IOWA STATE DEPARTMENT OF HEALTH
DIVISION OF PUBLIC HEALTH ENGINEERING AND INDUSTRIAL HYGIENE

# GROUND WATER

Town Carroll County Carroll Date July 25, 1949

WELL NO. 8 (new) Active Yes Standby ..... Abandoned ..... Replaced by No. .....

LOCATION: Street High lift station Sec. ..... T. ..... N.R. ..... East: West

Lot ..... Block ..... Township .....

OWNERSHIP Municipal Date Installed Completed Sept. 17, 1948

CONTRACTOR Thorpe Well Co. Address Des Moines, Iowa

DATE RECONDITIONED None 19..... Contractor ..... Address .....

CONSTRUCTION EMPLOYED: Drilled - gravel packed. Main hole 22" O D pipe from 0 to 126'-7" 12" I D pipe from a point 1' below ground surface to 136'-0" 12" Everdur screen from 135' to 175' (5' of 10" pipe welded on top) Washed ¾" gravel between 12" and 22" pipe to surface Nine holes NE - NW and SW, all 5" I D pipe from surface to 123' gravel filled.

CURB ELEVATION ..... REFERENCE .....

TYPE OF CONSTRUCTION Drilled, gravel packed Depth 184 ft. Diameter 12 in.

CASING: Material ..... Condition .....

SCREEN: Material ..... Length ..... ft. Diameter ..... in. Slot Opening ..... in.

WELL SEALED Yes How Steel plate between 22" and 12" pipe with extended sealing through plate for gravel pack, concrete vertical encloses plate & extends to top of casing. Approved Yes

WELL VENTED Yes How Turned down screened vent connected with 12" pipe Approved Yes

TYPE OF PUMP V.T. Make Fabona Capacity 400 GPM Lubricated Water

DEPTH TO CYLINDER ..... ft. Tail Pipe 175' to bottom of screen ft.

PUMP CONTROL: Manual Yes Automatic ..... Semi-Automatic .....

STATIC LEVEL ..... ft. Pumping Level ..... ft. Drawdown ..... ft.

OPTIMUM SPECIFIC YIELD 400 at 109' head GPM Drawdown ..... ft. Time ..... hrs.

RATE OF DRAWDOWN ..... Rate of Recovery .....

TEMPERATURE OF WATER ..... °F Where Measured ..... Temp. of Atmosphere ..... °F

DRAWDOWN GAUGE INSTALLED .....

TOPOGRAPHICAL POSITION OF WELL In lowland, approximately 100' north of creek

WELL SITE INVESTIGATED Yes Approved Yes Why not .....

WELL CONSTRUCTION REVIEWED Yes Approved Yes Why not .....

PIT CONSTRUCTION: Purpose None Size and Description .....

CONDITION: ..... Drainage Facilities .....

PUMP INSTALLATION: Approved Yes Why Not .....

CUTTINGS FROM WELL PRESERVED: Yes Where delivered to I.G.S. July 22, 1948

DEPTH TO BED ROCK ..... Depth to Water-bearing Stratum .....

SOURCE OF WATER: Principal Formation Sand and gravel Other .....

Total Hardness ..... ppm. Total Iron ..... ppm. Sulfates ..... ppm. Fluorine ..... ppm.

Manganese ..... ppm. pH ..... $CO_2$ ..... ppm.

REMARKS: Mineral analysis will be collected soon.

New individual pump house for this well with equipment pumping direct to subsurface reservoir near highlift pump station.

Approximately 95 ton of ¾" washed gravel used in pack. 22" pipe and 8" pipe concreted at bottom.

| GEOLOGICAL DATA | | | CASING DATA | WELL DATA | |
|---|---|---|---|---|---|
| Formation | Material and distance from surface in ft. | Series | Position, kind and extent of casing, liners, shoes, etc. | Scale: Horizontal ..... Vertical ..... | Position of seals, screens, static level, etc. |

| From | To | Depth | Material and distance from surface in ft. |
|---|---|---|---|
| 0 | 5 | 5 | Top soil |
| 5 | 23 | 18 | Yellow clay |
| 23 | 30 | 7 | Clay - gravel |
| 30 | 65 | 35 | Blue clay |
| 65 | 75 | 10 | Blue clay(sandy) |
| 75 | 123 | 48 | Gray clay |
| 123 | 140 | 17 | Sandstone |
| 140 | 150 | 10 | Gray shale |
| 150 | 160 | 10 | Yellow sand |
| 160 | 165 | 5 | Yellow sand(muddy) |
| 165 | 175 | 10 | Yellow sand |
| 175 | 185 | 10 | Sand & shale |
| 185 | 186 | 1 | Gray shale |

