

orig WT file

104



# Layne-Western Company

721 ILLINOIS AVENUE

AURORA, ILLINOIS

Whiteside

## Well Information—Drift Wells

Name of Job Northern Illinois Water Corp. Date Sept. 15, 1962  
 City or Village Sterling State Ill.  
 Well No.: 6 Drillers: Siefers  
 Well Location Approx. 1400 ft. ( W ) and 50 ft. ( S ) of the NE corner of  
 Section 19, Twp. 21 ( N ), Range 7 ( E ) Whiteside County.  
 Otherwise located as On West Lefever Rd., 3/4 mile west of Dillon St.

Work Began: Aug. 2, 1962 Work Completed: Sept. 7, 62 Well Depth: 86½'

All measurements made from existing ground level at time well was drilled.

### Casing Record:

| Amount      | Dia.       | Wt. or Thickness | Material     | Joints        | From      | To          |
|-------------|------------|------------------|--------------|---------------|-----------|-------------|
| <u>48½'</u> | <u>30"</u> | <u>0.25"</u>     | <u>ARMCO</u> | <u>Welded</u> | <u>+2</u> | <u>46½'</u> |
| <u>48½'</u> | <u>20"</u> | <u>0.375"</u>    | <u>Steel</u> | <u>"</u>      | <u>+2</u> | <u>46½'</u> |

### Screen Record: Type Layne shutter - 7 gauge

| Amount     | Dia.       | Opening   | Material    | Joints        | From        | To          |
|------------|------------|-----------|-------------|---------------|-------------|-------------|
| <u>40'</u> | <u>20"</u> | <u>#6</u> | <u>S.S.</u> | <u>Welded</u> | <u>46½'</u> | <u>86½'</u> |
|            |            |           |             |               |             |             |

Type of Seal at Bottom Stainless steel plate on bottom of screen

### Hole Record:

|           |           |            |    |             |
|-----------|-----------|------------|----|-------------|
| <u>52</u> | inch from | <u>0</u>   | to | <u>20'</u>  |
| <u>42</u> | inch from | <u>20'</u> | to | <u>86½'</u> |

### Gravel Pack Record:

| Amount        | Size      | Source                     | From         | To          |
|---------------|-----------|----------------------------|--------------|-------------|
| <u>43 ton</u> | <u>#3</u> | <u>Northern Gravel Co.</u> | <u>26'7"</u> | <u>86½'</u> |

(Note: Gravel on outside of 30" casing from 35' to 46½')

Cementing Record: 30" casing cemented in 52" hole from 0 to 15' using  
Redi-mix concrete

Backfill Record: Sand backfill outside of 30" casing between 15' and 35'

**Figure 1**

after

at Dated\_\_

[illegible]



## WELL TEST DATA SHEET



# Loyne-Western Company

WATER SUPPLY CONTRACTORS

721 ILLINOIS AVENUE  
Phone: AURORA TW 7 4261AURORA, ILLINOIS  
CHICAGO Enterprise 1204

Page 1

Job **H. L. V. Corp.**Date Tested **Aug. 30, 1962**Location **Sterling, Ill.**Tested By **Siefers, Will, Parker**Dia. of Well **42 x 30 x 20**

Driver

Depth of Well **88' - 6" top of 20" casing** Pump Used:

Column and Shaft

Length of Airline **54'**

Bowls

Non-Pumping Level **15'**

All readings on well manufacturer

Orifice Size **6" x 9"**from top of 20" casing  
which is 2' above O.L.

| Time      | Piezometer Reading (in.) | G. P. M. | Air Gauge Reading (feet) | Pumping Level | Drawdown | Discharge Pressure<br>Lbs. Per Sq. In. | Total Pumping Head | Supply Well       |
|-----------|--------------------------|----------|--------------------------|---------------|----------|--|--------------------|-------------------|
| 7:30 A.M. | 0                        | 0        | 15'                      | 15'           | 0        | Nonpumping level                       |                    | 14'-0"            |
| 7:55      | 0                        |          | Started pump             |               |          | pump on                                |                    |                   |
| 8:00      | 5                        | 781      | 21'-6"                   | 21'-6"        | 6'-6"    | 6.5                                    |                    | 17'-3" 17.25      |
| 8:15      | 20                       | 855      | 23'-0"                   | 23'-0"        | 8'-0"    |  |                    | 18'-1" 18.33      |
| 8:30      | 35                       | 899      | 23'-0"                   | 23'-0"        | 8'-0"    |  |                    | 18'-6" 18.67      |
| 8:45      | 50                       | 899      | 23'-6"                   | 23'-6"        | 8'-6"    | 8.5                                    |                    | 18'-10" 18.82     |
| 9:00      | 65                       | 899      | 23'-6"                   | 23'-6"        | 8'-6"    |  |                    | 19'-0" 19         |
| 9:30      | 95                       | 863      | 23'-6"                   | 23'-6"        | 8'-6"    |  |                    | 19'-3" 19.17      |
| 10:00     | 125                      | 899      | 23'-6"                   | 23'-6"        | 8'-6"    |  |                    | 19'-3 1/2" 19.21  |
| 10:30     | 155                      | 899      | 23'-6"                   | 23'-6"        | 8'-6"    |  |                    | 19'-8 1/2" 19.29  |
| 11:00     | 185                      | 863      | 23'-6"                   | 23'-6"        | 8'-6"    |  |                    | 19'-6" 19.33      |
| 11:30     | 215                      | 863      | 24'-0"                   | 24'-0"        | 9'-0"    |  |                    | 19'-5" 19.42      |
| 12:00     | 245                      | 863      | 24'-0"                   | 24'-0"        | 9'-0"    |  |                    | 19'-5" "          |
| 12:30     | 275                      | 863      | 24'-0"                   | 24'-0"        | 9'-0"    |  |                    | 19'-5" "          |
| 1:00      | 305                      | 863      | 24'-0"                   | 24'-0"        | 9'-0"    |  |                    | 19'-5" "          |
| 1:30      | 335                      | 863      | 24'-0"                   | 24'-0"        | 9'-0"    |  |                    | 19'-6" 19.5       |
| 2:00      | 365                      | 863      | 24'-0"                   | 24'-0"        | 9'-0"    |  |                    | 19'-6" "          |
| 2:30      | 395                      | 863      | 24'-0"                   | 24'-0"        | 9'-0"    | 26                                     | 64'                | 19'-6" (2400 RPM) |
| 3:00      | 425                      | 863      | 24'-0"                   | 24'-0"        | 9'-0"    |  |                    | 19'-6" "          |
| 3:30      | 455                      | 863      | 24'-0"                   | 24'-0"        | 9'-0"    |  |                    | 19'-6" "          |
| 4:00      | 485                      | 863      | 24'-0"                   | 24'-0"        | 9'-0"    |  |                    | 19'-6" "          |
| 4:30      | 515                      | 863      | 24'-0"                   | 24'-0"        | 9'-0"    |  |                    | 19'-6" "          |
| 5:00      | 545                      | 863      | 24'-0"                   | 24'-0"        | 9'-0"    |  |                    | 19'-6" "          |
| 5:30      | 575                      | 863      | 24'-0"                   | 24'-0"        | 9'-0"    |  |                    | 19'-7" 19.58      |
| 6:00      | 605                      | 863      | 24'-0"                   | 24'-0"        | 9'-0"    |  |                    | 19'-7" "          |
| 6:30      | 635                      | 863      | 24'-0"                   | 24'-0"        | 9'-0"    |  |                    | 19'-7" "          |



## WELL TEST DATA SHEET



# Loyne-Western Company

WATER SUPPLY CONTRACTORS

721 ILLINOIS AVENUE  
Phone AURORA TW 7-4261AURORA, ILLINOIS  
CHICAGO ENTERPRISE 1204

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Job **H. L. W. Corp.**Date Tested **Aug. 30-31, 1962**Location **Sterling, Ill.**Tested By **Siefers, Will, Parker**Dia. of Well **42 x 30 x 20**

Driver

Depth of Well **88'-6" top of 20" casing** Pump Used:

Column and Shaft

Length of Airline **54'**

Bowls

Non-Pumping Level **15'**

Manufacturer

Orifice Size **6" x 5"**

Serial No.

| Time           | Piezometer Reading (in.) | G. P. M. | Air Gauge Reading (feet) | Pumping Level | Drawdown | Disch. Pressure Lbs. | Disch. Pressure Feet | Total Pumping Head | Remarks          |
|----------------|--------------------------|----------|--------------------------|---------------|----------|----------------------|----------------------|--------------------|------------------|
| 7:00 665       | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-7" 19.58     |
| 7:30 695       | 49                       | 863      | 24'                      | 24'           | 9"       |                      |                      |                    | 19'-7" "         |
| 8:00 725       | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-7" "         |
| 8:30 755       | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-7 1/2" 19.62 |
| 9:00 785       | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-7 1/2" "     |
| 9:30 815       | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-7 1/2" "     |
| 10:00 845      | 49                       | 863      | 24'                      | 24'           | 9"       |                      |                      |                    | 19'-7 1/2" "     |
| 10:30 875      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-8" 19.67     |
| 11:00 905      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-8" "         |
| 11:30 935      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-8" "         |
| 12:00 965      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-8 1/2" 19.71 |
| 12:30 995 A.M. | 49                       | 863      | 24'                      | 24'           | 9"       |                      |                      |                    | 19'-9" 19.75     |
| 1:00 1025      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-9" "         |
| 1:30 1055      | 49                       | 863      | 24'                      | 24'           | 9"       |                      |                      |                    | 19'-9" "         |
| 2:00 1085      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-9" "         |
| 2:30 1115      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-9" "         |
| 3:00 1145      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-9" "         |
| 3:30 1175      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-9" "         |
| 4:00 1205      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-9" "         |
| 4:30 1235      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-9" "         |
| 5:00 1265      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-9" "         |
| 5:30 1295      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-10" 19.82    |
| 6:00 1325      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-10" "        |
| 6:30 1355      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-10" "        |
| 7:00 1385      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-10" "        |
| 7:30 1415      | 49                       | 863      | 24'                      | 24'           | 9'       |                      |                      |                    | 19'-10" "        |



## WELL TEST DATA SHEET



# Layne-Western Company

WATER SUPPLY CONTRACTORS

721 ILLINOIS AVENUE  
Phone AURORA TW 7-4261AURORA ILLINOIS  
CHICAGO ENTERPRISE 1204

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Job **N. I. W. Corp.**Date Tested **6-30-11, 1963**Location **Sterling, Ill.**Tested By **Siefera, Will, Parker**Dia. of Well **42 x 30 x 20**

Driver

Depth of Well **68'-6", top of 20" casing** Pump Used:

Column and Shaft

Length of Airline **54'**

Bowls

Non-Pumping Level **15'**

Manufacturer

Orifice Size **6" x 5"**

Serial No.

| Time            | Piezometer Reading (in.) | G. P. M. | Air Gauge Reading (feet) | Pumping Level | Drawdown  | Disch. Pressure |      | Total Pumping Head | Remarks           |
|-----------------|--------------------------|----------|--------------------------|---------------|-----------|-----------------|------|--------------------|-------------------|
|                 |                          |          |                          |               |           | Lbs.            | Feet |                    |                   |
| 8:00 1445       | 48 1/2                   | 899      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | Supply well       |
| 8:30 1475       | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 19'-11" 19.92     |
| 9:00 1505       | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 19'-11" "         |
| 9:30 1535       | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 19'-11" "         |
| 10:00 1565      | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 19'-11" "         |
| 10:30 1595      | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 20'-0" 20.00      |
| 11:00 1625      | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 19'-11" 19.92     |
| 11:30 1655 AM   | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 19'-11 1/2" 19.96 |
| 12:00 1685      | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 19'-11 1/2" 19.96 |
| 12:30 1715 P.M. | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 19'-11 1/2" "     |
| 1:00 1745       | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 20'-0" 20         |
| 1:30 1775       | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 20'-0"            |
| 2:00 1805       | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 20'-0"            |
| 2:30 1835       | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 20'-0"            |
| 3:00 1865       | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 20'-0"            |
| 3:30 1895       | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 20'-0"            |
| 4:00 1925       | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 20'-0"            |
| 4:30 1955       | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 20'-1" 20.08      |
| 5:00 1985       | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 20'-1" 20.08      |
| 5:30 2015       | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 20'-1" "          |
| 6:00 2045       | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 20'-1" "          |
| 2075            | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 20'-1" "          |
| 2105            | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 20'-1" "          |
| 2135            | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 20'-1" "          |
| 2165            | 49                       | 863      | 24'-2 1/2"               | 24'-2 1/2"    | 9'-2 1/2" |                 |      |                    | 20'-1" "          |

Pump off





# Loyne-Western Company

WATER SUPPLY CONTRACTORS

721 ILLINOIS AVENUE

Phone AURORA BW 7-4261

AURORA, ILLINOIS

CHICAGO BRIDGE 1204

Page 4

Job **H. L. W. Corp.**Date Tested **8-30-31, 1962**Location **Sterling, Ill.**Tested By **Stefors, Will, Partner**Dia. of Well **42 x 30 x 20**

Driver

Depth of Well **88' - 6" top of 20" casing** Pump Used

Column and Shaft

Length of Airline **54'**

Bowls

Non-Pumping Level **15'**

Manufacturer

Orifice Size **6" x 5"**

Serial No.

## RECOVERY READING

| Time | Pressure Reading (in.) | G.P.M. | Water Gauge Reading (feet) | Static Level | Drawdown | Loss | Feet | Total Pumping Head | Well Supply      |
|------|------------------------|--------|----------------------------|--------------|----------|------|------|--------------------|------------------|
| 8:05 |                        |        | 18-1/2                     | 18.5         |          |      |      |                    | 16'-7" 16.58     |
| 8:10 |                        |        | 17-1/2                     | 17.5         |          |      |      |                    | 15'-9" 15.75     |
| 8:15 |                        |        | 17                         |              |          |      |      |                    | 15'-7" 15.58     |
| 8:20 |                        |        | 16-3/4                     | 16.75        |          |      |      |                    | 15'-5" 15.42     |
| 8:25 |                        |        | 16-3/4                     | 16.75        |          |      |      |                    | 15'-4" 15.33     |
| 8:30 |                        |        | 16-3/4                     | 16.75        |          |      |      |                    | 15'-3-1/2" 15.21 |
| 8:40 |                        |        | 16-1/2                     | 16.5         |          |      |      |                    | 15'-2" 15.17     |
| 8:50 |                        |        | 16-1/2                     | 16.5         |          |      |      |                    | 15'-2" "         |
| 9:00 |                        |        | 16-1/2                     | 16.5         |          |      |      |                    | 15'-2-3/4" 15.14 |

End of list



Time (min)

sterling - 8/30-31/62

Supply Well

$$T = \frac{264(863)}{19.2-17.97} = 185,230 \text{ gal/44} \quad P = 48609 \text{ gal/44}$$

$$T = \frac{(264)(863)}{0.67} = 340,000 \quad \frac{19.17}{19.16} = 0.67$$

$$P = \frac{340,000}{48} = 7090$$

gravity  
drainage

Depth to water



Time (min)

Sterling No. 6  
8/30-31/66

Recovery Data for Supply Well (Obs. Well)

$$T = \frac{(264)(863)}{1.20} = 190,000$$

$$\frac{15.8}{14.60} = 1.20$$

Depth to Water (feet)

5.00

5.50

6.00

6.50

