

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

49-57
NY 66
Approved by Seam.
12/2/49 in open file

Hydrologic Data
for
Pumping Test at Levittown, N. Y.
September 16-17, 1949

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Mineola, N. Y.
November 14, 1949

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HYDROLOGIC DATA FOR PUMPING TEST AT LEVITTOWN, N. Y.

A pumping test was run on September 16-17, 1949, at one of the ten wells (Map 1) constructed for public water supply and industrial uses at Levittown, a popular low-cost housing development in southeastern Nassau County in Long Island, New York. Water-level ^{measurements made} readings were ~~taken~~ prior to, during, and ^{after} ~~sub-~~sequent to the test in the ^{at} pumping well and four observation wells, two of which were equipped with automatic water-level recording instruments; pumping rates and other pertinent data were also collected. As shown on Map 2, the ^{at} pumping well and one observation well were screened in the Magothy (?) formation; all the other wells used in the test were screened in the ^{of Upper Cretaceous age} upper Pleistocene (glacial) sands and gravels which overlie the Magothy (?) ^{sands of the formation} sands. Some of the hydrologic data collected during the test are listed on Table 1; the elevations of the water-level readings as listed have been computed on basis of a common assumed datum which is believed to be within a few feet of the mean sea-level datum at Sandy Hook, New Jersey.

Although the pumping test was set up primarily to furnish qualitative results, actually sufficient quantitative data were collected from which the hydraulic characteristics of the water-bearing formations have been computed; such computations will be released in the near future. Since there is a paucity of quantitative data from which the coefficients of transmissibility and storage can be determined for the several aquifers ^{in parts} at many sections of Long Island, advantage is taken of opportunities to collect such basic information that can be used for quantitative analysis.

This pumping test was made possible through the kindness and cooperation of Levitt & Sons, Inc., its ground-water consultant, R. M. Leggett, and C. W. Lauman & Co., Inc., well drillers.

TABLE 1. - DATA FOR LEVITTOWN PUMPING TEST

Date	Time	Hours of Test	Average Pumping Rate gpm	Pump	Observation Wells			
				Well N-2791 (#2B)	0-1	0-2	0-3	N-3313 (#7)
				Elevation of water surface in feet (assumed datum)				
9-15-49	-	-	-	62.2	62.20	62.62	63.31	63.31
9-16-49	8:43A	Start of pumping						
	8:43A	0	0	62.2	62.19	62.61	63.29	63.29
		1	1063	38.8	60.48	62.47	63.29	63.29
		2	812	50.9	60.85	62.41	63.29-	63.28+
		3	709	44.5	60.59	62.35	63.29-	63.28-
		4	731	44.6	60.35	62.30	63.28	63.27+
		5	741	44.7	60.23	62.25	63.28-	63.27-
9-16-49	2:43P	6	740	45.0	60.16	62.20	63.27	63.26-
		7	743	43.9	60.05	62.15	63.26	63.25
		8	744	44.7	59.97	62.10	63.25	63.24+
		9	753	42.7	59.82	62.04	63.25-	63.23+
		10	760	42.7	59.75	62.03	63.24	63.22+
		11	755	41.7	59.65	-	63.23+	63.22
9-16-49	8:43P	12	772	41.5	59.63	61.95	63.23-	63.21
		13	764	41.5	59.55	61.91	63.21+	63.20+
		14	781	42.1	59.49	61.88	63.21	63.19+
		15	784	41.8	59.49	61.85	63.20	63.19-
		16	787	41.9	59.43	61.83	63.20-	63.18
		17	790	42.7	59.44	61.80	63.19-	63.17
9-17-49	2:43A	18	789	43.4	59.45	61.77	63.18-	63.16+
		19	790	43.5	59.44	61.75	63.17	63.15
		20	789	43.5	59.44	61.73	63.16	63.14
		21	789	43.6	59.42	61.72	63.15	63.13+
		22	789	42.4	59.35	61.70	63.14	63.12+
		23	790	42.3	59.29	61.69	63.13-	63.12-
9-17-49	8:43A	24	792	42.5	59.26	61.66	63.12	63.11
	9:25A	End of Pumping						
Difference in water level in 24 hrs.				19.7	2.93	0.95	0.17	0.18

U. S. Geological Survey
 Mineola, N.Y.
 November 14, 1949