DIVISION OF PUBLIC HEALTH ENGINEERING AND INDUSTRIAL HYGIENE

GROUND WATER

Town Indianola County Warren Date Feb. 20 19 56

WELL NO. Active x Standby Abandoned Replaced by No.

LOCATION: Street 2 mi. south of town. West of plant Sec. T N.R. East: West

Lot Block Township

OWNERSHIP City of Indianola Date Installed Nov. 19 19 55

CONTRACTOR Varner Well Co. Address Dubuque, Iowa

DATE RECONDITIONED 19 Contractor Address

CONSTRUCTION EMPLOYED: Cased to 1970', open hole from 1970' to 2525'

CURB ELEVATION 820'+ REFERENCE

TYPE OF CONSTRUCTION drilled Depth 2525 ft. Diameter 12 in.

CASING: Material steel and concrete Condition good

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

WELL SEALED yes How concrete Approved

WELL VENTED yes How Approved

TYPE OF PUMP turbine Make Layne Capacity 500 GPM Lubricated 100 HP - 3 phase

DEPTH TO CYLINDER ft. Tail Pipe ft.

PUMP CONTROL: Manual x Automatic Semi-Automatic

STATIC LEVEL 88 ft. Pumping Level 331 ft. Drawdown 245 ft.

OPTIMUM SPECIFIC YIELD 1000 GPM Drawdown ft. Time hrs.

RATE OF DRAWDOWN Rate of Recovery

TEMPERATURE OF WATER 79 °F Where Measured Temp. of Atmosphere °F

DRAWDOWN GAUGE INSTALLED

TOPOGRAPHICAL POSITION OF WELL flat level ground

WELL SITE INVESTIGATED no Approved Why not

WELL CONSTRUCTION REVIEWED yes Approved yes Why not

PIT CONSTRUCTION: Purpose Size and Description

CONDITION: Drainage Facilities

PUMP INSTALLATION: Approved Why Not

CUTTINGS FROM WELL PRESERVED: yes Where Geological Survey

DEPTH TO BED ROCK Depth to Water-bearing Stratum 1970'

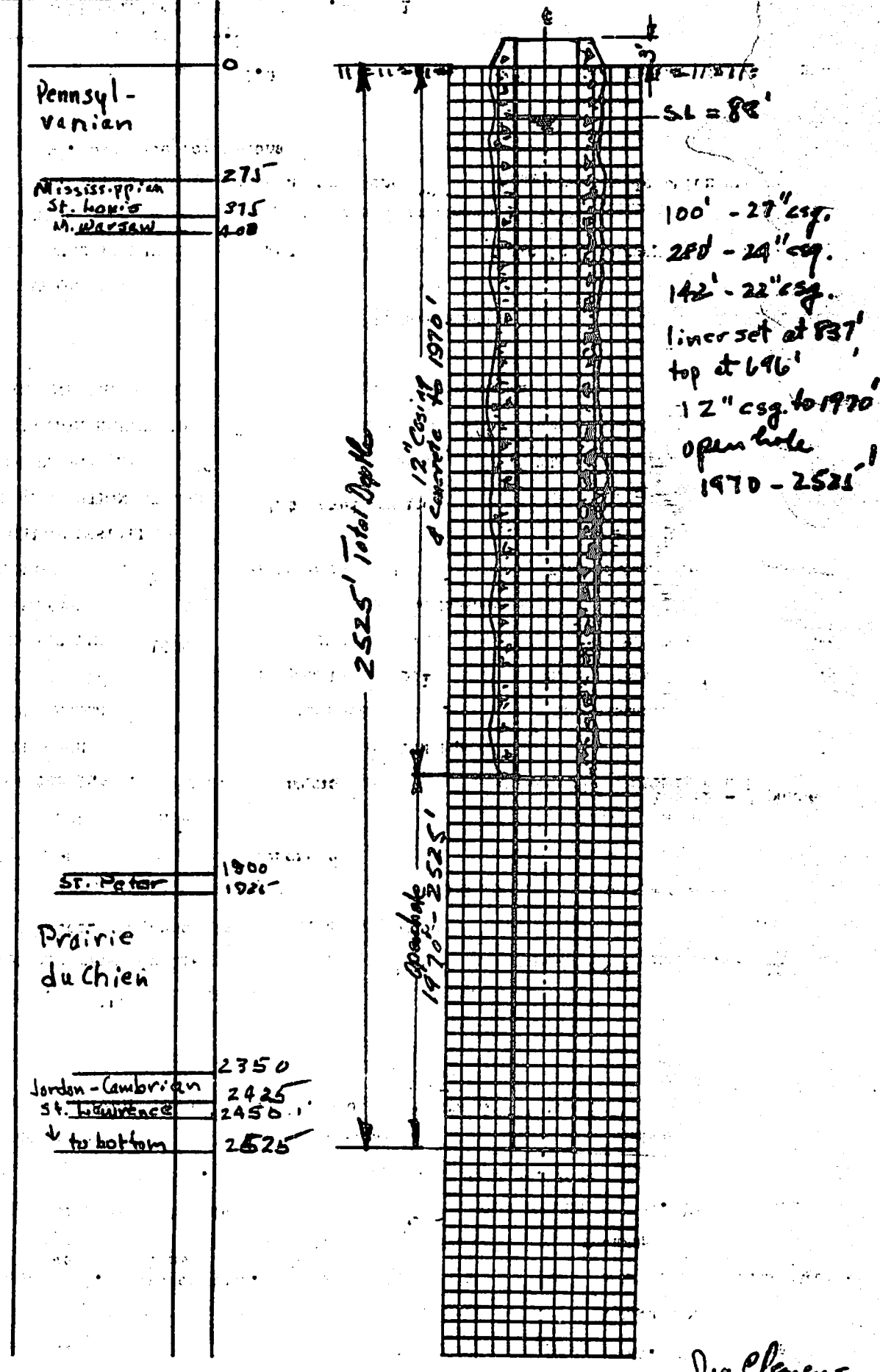
SOURCE OF WATER: Principal Formation Jordan Sandstone Other Prairie de Chien and St. Lawrence formations

Total Hardness 262 ppm. Total Iron 1.0 ppm. Sulfates 268 ppm. Fluorine 3.2 ppm.

Manganese none ppm. pH 8.0 . CO_2 ppm.

REMARKS: Well acidized with 3000 gal. of HCl

Formation	Material and distance from surface in ft.	Series	Position, kind and extent of casing, liners, shoes, etc.	Scale: Horizontal 0 = 2" Vertical 1" = 300'	Position of coals, cavities, static level, etc.



Jno. Clemens