# UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

Piesemetric levels from 1948 through 1950 for wells screened in the Lleyd sandy member of the Raritan formation on Long Island, New York

> by N. J. Lusczynski

Prepared in cooperation with the

New York Water Power and Control Commission
Nassau County Department of Public Works
Suffolk County Board of Supervisors
and the
Suffolk County Water Authority

Mineola, N. Y.
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Since 1932 the United States Geological Survey, in cooperation with the New York Water Power and Control Commission, the Nassau County Department of Public Works, the Suffolk County Board of Supervisors, and later also with the Suffolk County Water Authority, has been making both general and detailed studies dealing with the occurrence, movement, quantity, quality, and temperature of ground water found in the several water-bearing formations on Long Island. In the first years most of the emphasis was placed on studying the shallow water-table beds of Pleistocene age, although geologic and hydrologic information was obtained for the Lloyd sand member of the Raritan formation of upper Cretaceous age, the deepest water-bearing beds on Long Island, as well as for other artesian formations above the Lloyd.

However, in 1945 it seemed necessary to inaugurate a detailed and well-rounded program for a more complete study of the Lloyd sand member. Such a plan was endorsed and supported by all cooperating and interested parties. The following principal objectives were outlined:

- (1) Compilation of long-term records of the fluctuation and trend of water levels at selected wells, measured at least once a month, and measurement of water levels about once a year at nearly all measurable wells that tap the Lleyd sand member.
- (2) Determination of the principal hydraulic characteristics, the coefficients of permeability and storage, of the Lleyd sand member at as many locations as possible.

- (3) Assembly of a complete set of data on the chemical quality of the water pumped from the Lloyd sand member.
- (4) Accumulation of geologic data for use in delineating the position, extent, and thickness of the Lloyd sand member and of the over-lying confining clay member of the Raritan formation.

The present report deals exclusively with the progress made in obtaining water-level data. Water-level measurements have been made at most of the measurable wells screened in the Lleyd sand member on Long Island about once a year since late in 1945, and at many of the wells much more frequently. Some of the water-level data for 1946 and 1947 have been released in the typewritten reports listed below:

- (1) Preliminary data on water levels in wells that penetrate the Lleyd sand member, Long Island, No Ye; released to open files in 1946.
- (2) The piesemetric surface of the Lleyd sand member, Long Island, N. Y. in 1947; released to open files in 1949.

Report (2) contains such general and detailed information, including water levels in 82 wells in the Lloyd sand located in the four counties of Leng Island. Also included in that report are water-level hydrographs for five wells in Queens and Nassau Counties, where leng-term records are available, and a piesemetric map for the Lloyd sand member for western Long Island.

Attached to the present report, consisting of seven sheets, that gives records of piesometric levels for the Lloyd sand measured during late winter and early spring in 1948, 1949, and 1950 in 86 wells in Long Island. In 85 of these, observations were made about once a year during the three years.

Of the remaining wells, 16 are equipped with automatic recorders and 7 are measured monthly, and, therefore, much more information is available. All such data collected since 1946 will appear in forthcoming water-supply papers of the United States Geological Survey. Most records of periodic measurements collected prior to 1946 in wells acreemed in the Lleyd and have already been published in water-supply papers of the Geological Survey (see Water-Supply Papers 777, 817, 840, 845, 886, 906, 936, 944, 986, 1016, 1023 and 1071). However, all water-level records may be inspected at any time at the office of the Geological Survey at Mineela, N.Y.

The information in the attached table for wells tapping the Lleyd sand member was made possible to a large degree through the kindness and courtesy of many water districts and companies; municipal, county, State and Federal agencies; and numerous well owners. All these agencies and persons gave members of the Geological Survey access to the wells, shut down pumps where necessary often to their own inconvenience, and at times gave other assistance. Many also furnished well-construction data and earlier water-level records. Their cooperation is gratefully acknowledged.

Table

|   | State Milit  |      | in the second                        |                              | in fact was          |                               | 1990 00     | davidges                           | um of<br>wall        | by tide          | i Book 1 to 1  |
|---|--------------|------|--------------------------------------|------------------------------|----------------------|-------------------------------|-------------|------------------------------------|----------------------|------------------|--|
|   | I MI         | 721  | Pirotechi<br>Se no begin             | New York Water Service Corp. | -                    | 5-51-46<br>5-61-46            |             | 1 m:<br>1 m:                       | U.S.G.S. Observation | yes<br>Di        | Former public water supply well  |
|   | I CO         |      | Bet No Yest                          | Kines Co. Ice & Pupl Corp.   | 7.5                  |                               | 1 7         | at least tome.                     | 1 Industrial         | No (7)           |  |
|   | T 105*       |      | Barron Island, Floyd Demott<br>Floid | 0. 8. Key                    | +9.0<br>+9.6<br>+8.9 | 5-61-66<br>5-61-60<br>8-89-80 |             | not pused<br>notabled in           | USOS Observation     | 700<br>          |  |
|   | 9 80         |      | Cimialo                              | Long Island Sallroad         | 7:                   | 6-15-49<br>8-15-40            |             | 1                                  | Industrial           | No No            | Pump operated automatically  |
|   | Q 84         | 12   | Flucking                             | Enicherhalter Ice Co.        | +6.2<br>-5.1         | 4-14-40                       | 7           | over 6 mm.                         | Industrial           | Yes (?)          | t<br>Wean of high and low tide readings  |
|   | Q 64         | •    | - Alchurot                           | Enickerbocker Ice Co.        | -4712<br>-12.9       | 1-01-00<br>0-1-00<br>0-00-00  |             | not property                       | USGS Observation     | No               |  |
|   | 9 111        | 2    | Far Rocksway                         | Queensbero Gas & Elec. Co.   | +6,2<br>+0,2         | 4-24-68<br>8- 8-80            | =           | 2 hre. 40 mins.<br>4 hrs. 50 mins. | Industrial           | Yes              | Well cased off about 1 hr.   |
|   | Q 275        | 1    | Ferest Hills                         | N.Y.C. Dept. W.S.G. & E.     | *5.3<br>*5.1<br>*6.8 | 5-81-48<br>5-51-69<br>8-88-60 | - [         | not proposi<br>de                  | USGS Observation     | No<br>Es         | Abandoned public supply well. Continuou<br>water level record available since 1935 |
|   | Q 278        |      | Douglaston                           | H.Y.C. Bopt. W.S.G. & E.     | *1.8<br>*2.0         | 3-66-48<br>5-28-48<br>2-67-60 | #<br>#<br># | not primad<br>do<br>do             | USOS Observation     | No (?)           | Abandoned public supply well   |
|   | a <b>ses</b> | 5    | Flushing                             | M.Y.C. Dept. W.S.G. & E.     | -7.2<br>-4.0<br>-7.7 | 3-26-48<br>2-24-49<br>2-27-80 | iii<br>iii  | not pumped<br>do<br>do             | UK Cheervation       | Ho (7)           | Abandoned public supply well   |
| • | 287          |      | Broad Chancel                        | Broad Cheanel Corp.          | +8.0<br>+8.8<br>+6.1 | 5-81-48<br>8-81-40<br>8-88-80 | 1           | not pumped<br>do<br>do             | USGS Observation     | Yes<br>yes<br>d. | Abandonei public supply well   |
| 2 | 3 2000       |      | Actions                              | No E. Hart Ice Co.           | +8.7<br>+7.4         | 7- 1-48<br>8-36-80            | 3           | not pumped<br>de                   | USGS Observation     | Yes<br>90        | Former USGS recorder station   |
|   | 517          | 3-17 | Michaeld Hill                        | Jamaica Water Summly Co.     | -12.9                | 4-2-48                        | 1           | 2 100                              | Public Supply        | No               | 1  |
| • | 470          | 10   | Bayside                              | NaYaC. Dept. W.L.G. & B.     |                      | 5-51-66<br>5-51-66<br>2-60-60 |             | not pumped                         | USGS Observation     | Io.              | 8<br>g Continuous water level record available<br>g since 1955                     |

### Data on piesometric levels for wells in the Lloyd sand in Long Island, New York, for 1948-50

| State mili | Owner's<br>number | Locality             |                                     | Water level,<br>in feet<br>, meen see level, |                               | Type of measurement | Length of shutdown                 | Present use of well | Influenced by tide | Remarks  |
|------------|-------------------|----------------------|-------------------------------------|--|-------------------------------|---------------------|------------------------------------|---------------------|--------------------|--|
| 9.86       | •                 | Roseway Park         | W.Y.C. Dopt. W.S.O. 4 E.            | *0.2<br>*0.3<br>*0.3                         | 5-51-40<br>5-51-49<br>2-49-60 | •                   | not pumped<br>do                   | USGS observation    | Tos                | Continuous water level record available since 1955   |
| 9.00       | 200               | Janes                | Jamiles Bater Supply Co.            | -03  | 5-60-60                       | - 7                 | Al hre.                            | Public sumly        | i No               |  |
| 0.890      | 444               | Richard H71          | Jemica Water Semply Co.             | 414  | 4-1-40                        | w.                  | lè bre.                            | Public supply .     | i No               | <u>;                                    </u>   |
| 9 867      | 4-16-6            | Juntos               | Jameica Mater Supply Co.            | -46-7  | 1-10-40                       | AL                  | 1t hre.                            | Public semply       | 1 No               |  |
| Q 577      | •                 | Creature             | Greedmoor State Hospital            | 1.0.0  | 5-53-46                       | R                   | not pumped                         | USGS observation    | Мо                 | High daily reading. Water levels affected<br>by purpose in several pearby wells.                                       |
| 9.00       | •                 |                      | Grandson State Hospital             | 4.0  | 2-20-50                       | 1 - 1/2             | ast pupel                          | USOS observation    | no                 | High daily reading. Water levels affected<br>by purpose in several nearby wells.                                       |
| • Q 1027   |                   | Pluming              | N.Y.C. Dept. of Parks               | ****<br>****<br>****                         | 4- 9-48<br>8-61-49<br>2-49-60 | WT<br>R<br>R        | not pumped<br>de<br>do             | USGS observation    | Yes                |  |
| Ø 1822     |                   | Whitestone           | W.T.C. Dept. W.S.G. 4 B.            | *1.7<br>*1.0<br>*2.0                         | 3-20-48<br>3-20-40<br>2-27-60 | WI<br>WI            | not pumped<br>do<br>do             | OSCS observation    | Yes                | Former 1888 recorder station   |
| . 6 1941   | 4 4               | Elsburet             | Durine Femous Pools, Inc.           | -81.A<br>-4.3                                | 4-25-48<br>5- 9-80            | #1<br>#7            | not pusped                         | Recharge            | No (7)             | Affected by pumpage at well Q 27 on same : property. Pumpage reduced appreciably since : 1948.                         |
| 9.3896     |                   | College Point        | In the Etterers British Co.         | 9.1  | 8-18-80                       |                     | error 2 mee.                       | Industrial          | Yes (7)            | 1 Beautier operated by Klienert at nearby well   |
| 17         | 26                | Valley Stream        | Citizens Nater Supply Co.           | ****<br>****<br>*7.0                         | 1-01-40<br>1-01-40<br>1-01-40 |                     | ant propert                        | UBOS observation    | No                 | Continuous water level record available since 1956   |
| 1.0        | Be S              | Great Resk Letsten   | Cattage Eter Burde Co.              |  | +14-48                        | 77                  | 4 100                              | Public service      | 101                | One of many wells on suction line  |
| IN.        | 15                | A CONTRACT OF STREET | Manhagest-Lakerillo Tator District  | 90.4<br>91.9<br>94.7                         | 4- 6-48<br>4- 7-40<br>8-14-60 | T<br>T<br>R         | 2 hre. 80 min.<br>2 hre.<br>2 days | Public supply       | Yes                | Diffusion from well screen in upper strate<br>shet off 20 min. before measurement<br>Diffusion discontinued since 1948 |
| 1 10       |                   | Port Bullington      | Port Buildington Water Material     | **************************************       | 5-51-46<br>5-51-46<br>5-25-60 | R<br>R<br>R         | not pumped<br>do<br>de             | 7722                | Yes                | High daily reading affected by pumpage in 4 wells on same property.  |
| 1.0        | 1                 | Danie Polst          | Village of Sanda Pt. Water District | 1 46.5 1                                     | 4- 6-48<br>4- 7-49<br>8-17-50 | 矿                   | 2 days<br>80 hrs.<br>5 days        | Public supply       | Yes                | May be affected by pumpage at nearby well no screened in Lloyd Sand  |

|   | State well number | Omer's : | Recelity         | Owner                          | : Water level, : in feet : mean son level: | Dete                 | Type of measurement |                        | Present use of well | i Influenced by tide | : Remarks  |
|---|-------------------|----------|------------------|--------------------------------|--|----------------------|---------------------|------------------------|---------------------|----------------------|--|
|   | H 45              | أحد      | Long Beach       | City of Long Beach             | 19.2                                       | 3-15-50              | : .                 | Since summer of 1949   | Public supply       | Yes                  | Readings at N 40 not religble  |
|   | H 46              |          | Paint Lookeut    | t Channel Mgm*t Corp.          | +15 <sub>0</sub> 5<br>+14 <sub>0</sub> 7   | 4-19-48<br>5-15-60   |                     | 8 min.<br>1 hra        | Public supply       | Yes                  | Pump operates automatically  |
|   | N 67              |          | Presport         | Village of Freeport            | +14.9<br>+14.9                             | 8-18-48<br>2-24-50   |                     | 14 hrs.<br>46 hrs.     | Industrial          | i No                 | Former USGS recorder station   |
| · | N 109             | 1        | Glenwood Landing | Jericho Water District         | *18.0<br>*16.6                             | 4- 8-48<br>2-18-50   |                     | 5 yes.<br>1 7 yes.     | Public supply       | Yes                  | t Not used since 1945  |
|   | N 130             | . :      | Glenwood Landing | Jericho Water District         | •17.8                                      | 4- 8-48              |                     | All winter             | Public supply       | Yes .                | : Used occassionally during summer   |
|   | N 113 :           |          | Locust Valley    | Paul G. Pennoyer Estate        | +22.5                                      | 4-12-48              |                     | 1 hr.                  | Estate              | I No                 | Pump operates sutomatically  |
|   | N 110             | • ;      | Locust Valley    | Locust Velley Water District   | +54.1<br>+40.4                             | 4- 6-48<br>2-14-50   | 1 WT                | : 2 mos.               | Public supply       | i No                 |  |
| 1 | N 119             | 5        | Locust Valley    | : Locust Valley Water District | +55.5<br>+41.4                             | 4- 6-48<br>2-14-50   | . W                 | 7 hrs.                 | Public supply       | t No                 | •  |
| 1 | N 1985            |          | Lattingtown      | G. Beker Estate                | +12.8<br>+11.4                             | 5-29-48<br>2-17-50   |                     | : 2 days<br>: 3 days   | Estate              | Yes                  | 1  |
| l | N 194             | :        | Lattingtown      | The Creek Golf Club            | •17.6<br>•17.6                             | 4- 8-48 2-17-50      | 1 TT                | Not pumped             | Abendoned           | Yes                  | t Flowing well; cased off about 10 mins. t Flowing well; cased off about 10 mins.                      |
|   | N 172             |          | Mill Neck        | : Arthur V. Davis Estate       | *16.0<br>*16.0                             | 5- 9-50              | 1 177               | : Unknown<br>: 2 hrs.  | Estate              | Yes                  | Flows at high tide at about 17 ft. above is  |
|   | H 176             | :        | Centre Island    | Thurston Smith                 | + 8.8<br>+ 9.7                             | 5-29-48<br>: 5- 7-50 |                     | Unknown<br>de          | Estate              | Yes                  | : Well overflows top of pit at elev. near<br>: 10 ft. mesel.   |
|   | N 202             |          | Oyster Bay       | 1 Oyster Bay Water District    | +26.8<br>+29.4                             | 6- 8-48<br>8-16-60   | 1 TT                | r Not pumped<br>c do   | Abandoned           | Yes                  | : Flowing well cased off for \( \frac{1}{2} \) hr.   |
|   | N 206 1           | :        | Centre Island    | : Village of Cembre Island     | +8,2                                       | <b>5-16-50</b>       | WT +                | At lease several bre.  | Private supply      | i Yes                | : Flowing well cased off 1 hr. cverflows : top of pit at 9 ft. m.c                                     |
| ì | N 501             |          | Centre Island    | Joseph Stein                   | +10,2                                      | 4-2-40               | , w                 | 2 days                 | Private supply      | Yes                  | : Flowing well cased off 1 hr. overflows : top of pit at 10.5 ft. masel.                               |
| , | N 502             |          | Contro Island    | McClaren Estate                | +8.2<br>+8.5                               | 4-21-48<br>5-16-50   |                     | : 21 hrs.<br>: Unknown | Private supply      |                      | : Flowing well cased off la hrs. May ove : flow top of pit at 9.8 ft. m.s.l. : Cased off 1 hr. 15 min. |

For explanation of symbols see footnote at end of table.

## Data on piesometric levels for wells in the Lloyd sand in Long Island, New York for 1948-60

| State well<br>number |   | Locality           | Cyner                                | Water level,<br>in feet chare<br>mean see level, | Date                          | Type of measurement                   | Length of shutdown                      | Present use of      | Influence<br>by tide | Remarks   |
|----------------------|---|--------------------|--------------------------------------|--|-------------------------------|---------------------------------------|---|---------------------|----------------------|---|
| N 506                |   | Centre Island      | Nichols Estate                       | +7.5<br>+8.0                                     | 5-29-48<br>2-20-50            |                                       | Not pumped                              | Abandoned           | Yes                  | Flows at high tide occassionally  |
| N 507                |   | Beyville           | 0. L. Jenes Estate                   | *10.4  | 4-48-48                       | : 5                                   | Not pusped                              | Abendoned           | Yes                  |   |
| <b># 50.1</b>        |   | Mill Neck          | Irving Cox Estate                    | *20.6<br>*21.0<br>*20.9                          | 5-27-48<br>5-51-40<br>5- 2-60 | # # # # # # # # # # # # # # # # # # # | Not pumped<br>do<br>. de                | UBOS observation    | Yes                  | Readings taken at or near high tide   |
| N 200                |   | Planders Manor     | Plandome Gulf Club                   | 7.5  | 4- 6-48<br>4- 7-49<br>8-15-50 | 111                                   | All winter<br>do                        | Colf also           | No (?)               |   |
| ₩ 657                |   | Bar Beach          | Village of North Hempstood           | *14.1<br>*14.8<br>*14.1                          | 5-51-48<br>5-51-49<br>2-28-50 | 1                                     | Not pumped - do do                      | Para Carlo          | Yes                  | Mean daily reading  |
| N 000                | 1 | Cles Cove          | Chauco Products Co.                  | +9.4   | 4-16-48<br>2-18-50            | 7                                     | 55 mine.                                | Industrial          | Yes                  | Affected by pumpage at N 661  |
| ¥ 476                |   | Port Washington    | Board of Sever Commissioners         | *1.9<br>*4.2                                     | 5-28-48<br>2-15-60            |                                       | 82 mine.                                | Sewer works         | Yes                  | Pump operated automatically   |
| N 687                | 5 | Great Neck         | Citisens Water Supply Co             | *1.5<br>*2.3<br>*2.7                             | 4- 6-48<br>4- 7-49<br>2-15-48 | # # # # # # # # # # # # # # # # # # # | Not pumped<br>See remarks<br>5 mose     | Public supply       | Yes                  | t Pump operated only during Sept. 1948                                      |
| у 864                |   | East Island        | J. P. Margan Estate                  | +10.0<br>8.6                                     | 3-29-48<br>3-16-50            |                                       | At least 1 day                          | Estate<br>Abandoped | Yes                  | Pump operated automatically Well probably not used in 1949 and 195          |
| 1 908                |   | See Cliff          | Sea Cliff Water Co.                  | *25.0  | 8-16-60                       |                                       | 17 hrs.                                 | Public graphy       | Yes                  |   |
| и 1200               | • | Great Neck Estates | Citisens Water Supply Co.            | +5.8<br>+7.6                                     | 4- 6-48<br>4-12-49<br>2-15-50 | 1                                     | 8 mos.<br>Probably since summer<br>1948 | Public supply       | Yes                  |   |
| N 1828               |   | North Hills        | : Manhasset-Lakeville Water District | *10.5<br>*10.5<br>*6.0                           | 4- 6-48                       |                                       | All winter<br>2 mme.<br>25 dars         | Public supply       | t No                 | : Automatic recorder record obtained; shut down for repairs during Dec. 194 |
| N 1561               |   | Port Washington    | Beacon Theatre                       | ***  | 4-12-49<br>2-15-50            |                                       | Since last summer                       | : Hecharge          | 1 No (7)             | Recharge well to supply well N 1291   |

For explanation of symbols see footnote at end of table.

## Data on piesometric levels for wells in the Lloyd sand in Long Island, New York, for 1948-50

Table (Cont'd.)

| State well manher | Omer's<br>mader | Locality         |                                      | Water level,<br>in feet and<br>mean see level | Date                          | Type of measurement | Length of shutdown                        | Present use of     | Influenced<br>by tide | Remarks   |
|-------------------|-----------------|------------------|--------------------------------------|---|-------------------------------|---------------------|---|--------------------|-----------------------|---|
| ) 1 <b>0</b> 18   |                 | Lake Success     | : Manhasset-Lakeville Water District | +2.0<br>+2.2<br>+26.2                         | 5-10-48<br>4-12-49<br>2-12-50 | t WT                | : Several days<br>: 2 wks.<br>: 7 days    | Public supply      | 1 No (?)              | Not consistent with previous readinge                 |
| N 1651            |                 | Locust Valley    | Locust Valley Water District         | *20.2<br>*18.9                                | 4-16-48<br>2-14-60            |                     | : All winter<br>: 16 hrs.                 | Public supply      | i No                  |   |
| # 1715            | 1               | Port Washington  | Port Washington Water District       |   | 4- 5-48<br>4- 7-49<br>2-15-60 | 1 17                | : At least 1 mo.<br>: 2 mos.<br>: 44 hrs. | Public supply      | Tos                   | In same well field with N 1716                        |
| N 1716            | 2               | Pert Washington  | Port Washington Water District       | +12.5<br>+10.2<br>+ .9                        | 4-21-48<br>4- 7-49<br>8-13-50 | 1 AL                | :<br>: 1 mo.<br>: 2 wks.<br>: 5 days      | Public supply      | Yes                   | In same well field with N 1715                        |
| N 1802            |                 | Lake Success     | Manhasset-Lakeville Water District   | +7.0<br>+2.7<br>-1.0                          | 6-18-48<br>4- 7-49<br>2-14-50 | : III<br>: III      | :<br>: 2 days<br>: 2 me.<br>: 15 days     | : Public supply    | i No<br>i             |   |
| N 1877            | 8               | Roelyn           | t Roelyn Water District              | +18.7<br>+16.4                                | 4-18-48<br>5-14-50            | 1 177               | : 2½ hrs.<br>: 10 hrs.                    | Public supply      | Yes                   |   |
| N 1917            |                 | Glan Cove        | Wah Chang Trading Corp.              | *11.6<br>*12.7                                | 4- 8-48<br>2-18-50            |                     | : 1 hr. estimated<br>: 15 hrs.            | Industrial         | Yes                   | Pump operates automatically                           |
| N 1926            |                 | Kings Point      | t U. S. Merchant Marine Academy      | -6.0<br>• .9                                  | 4-18-48<br>2-26-50            |                     | : 10 mins.<br>: 12 hrs.                   | School supply      | Yes                   | Pump operates automatically                           |
| N 1968            | J-16-A          | New Hyde Park    | Jamaica Water Supply Co.             | +6.8<br>+7.2                                  | 5-50-48<br>4-22-49            |                     | : All winter<br>: 5 mos.                  | Public supply      | i No                  |   |
| N 2002            | 7               | Gleswood Landing | Long Island Lighting Co.             | +9.8<br>+6.6                                  | 4-12-48<br>2-15-50            |                     | : 1 hr. estimated<br>: 55 mins.           | Industrial         | Yes                   | : Pump operated automatically see N 2424              |
| N 2071            |                 | Olen Cove        | Appleby Estate                       | *14.4<br>*12.5<br>*12.0                       | 8-67-48<br>8-81-49<br>8- 2-50 | TT TT               | t not pumped<br>t do<br>t do              | : USGS observation | Yes                   | Flowing well; readings taken at or nea<br>high tide,  |
| N 2116            | 1               | Dosoris Island   | J. P. Morgen Setate                  |   | 4- 8-48<br>5- 9-50            | T T                 | : At least 1 hr.                          | : Estate           | Yes                   | Pump operates automatically Reading unreliable (?)    |
| N 2117            | 2               | Dosoris Island   | J. P. Morgan Estate                  | *10.9<br>*22.4                                | 6- 8-48<br>8-16-50            | : #                 | : At least 1 hr.                          | Estate             | Yes                   | Pump operates automatically<br>Reading unreliable (?) |

|            | ate well<br>number | Owner's<br>number | Locality          | Ormée                         | Water level<br>in feet<br>mean sea level | Date                          | Type of measurement  | Length of<br>shutdown  | Present use of                        | Influenced by tide | Remarks   |
|------------|--------------------|-------------------|-------------------|-------------------------------|--|-------------------------------|--|------------------------|---------------------------------------|--------------------|---|
| N 2        | 2118               | 1                 | Dosoris Park      | John To Prett                 | *11.9<br>*11.6                           | 4-8-48<br>2-17-60             |  | 2 hre.<br>Unknown      | Setate                                | Yes                | Pump operates automatically. Cased off  |
| N 2        | 2120               | ı                 | Glen Cove         | A. N. Loss Estate             | +12.1<br>+10.6                           | 4-18-48<br>5- 7-80            | . #  | See remarks            | : Estate                              | Tes                | :. Probably shutdown all winter   |
| W 2        | 2424               | 8                 | Glenwood Landing  | Long Island Lighting Co.      | +15.5                                    |                               |  | Not pumped             | : USGS observation                    | 1 Yes              | : Automatic record available Sept. 27, 194 s to Jane 24,1965  |
| , x 2      | 2597               |                   | Long Beach        | City of Long Beach            | + .5                                     | 8- 1 <b>-48</b>               | *  | Not pumped             | t USUS observation                    | Yes                | Automatic record available July 29 to Au<br>2, 1945. Mean daily reading. Affected<br>pumpage at nearly wells. |
| н е        | 1502               | 11/1/1            | Bolling ox both a |                               | *25.5<br>*22.1                           | 5-81-40<br>5-15-60            |  | Not pumped             | : USGS observation<br>: Public supply | 1 No               | : Automatic record available Dec. 24,1948; to April 15, 1949  |
| у :        | 1448               |                   | Long Beach        | City of Long Brack            | + 8,0                                    | 8-10-60                       |  | Not pumped             | : Public supply                       | t Yes              | : Mean daily reading. Automatic record<br>: available for period Mar. 8-11, 1950                              |
| 8 0        |                    |                   | Test Feek         | Immediate Conception Seminary | 20.0                                     | 4-15-48<br>2-17-40            | <u>.</u>   | 1 hr. 15 mine.         | Seminary supply                       | No (?)             | Pump operated automatically. Affected by pumpage in well \$.229 locates 10 ft. away                           |
| 8 4        | • 7                | 1                 | Korthport         | U.S. Veterans Hospital        | *\$2.7<br>*\$3.5                         | 5-51-40<br>2-17-60            |  | 6 vks.<br>18 krs.      | 1 Hospital supply                     | No.                | : Affected by pumpage at nearby wells   |
| 3.4        | ω .                | •                 | Northpert         | U.S. Veterans Hospital        | +82.6                                    | 5-61-40<br>2-17-60            | To The state of th | 10 days<br>6 days      | Hospital supply                       | No 1               | Affected by pumpage at nearby wells   |
| 5.2        | 20R                |                   | Huntington        | M.Y. Water Service Corp.      | 959.2<br>961.0<br>9.00                   | 4- 2-46<br>5-80-46<br>2-21-50 | ## ## ## ## ## ## ## ## ## ## ## ## ##   | Not pumped<br>do<br>do | UBGS observation                      | i No<br>i          |   |
| S 2        | 217                |                   | West Neck         | T.S. Fillians Estate          | •7.7<br>•8.0                             | 4-15-48<br>2-17-60            |  | See remarks            | Estate supply                         | Yes                | Probably not pumped   |
| s <b>4</b> | 1466               |                   | Lloyd Neck        | Marchall Field Setate         | 19.6                                     | 4-15-48                       |  | le hrs.                | : Estate supply                       | Yes                |   |

For explanation of symbols see footnote at end of table.

#### Data on piezometric levels for wells in the Lloyd sand in Long Island, New York, for 1948-50

Table (cont'd.)

| State well number | Omer's    | Locality   | Owner                          | Water level<br>in feet<br>men see level | Date               | Type of measurement | Length of shutdown | Present use of   | Influenced by tide | Remarks                                  |  |
|-------------------|-----------|------------|--------------------------------|---|--------------------|---------------------|--------------------|------------------|--------------------|--|--|
| S 4724            | Most rach | There Heak | Boardman Estate                | 915₀7<br>915₀0                          | 4-15-48<br>2-17-50 | II                  | 5 days<br>Unknown  | Estate supply    | Yes                | Cased off 50 mins.<br>Cased off 30 mins. |  |
| S 6409            |           | Upton      | Brookhaven National Laboratory | +94.8<br>+55.1                          | 4- 7-49<br>2-24-50 | r<br>R<br>R         | Not pumped<br>do   | USGS observation | No                 |  |  |
| 5 6454            |           | Upton      | Brookhaven National Laboratory | +65.5<br>+62.1                          | 8-28-49<br>2-27-50 | R<br>R              | Not pumpeá<br>do   | USGS observation | No                 |  |  |

Note: Mater-level readings in above table were taken in the late winter or early spring of 1948, 1949 and 1950. Wells at which water levels are read monthly or recorded by automatic recorder are noted as USOS chearvation wells; or all other well readings were taken about once a year. Water levels in artesian acquirers are affected by tides, barcastric preserve, and length of recovery after shutdown of pumpage. Nean daily readings are indicated only for wells equipped with an extensite rescribe; all other readings are measurements taken on date indicated but may not necessarily represent mem levels for the day. Where influence of tide or water level is not known definitely, a question mark is shown in the table.

| AL | - | Airline     | Min (s) | - | Minute (s)           |
|----|---|-------------|---------|---|----------------------|
| R  | - | Recorder    | Hr (s)  | - | Hour (s)             |
| I  |   | Wetted tape | Tk (a)  | - | Hour (s)<br>Week (s) |
|    |   | Static tube |         |   | Month (s)            |

Prepared by the

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- Suffolk County Water Authority and Board of Supervisors

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