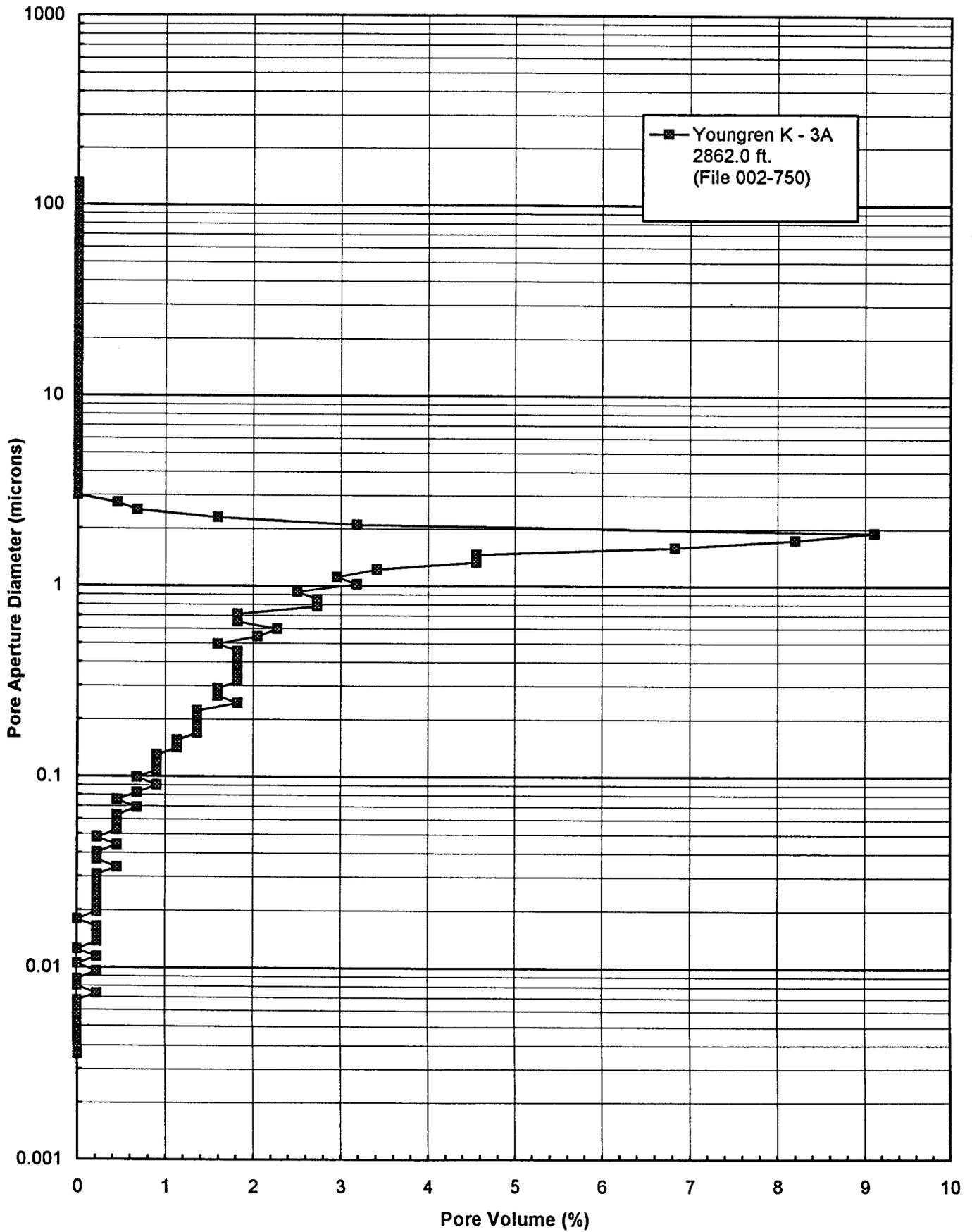
Mercury Injection Capillary Pressure (Bulk Volume)



Mercury Injection Capillary Pressure (Pore Volume)



Pore Aperture Size Distribution



Mercury Injection Capillary Pressure

Youngren K - 3A : 2877.0 feet

File 002-753

Sample Information	
Bulk Volume = 12.5650 cc	Porosity = 9.41% (mercury)
Pore Volume = 1.1821 cc	Permeability = 0.2958 md (mercury)
Closure = 0.34%BV @ 93.4 psia	Median Pore Aperture = 0.5951 microns

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1.64	130	0.02	100.0	0.00	0.0000
1.80	119	0.02	100.0	0.00	0.0000
1.96	109	0.05	100.0	0.00	0.0000
2.15	99.2	0.05	100.0	0.00	0.0000
2.35	90.8	0.07	100.0	0.00	0.0000
2.57	83.0	0.07	100.0	0.00	0.0000
2.81	75.9	0.10	100.0	0.00	0.0000
3.08	69.3	0.10	100.0	0.00	0.0000
3.37	63.3	0.10	100.0	0.00	0.0000
3.68	58.0	0.12	100.0	0.00	0.0000
4.03	52.9	0.12	100.0	0.00	0.0000
4.41	48.4	0.12	100.0	0.00	0.0000
4.82	44.3	0.12	100.0	0.00	0.0000
5.27	40.5	0.12	100.0	0.00	0.0000
5.77	37.0	0.12	100.0	0.00	0.0000
6.31	33.8	0.12	100.0	0.00	0.0000
6.90	30.9	0.15	100.0	0.00	0.0000
7.55	28.3	0.15	100.0	0.00	0.0000
8.26	25.8	0.15	100.0	0.00	0.0000
9.04	23.6	0.15	100.0	0.00	0.0000
9.89	21.6	0.15	100.0	0.00	0.0000
10.8	19.8	0.15	100.0	0.00	0.0000
11.8	18.1	0.15	100.0	0.00	0.0000
12.9	16.5	0.15	100.0	0.00	0.0000
14.2	15.0	0.15	100.0	0.00	0.0000
15.5	13.8	0.15	100.0	0.00	0.0000
16.9	12.6	0.15	100.0	0.00	0.0000
18.5	11.5	0.17	100.0	0.00	0.0000
20.3	10.5	0.17	100.0	0.00	0.0000
22.2	9.61	0.17	100.0	0.00	0.0000
24.3	8.78	0.17	100.0	0.00	0.0000
26.6	8.02	0.17	100.0	0.00	0.0000
29.0	7.36	0.17	100.0	0.00	0.0000
31.8	6.71	0.20	100.0	0.00	0.0000
34.8	6.13	0.20	100.0	0.00	0.0000
38.0	5.61	0.22	100.0	0.00	0.0000

Mercury Injection Capillary Pressure

Youngren K - 3A : 2877.0 feet
File 002-753

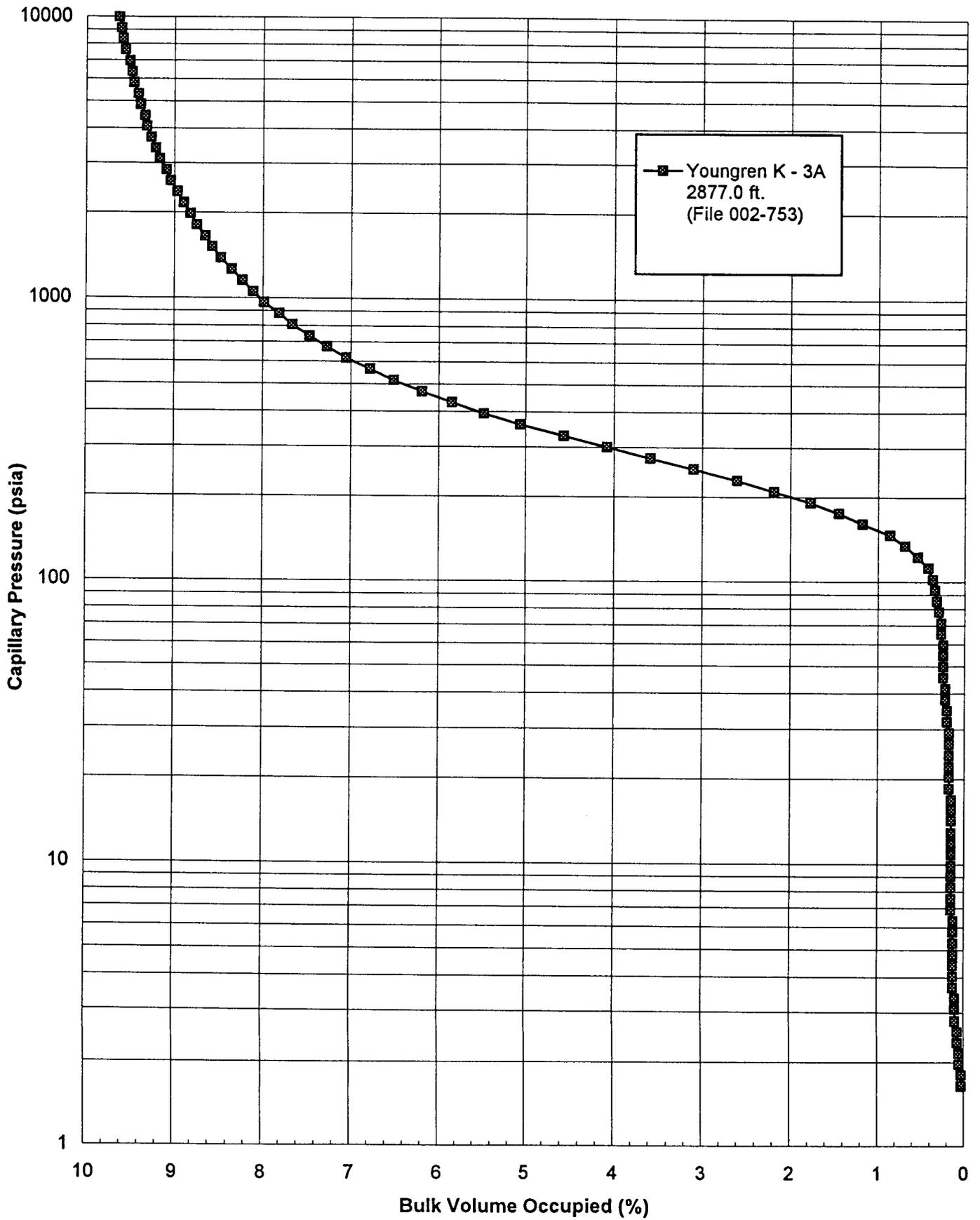
Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
41.6	5.13	0.22	100.0	0.00	0.0000
45.5	4.69	0.25	100.0	0.00	0.0000
49.8	4.28	0.25	100.0	0.00	0.0000
54.5	3.91	0.25	100.0	0.00	0.0000
59.6	3.58	0.25	100.0	0.00	0.0000
65.2	3.27	0.27	100.0	0.00	0.0000
71.3	2.99	0.27	100.0	0.00	0.0000
78.0	2.73	0.29	100.0	0.00	0.0000
85.3	2.50	0.32	100.0	0.00	0.0000
93.4	2.28	0.34	100.0	0.00	0.0000
102	2.09	0.37	99.7	0.26	0.0304
112	1.90	0.42	99.2	0.52	0.0522
122	1.75	0.54	97.9	1.31	0.1305
134	1.59	0.69	96.3	1.57	0.1305
146	1.46	0.86	94.5	1.83	0.1523
160	1.33	1.18	91.1	3.39	0.2424
175	1.22	1.45	88.3	2.87	0.1915
191	1.12	1.77	84.9	3.39	0.2121
209	1.02	2.19	80.4	4.44	0.2466
229	0.932	2.60	76.0	4.44	0.2219
251	0.850	3.09	70.8	5.22	0.2374
274	0.779	3.59	65.5	5.22	0.2270
300	0.711	4.08	60.3	5.22	0.2008
328	0.650	4.57	55.1	5.22	0.1865
359	0.594	5.06	49.9	5.22	0.1684
393	0.543	5.48	45.4	4.44	0.1305
430	0.496	5.85	41.5	3.92	0.1058
470	0.454	6.19	37.9	3.66	0.0914
514	0.415	6.51	34.5	3.39	0.0771
563	0.379	6.78	31.6	2.87	0.0586
615	0.347	7.05	28.7	2.87	0.0552
673	0.317	7.27	26.4	2.35	0.0405
736	0.290	7.47	24.3	2.09	0.0332
806	0.265	7.66	22.2	2.09	0.0298
881	0.242	7.81	20.6	1.57	0.0209
964	0.221	7.98	18.8	1.83	0.0220
1050	0.203	8.11	17.5	1.31	0.0152
1150	0.186	8.23	16.2	1.31	0.0131
1260	0.169	8.35	14.9	1.31	0.0119
1380	0.155	8.47	13.6	1.31	0.0109
1510	0.141	8.57	12.5	1.04	0.0080
1650	0.129	8.65	11.7	0.78	0.0056

Mercury Injection Capillary Pressure

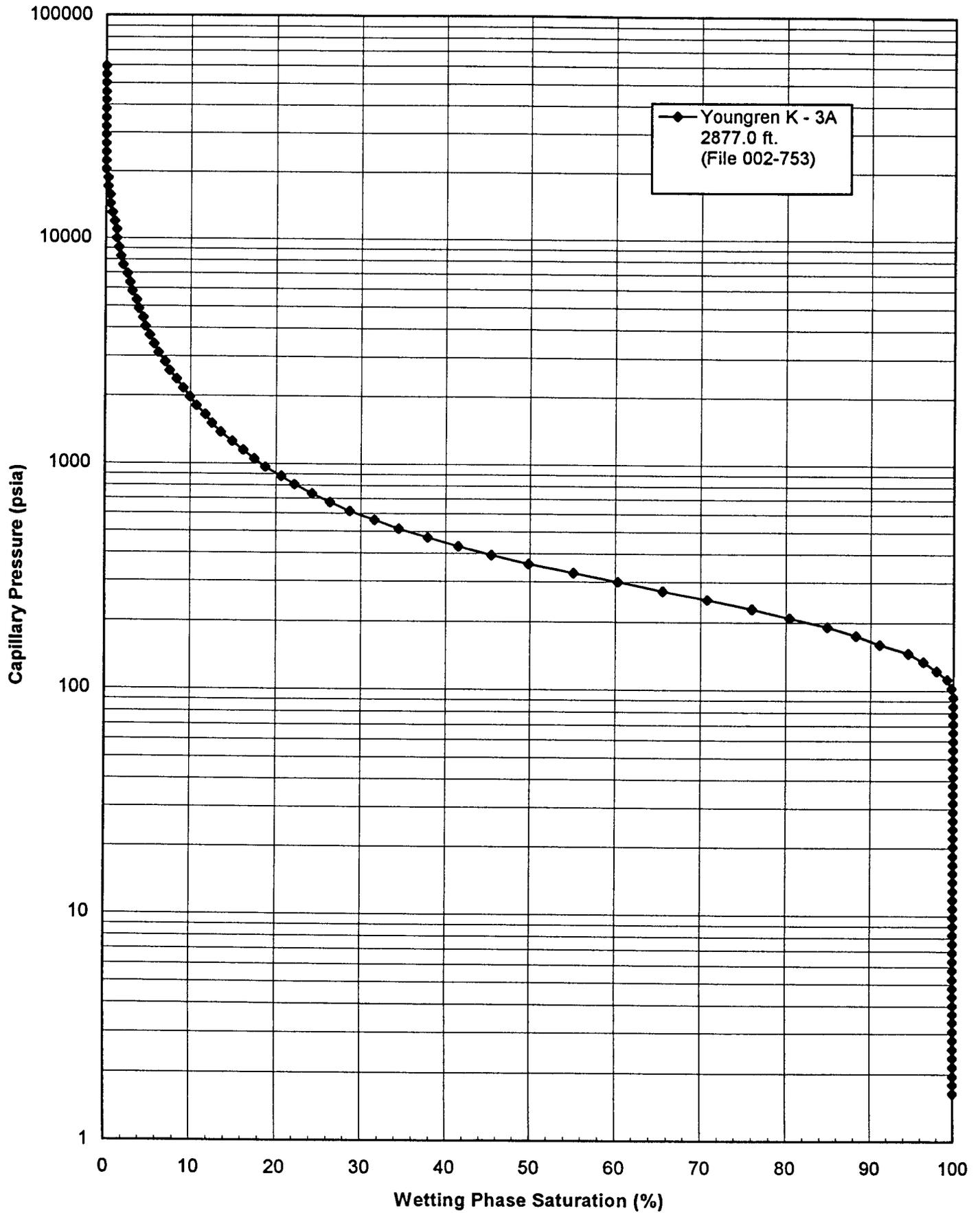
Youngren K - 3A : 2877.0 feet
File 002-753

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1810	0.1179	8.74	10.7	1.04	0.0065
1980	0.1077	8.82	9.9	0.78	0.0046
2160	0.0988	8.89	9.1	0.78	0.0044
2370	0.0900	8.97	8.4	0.78	0.0037
2590	0.0824	9.04	7.6	0.78	0.0036
2830	0.0754	9.09	7.0	0.52	0.0022
3100	0.0688	9.16	6.3	0.78	0.0029
3390	0.0629	9.21	5.7	0.52	0.0018
3710	0.0575	9.26	5.2	0.52	0.0016
4060	0.0525	9.31	4.7	0.52	0.0015
4440	0.0480	9.33	4.4	0.26	0.0007
4850	0.0440	9.38	3.9	0.52	0.0013
5310	0.0402	9.41	3.7	0.26	0.0006
5810	0.0367	9.46	3.1	0.52	0.0010
6360	0.0335	9.48	2.9	0.26	0.0005
6950	0.0307	9.51	2.6	0.26	0.0004
7610	0.0280	9.56	2.1	0.52	0.0008
8320	0.0256	9.58	1.8	0.26	0.0004
9100	0.0234	9.60	1.6	0.26	0.0003
9960	0.0214	9.63	1.3	0.26	0.0003
10900	0.0196	9.63	1.3	0.00	0.0000
11900	0.0179	9.65	1.0	0.26	0.0003
13000	0.0164	9.68	0.8	0.26	0.0002
14300	0.0149	9.70	0.5	0.26	0.0002
15600	0.0137	9.70	0.5	0.00	0.0000
17100	0.0125	9.73	0.3	0.26	0.0002
18700	0.0114	9.73	0.3	0.00	0.0000
20400	0.0105	9.75	0.0	0.26	0.0002
22300	0.0096	9.75	0.0	0.00	0.0000
24400	0.0087	9.75	0.0	0.00	0.0000
26700	0.0080	9.75	0.0	0.00	0.0000
29300	0.0073	9.75	0.0	0.00	0.0000
32000	0.0067	9.75	0.0	0.00	0.0000
35000	0.0061	9.75	0.0	0.00	0.0000
38300	0.0056	9.75	0.0	0.00	0.0000
41900	0.0051	9.75	0.0	0.00	0.0000
45800	0.0047	9.75	0.0	0.00	0.0000
50100	0.0043	9.75	0.0	0.00	0.0000
54800	0.0039	9.75	0.0	0.00	0.0000
59500	0.0036	9.75	0.0	0.00	0.0000

Mercury Injection Capillary Pressure (Bulk Volume)

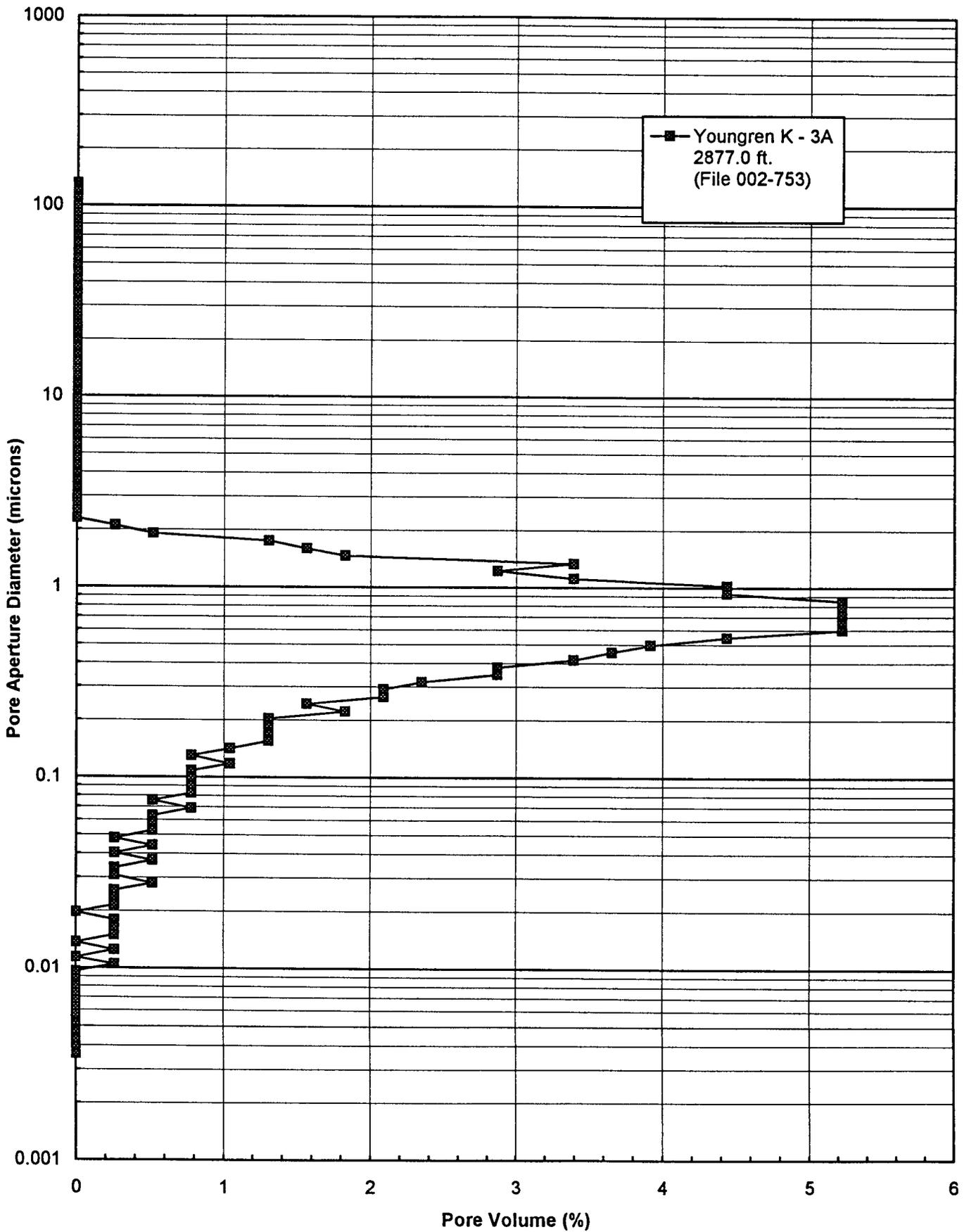


Mercury Injection Capillary Pressure (Pore Volume)



◆ Youngren K - 3A
2877.0 ft.
(File 002-753)

Pore Aperture Size Distribution



Mercury Injection Capillary Pressure

Youngren K - 3A : 2882.5 feet
File 002-754

Sample Information

Bulk Volume = 12.4123 cc

Porosity = 5.16% (mercury)

Pore Volume = 0.6409 cc

Permeability = 0.393 md (mercury)

Closure = 0.29%BV @ 34.8 psia

Median Pore Aperture = 0.543 microns

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1.64	130	0.03	100.0	0.00	0.0000
1.80	119	0.03	100.0	0.00	0.0000
1.96	109	0.03	100.0	0.00	0.0000
2.15	99.2	0.05	100.0	0.00	0.0000
2.35	90.8	0.05	100.0	0.00	0.0000
2.57	83.0	0.05	100.0	0.00	0.0000
2.81	75.9	0.08	100.0	0.00	0.0000
3.08	69.3	0.08	100.0	0.00	0.0000
3.37	63.3	0.08	100.0	0.00	0.0000
3.68	58.0	0.08	100.0	0.00	0.0000
4.03	52.9	0.11	100.0	0.00	0.0000
4.41	48.4	0.11	100.0	0.00	0.0000
4.82	44.3	0.11	100.0	0.00	0.0000
5.27	40.5	0.11	100.0	0.00	0.0000
5.77	37.0	0.11	100.0	0.00	0.0000
6.31	33.8	0.13	100.0	0.00	0.0000
6.90	30.9	0.13	100.0	0.00	0.0000
7.55	28.3	0.13	100.0	0.00	0.0000
8.26	25.8	0.13	100.0	0.00	0.0000
9.04	23.6	0.13	100.0	0.00	0.0000
9.89	21.6	0.16	100.0	0.00	0.0000
10.8	19.8	0.16	100.0	0.00	0.0000
11.8	18.1	0.18	100.0	0.00	0.0000
12.9	16.5	0.18	100.0	0.00	0.0000
14.2	15.0	0.21	100.0	0.00	0.0000
15.5	13.8	0.21	100.0	0.00	0.0000
16.9	12.6	0.21	100.0	0.00	0.0000
18.5	11.5	0.21	100.0	0.00	0.0000
20.3	10.5	0.24	100.0	0.00	0.0000
22.2	9.61	0.24	100.0	0.00	0.0000
24.3	8.78	0.24	100.0	0.00	0.0000
26.6	8.02	0.26	100.0	0.00	0.0000
29.0	7.36	0.26	100.0	0.00	0.0000
31.8	6.71	0.29	100.0	0.00	0.0000
34.8	6.13	0.29	100.0	0.00	0.0000
38.0	5.61	0.32	99.5	0.51	0.1594

Mercury Injection Capillary Pressure

Youngren K - 3A : 2882.5 feet
File 002-754

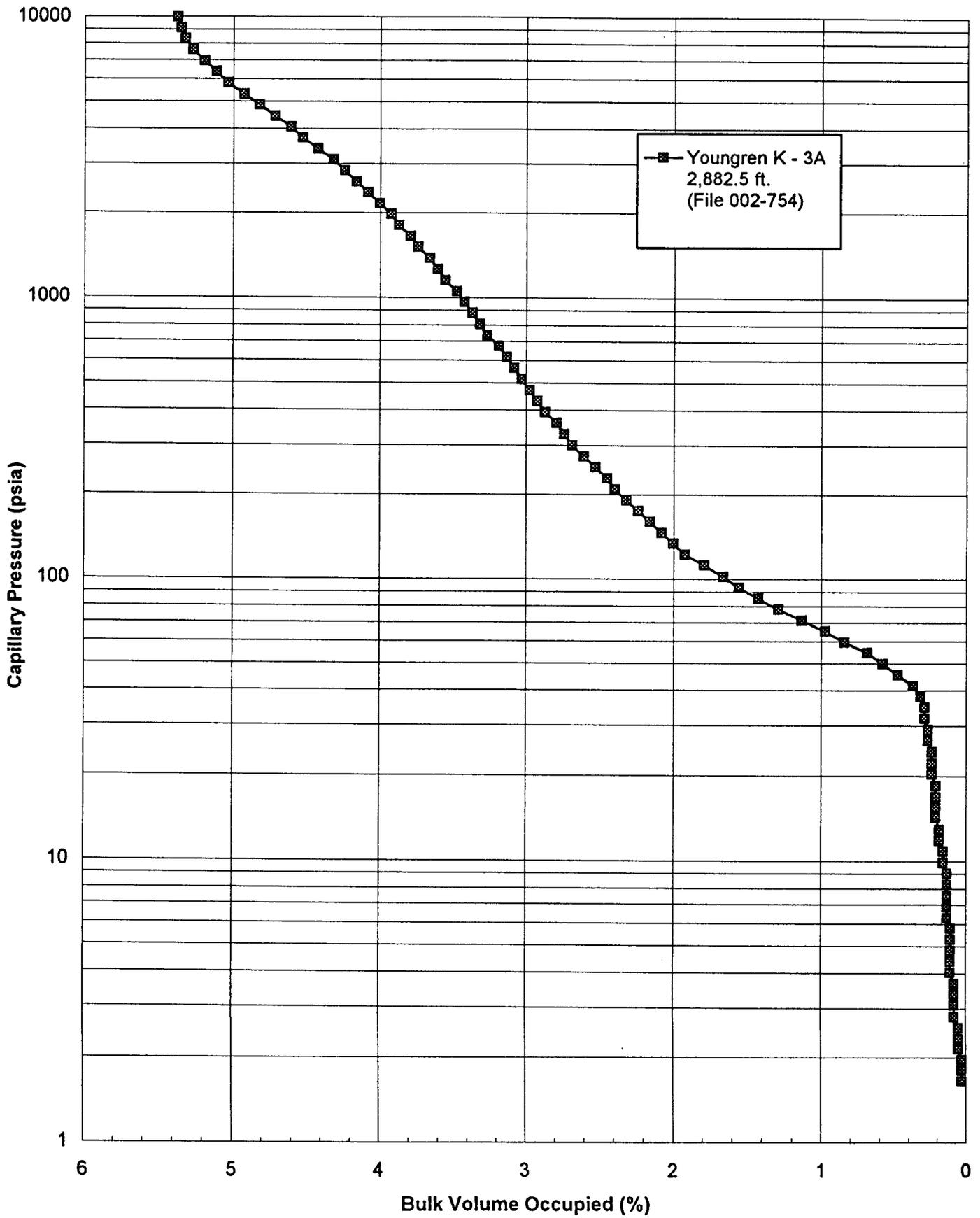
Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
41.6	5.13	0.37	98.5	1.02	0.2834
45.5	4.69	0.47	96.4	2.04	0.5233
49.8	4.28	0.58	94.4	2.04	0.4746
54.5	3.91	0.68	92.3	2.04	0.4342
59.6	3.58	0.84	89.3	3.06	0.6002
65.2	3.27	0.97	86.7	2.55	0.4555
71.3	2.99	1.13	83.7	3.06	0.5018
78.0	2.73	1.29	80.6	3.06	0.4569
85.3	2.50	1.42	78.1	2.55	0.3495
93.4	2.28	1.55	75.5	2.55	0.3149
102	2.09	1.66	73.5	2.04	0.2373
112	1.90	1.79	70.9	2.55	0.2551
122	1.75	1.92	68.4	2.55	0.2551
134	1.59	2.00	66.8	1.53	0.1276
146	1.46	2.08	65.3	1.53	0.1276
160	1.33	2.16	63.8	1.53	0.1093
175	1.22	2.24	62.2	1.53	0.1020
191	1.12	2.32	60.7	1.53	0.0957
209	1.02	2.40	59.2	1.53	0.0850
229	0.932	2.45	58.2	1.02	0.0510
251	0.850	2.53	56.6	1.53	0.0696
274	0.779	2.61	55.1	1.53	0.0665
300	0.711	2.69	53.6	1.53	0.0589
328	0.650	2.74	52.6	1.02	0.0364
359	0.594	2.79	51.5	1.02	0.0329
393	0.543	2.87	50.0	1.53	0.0450
430	0.496	2.92	49.0	1.02	0.0276
470	0.454	2.98	48.0	1.02	0.0255
514	0.415	3.03	46.9	1.02	0.0232
563	0.379	3.08	45.9	1.02	0.0208
615	0.347	3.14	44.9	1.02	0.0196
673	0.317	3.19	43.9	1.02	0.0176
736	0.290	3.27	42.3	1.53	0.0243
806	0.265	3.32	41.3	1.02	0.0146
881	0.242	3.37	40.3	1.02	0.0136
964	0.221	3.42	39.3	1.02	0.0123
1050	0.203	3.48	38.3	1.02	0.0119
1150	0.186	3.56	36.7	1.53	0.0153
1260	0.169	3.61	35.7	1.02	0.0093
1380	0.155	3.66	34.7	1.02	0.0085
1510	0.141	3.74	33.2	1.53	0.0118
1650	0.129	3.79	32.1	1.02	0.0073

Mercury Injection Capillary Pressure

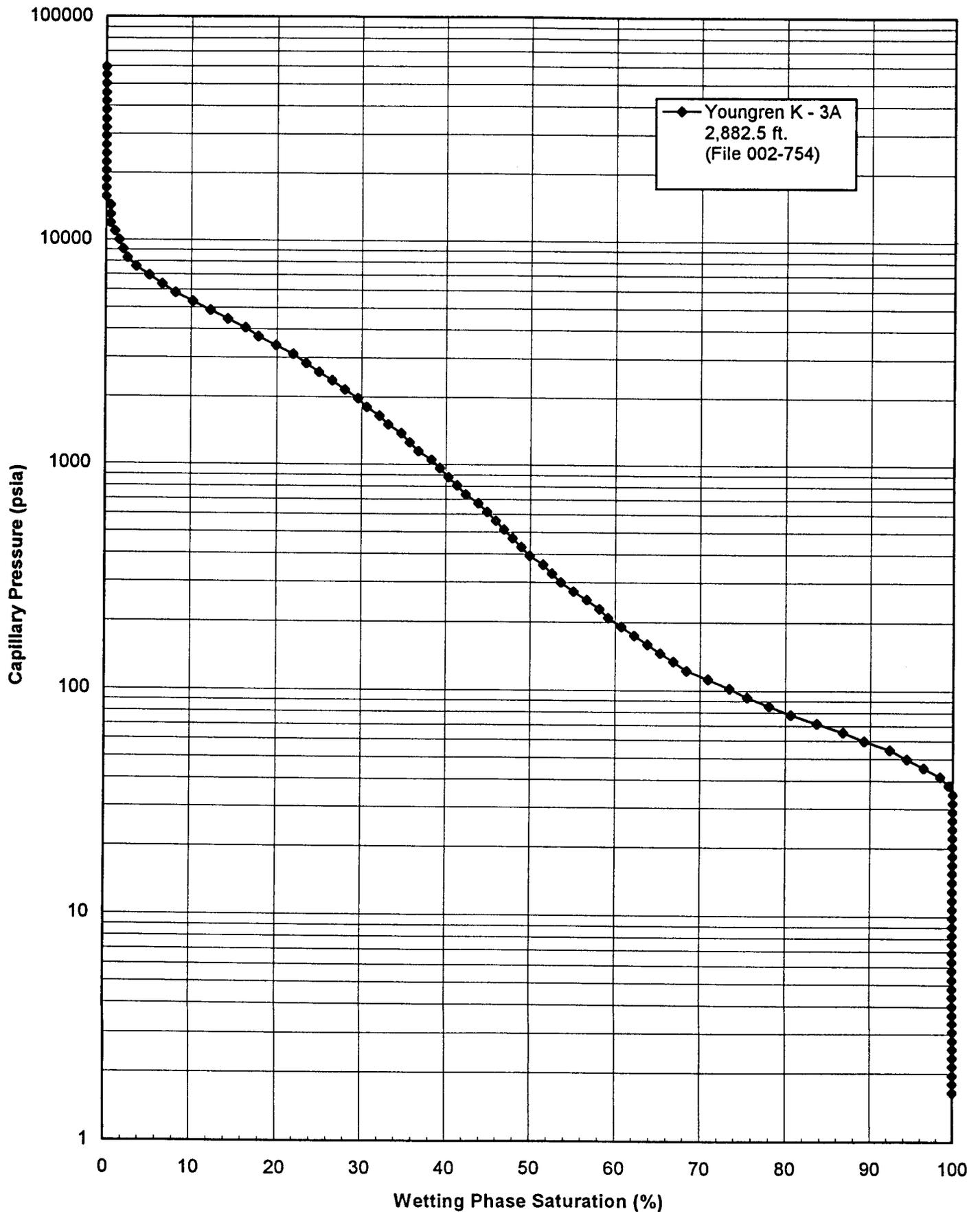
Youngren K - 3A : 2882.5 feet
File 002-754

Capillary Pressure (psia)	Pore Aperture Diameter (microns)	Cumulative Bulk Vol. (%)	Wetting Phase Saturation (%)	Incremental Wetting Phase Change (%)	Saturation Change per psia
1810	0.1179	3.87	30.6	1.53	0.0096
1980	0.1077	3.93	29.6	1.02	0.0060
2160	0.0988	4.00	28.1	1.53	0.0085
2370	0.0900	4.08	26.5	1.53	0.0073
2590	0.0824	4.16	25.0	1.53	0.0070
2830	0.0754	4.24	23.5	1.53	0.0064
3100	0.0688	4.32	21.9	1.53	0.0057
3390	0.0629	4.43	19.9	2.04	0.0070
3710	0.0575	4.53	17.9	2.04	0.0064
4060	0.0525	4.61	16.3	1.53	0.0044
4440	0.0480	4.72	14.3	2.04	0.0054
4850	0.0440	4.82	12.2	2.04	0.0050
5310	0.0402	4.93	10.2	2.04	0.0044
5810	0.0367	5.03	8.2	2.04	0.0041
6360	0.0335	5.11	6.6	1.53	0.0028
6950	0.0307	5.19	5.1	1.53	0.0026
7610	0.0280	5.27	3.6	1.53	0.0023
8320	0.0256	5.32	2.6	1.02	0.0014
9100	0.0234	5.35	2.0	0.51	0.0007
9960	0.0214	5.37	1.5	0.51	0.0006
10900	0.0196	5.40	1.0	0.51	0.0005
11900	0.0179	5.43	0.5	0.51	0.0005
13000	0.0164	5.43	0.5	0.00	0.0000
14300	0.0149	5.43	0.5	0.00	0.0000
15600	0.0137	5.45	0.0	0.51	0.0004
17100	0.0125	5.45	0.0	0.00	0.0000
18700	0.0114	5.45	0.0	0.00	0.0000
20400	0.0105	5.45	0.0	0.00	0.0000
22300	0.0096	5.45	0.0	0.00	0.0000
24400	0.0087	5.45	0.0	0.00	0.0000
26700	0.0080	5.45	0.0	0.00	0.0000
29300	0.0073	5.45	0.0	0.00	0.0000
32000	0.0067	5.45	0.0	0.00	0.0000
35000	0.0061	5.45	0.0	0.00	0.0000
38300	0.0056	5.45	0.0	0.00	0.0000
41900	0.0051	5.45	0.0	0.00	0.0000
45800	0.0047	5.45	0.0	0.00	0.0000
50100	0.0043	5.45	0.0	0.00	0.0000
54800	0.0039	5.45	0.0	0.00	0.0000
59500	0.0036	5.45	0.0	0.00	0.0000

Mercury Injection Capillary Pressure (Bulk Volume)



Mercury Injection Capillary Pressure (Pore Volume)



Pore Aperture Size Distribution

