IOWA GEOLOGICAL SURVEY
In Cooperation with U. S. Geological Survey
RECORD OF WELL

W 7482

Location:

Town: Waterloo (N E) (S W) :County Black Hawk ~~E.~~

NE NE SE sec. 34 T. 89 N., R. 13 W. _____ Twp.

Well name and number Waterloo City Well No. 15 (1955)

Owner _____ Address _____

Tenant _____ Address _____

Contractor Thorpe Well Co. Address _____

Drillers Atcheson & Lambertz

Drilling dates Aug. 31 (on test hole) - Oct. 24, 1955

Well data:

Altitudes: Drilling curb _____ feet; Land surface _____ feet

Determined by _____

Topographic position _____

Total depth: Reported 206 feet, Measured _____ feet

Drilling method _____

Hole and casing data 112½' of 24" Std pipe set at 112'; 145½' of 20" set at 142'; 66' of 18" screen with ⅛" slot. Top 5' of screen is blank.

Original depth to water 118 ft. above below _____ Date _____

Source of data _____

Sources of water: Principal _____

Others _____

## Production Data

| | | | | |
|---|---|---|---|---|
| Date | | | | |
| Static water level | 118' | | | |
| Measuring point | | | | |
| Pumping water level | 126' | | | |
| Yield (g. p. m.) | 213 | | | |
| Duration of pumping | | | | |
| Specific capacity | | | | |

## Pump Data

Type pump _____ Column diameter and length _____

Cylinder or bowls diameter and length _____

Suction pipe _____ Airline _____

Power _____ Production _____ g. p. m. for _____ hours per day

Use of water _____

## Dissolved constituents and properties (in parts per million except as indicated)

| | | | | |
|---|---|---|---|---|
| Date sampled | | | | |
| Sampled by | | | | |
| Silica ($SiO_2$) | | | | |
| Iron (Fe) | | | | |
| Manganese (Mn) | | | | |
| Calcium (Ca) | | | | |
| Magnesium (Mg) | | | | |
| Potassium (K) | | | | |
| Sodium (Na) | | | | |
| Carbonate ($CO_3$) | | | | |
| Bicarbonate ($HCO_3$) | | | | |
| Sulfate ($SO_4$) | | | | |
| Chloride (Cl) | | | | |
| Fluoride (F) | | | | |
| Nitrate ($NO_3$) | | | | |
| Dissolved solids | | | | |
| Hardness (as $CaCO_3$) | | | | |
| Total | | | | |
| Grains per gallon | | | | |
| Noncarbonate | | | | |
| Alkalinity (as $CaCO_3$) | | | | |
| pH | | | | |
| Specific conductance (micromhos at 25°C) | | | | |
| Temperature (°F) | | | | |
| Analysis No. | | | | |

## Laboratory Data

Well No. W 7482 Sample range 0-203 No. of samples 39

No. of dupls. and cond. 39 Fair Washed range 100-203

Samples prepared by Campbell Date 3-15-56

Logged by NORTHUP Date 4/3/56

Correlations by NORTHUP Date 4/3/56

EIR-6

R-1-B

# THORPE WELL COMPANY

2340 SIXTH AVENUE
DES MOINES, IOWA

*Drilled for* City Water Works *at* Waterloo, Iowa
Beside water tower at Ivanhoe & Kimball Avenue

*Well is located* _____ *miles N-E-S-W and* _____ *miles N-E-S-W from* _____

*in the* NE¼SE¼ SE ¼ *Section* 34 *Township* 89N *Range* 13 W

*Drilling started* August 31 (on testhole) *19* 55 *Completed* October 24 *19* 55

*Well No.* 15 *Kind of Well* Water *Depth* 206 ft. *Size hole started* 30 *in.*

*Finish* 19" *G. P. M.* 2131 *Static Head* 118' *Pumping level from surface* 126'

*Water was first encountered at* 143' *in* lime rock *Approx. Amt.* _____ *Temp.* 49°

*Remarks* _____

(GIVE DETAILS OF PERFORATED PIPE AND SEALS)

| RECORD OF PERMANENT PIPE | | | | | TEMPORARY PIPE | |
|---|---|---|---|---|---|---|
| SIZE PIPE | AMOUNT OF PIPE | DEPTH TO BOTTOM OF PIPE | DEPTH TO TOP OF PIPE | MAKE OF PIPE | SIZE PIPE | AMOUNT |
| 24" | 112' 6" | 112' | 6" above ground | Standard | 30" | 22' |
| 20" | 145' 6" | 142' | 3'6" above ground | 1/2" wall std | 26" | 65' |
| 18" | screen | 61' with 1/8" | slot top 5' of screen is blank, total 66' | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

*Driller* Orian L. Atcheson *From Surface to* 206 *feet*

*Driller* Art Lambertz *From* _____ *feet to* _____ *feet*

*Driller* _____ *From* _____ *feet to* _____ *feet*

| AMOUNT IN FEET | KIND OF SOIL OR FORMATION (BE SPECIFIC) | TOTAL DEPTH FEET |
|---|---|---|
| 3 | Sandy dirt & rock | 3 |
| 12 | Sandy yellow clay | 15 |
| 5 | Sand and gravel | 20 |
| 31 | Sandy blue clay | 51 |
| 7 | Coarse sand | 58 |
| 43 | Sandy blue clay | 101 |
| 24 | Lime rock broken | 125 |
| 10 | Broken lime rock and clay | 135 |
| 5 | Broken lime rock | 140 |
| 10 | Broken lime rock and clay | 150 |
| 5 | Sand lime rock | 155 |
| 5 | No sample | 160 |
| 7 | Hard lime rock | 167 |
| 13 | Broken lime rock soft | 180 |
| 5 | No sample | 185 |
| 19 | Brdken lime rock | 204 |
| 2 | Hard lime rock | 206 |
| | | |
| | | |
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