

COUNTY

RILEY

LOCATION

10-8E-08A?

DATE

August 26, 1952

PERFORMED BY U.S. and Kansas Geological Surveys

DISCHARGE

1333 gpm

LENGTH OF TEST

183 min

30 min recovery

OF OBSERVATION WELLS

4

DISTANCE(S) TO PUMPING WELL

1.17', 384', 131', 588', 218'

WATER LEVEL = 27'

AQUIFER TYPE ALLUVIAL (Kansas and Big Blue Rivers)

DEPTH OF TEST WELL ? (no log is available)

SCREEN ?

COMMENTS The drawdowns are measured in hundredths of a foot sometimes ^{which is} probably leading to the very high transmissivity values. — There is some problem(s) with the data from this test. ^{There may be} recharge from the river? — but this test does not have a very long duration.

COMPUTER ANALYSIS

METHOD	T (gpd/ft)	S	RMS error	r
Rec	Unreasonably high	_____		588'
Thi's	Unreasonably high	_____		384'
Thi's	" "	_____		588'
Rec	" "	_____		384'
Thi's	" "	_____		131'
Rec	" "	_____		131'
Thi's	" "	_____		218'
Thi's	Unreasonably high, high error, low cc	_____		1.17'
Rec	" "	_____		1.17'
Rec	" "	_____		218'

MANHATTAN

City
Pumping
Plant



(CITY LIMITS)

RATON ST.

2400 feet

CITY
WELLS

#7
#8
#5
#6

Note
wells are
150 to 200
feet apart.

Old channel of Blue River

THIRD ST. (TRANS. HWY 13)

POYNTZ STREET

US 40

US 40

KANSAS

RIVER

BIG BLUE RIVER

SKETCH MAP
Showing location of city wells
Manhattan, Kansas

MEASUREMENT OF THE MANHATTAN PUMPING TEST

$$\frac{1}{r^2} = 6.701 \times 10^{-5}$$

$$r^2 = 17.161$$

$$\frac{1}{r^2} = 5.827 \times 10^{-5}$$

Well No. 5 $r = 384'$					Well No. 6 $r = 131'$					Well No. 7 $r = 588'$				
		Drawdown		Recovery		Drawdown		Recovery		Drawdown		Recovery		
Time in Minutes	Depth to Water	Drawdown	Depth to Water	Residual drawdown	Depth to Water	Drawdown	Depth to Water	Residual drawdown	Depth to Water	Drawdown	Depth to Water	Residual drawdown	Depth to Water	Residual drawdown
Static	26.51	0.0			27.70	0.00			27.725	0.00				
1	26.66	.15	26.68	.180	28.35	.65	28.13	.43	27.725	.000	27.70	.054		
3	26.71	.20	26.62	.110	28.45	.75	27.97	.27	27.735	.010	27.695	.049		
5			26.60	.090	28.47	.77	27.93	.23	27.750	.025	27.685	.039		
7	26.72	.21	26.573	.063	28.49	.79	27.91	.21	27.752	.027	27.680	.034		
10	26.728	.218			28.49	.79	27.88	.18	27.755	.030	27.665	.019		
15	26.747	.237	26.553	.043	28.495	.795	27.87	.17	27.755	.030	27.660	.014		
20	26.779	.269	26.55	.040	28.53	.83	27.85	.15	27.765	.040	27.662	.016		
30	26.772	.262	26.536	.026	28.57	.87	27.79	.09	27.765	.040	27.646	.000		
40	26.772	.263			28.58	.88			27.760	.035				
50	26.771	.261			28.59	.89			27.750	.025				
60	26.779	.269			28.62	.92			27.750	.025				
80	26.785	.275			28.64	.94			27.750	.025				
100	26.788	.278			28.66	.96			27.740	.015				
130	26.800	.290			28.67	.97			27.740	.015				
160	26.804	.294			28.68	.98			27.725	.000				
183	26.805	.295			28.71	1.01			27.735	.010				
Well No. 8 $r = 218'$					Well No. 9 $r = 1'$									
Static	25.80	0.00			27.00	0.00								
1	26.10	.30	26.00	.22			27.17	.32						
3	26.07	.29	25.91	.13										
5	26.11	.31	25.872	.092			27.01	.16						
7	26.10	.30	25.87	.09			26.99	.14						
10	26.13	.33	25.85	.07			26.97	.12						
15	26.14	.34	25.83	.05	38.82	11.82	26.94	.09						
20	26.15	.35	25.80	.02			26.92	.07						
30	26.16	.36	25.78	.00			26.88	.03						
40	26.16	.36					26.85	.00						
50	26.19	.39			42.57?	15.57?								
60	26.19	.39												
80	26.20	.40												
100	26.21	.41												
130	26.215	.415			38.90	11.90								
160	26.22	.42												
183	26.24	.44												