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

GROUND WATER

Town Hospers, Iowa County Sioux Date May 8, 1962

WELL NO. #3 Active Yes Standby Abandoned Replaced by No.

LOCATION: Street Sec. T. N.R. East: West

Approximately 500' - 600' north of No. 1 city well. Lot Block Township

OWNERSHIP Town of Hospers, Iowa Date Installed June 7, 1961

CONTRACTOR Layne-Western Company Address Omaha, Nebraska

DATE RECONDITIONED New Above 19 Contractor Address

CONSTRUCTION EMPLOYED: Telescope Casing Method

CURB ELEVATION REFERENCE Even with or above railroad track

TYPE OF CONSTRUCTION Telescope Casing Method Depth 49' ft. Diameter 16 in.

CASING: Material 16" O.D. x 3/8 wall Condition new

SCREEN: Material Everdur Bronze Layne Shutter Length 20' ft. Diameter 16"O.D. in. Slot Opening Layne No. 3 in.

WELL SEALED Yes How with 10' of concrete seal from top of pump base down around outside of casing. Approved

WELL VENTED Yes How with a 1" return breather in pump head Approved Yes

TYPE OF PUMP turbine Make Layne Capacity 100 GPM Lubricated Water

DEPTH TO CYLINDER 40' ft. Tail Pipe none ft.

PUMP CONTROL: Manual Not Manual Automatic Tankmaster Semi-Automatic

STATIC LEVEL 24' ft. Pumping Level 36' ft. Drawdown 12' ft.

OPTIMUM SPECIFIC YIELD 100 GPM Drawdown 12' ft. Time 6 hrs.

RATE OF DRAWDOWN constant Rate of Recovery 9'-6" in five minutes

TEMPERATURE OF WATER 56 °F Where Measured at pump discharge Temp. of Atmosphere 85 (approximate) °F

DRAWDOWN GAUGE INSTALLED Yes

TOPOGRAPHICAL POSITION OF WELL at well drain location on north side of railroad track

WELL SITE INVESTIGATED Yes Approved Yes Why not

WELL CONSTRUCTION REVIEWED Yes Approved Yes Why not

PIT CONSTRUCTION: Purpose None Size and Description none

CONDITION: Drainage Facilities

PUMP INSTALLATION: Approved yes Why Not

CUTTINGS FROM WELL PRESERVED: yes Where

DEPTH TO BED ROCK 45' Depth to Water-bearing Stratum 24'

SOURCE OF WATER: Principal Formation sand and gravel Other none

Total Hardness 340 ppm. Total Iron 0.02 ppm. Sulfates 182 ppm. Fluorine not determined ppm.

Manganese 0.05 ppm. pH approx. 7.6 CO_2 3 ppm.

REMARKS: Above water analysis report is an a sample taken just prior to the completion of the pumping test. The bottle sample was mailed to General Filter Company laboratory in Ames, Iowa so that pH and CO_2 determinations possibly are not the most accurate. A copy of our well information sheet is attached showing log, casing and screen data in lieu of our typing in on the back side of this sheet.

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 1"=1' Vertical 1"=6' — Position of seals, screens, static level, etc.

RECEIVED
Regional Health Service No. 3
State Department of Health

2' above ground surface

Black top soil 0 – 2'

Brown sandy clay

6'

Coarse sand & clay

9'

Coarse sand gravel

11'

3' of 16" dia. casing

22' of 3/8" wall thickness 13" dia. Steel casing

Coarse Sand & gravel

29'

20' of 16" dia. bronze - 6 gauge 3 openings

Coarse Sand & gravel boulders

34'

clay

36'

fine sand some coarse sand

45'

shale

47'

Grout Liner 5' (conc.)

Liner - 15' clay

Pea gravel — gravel-pack

47' –

