

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

GROUND WATER

Town Howan County Wright Date January 18, 19 50

WELL NO. 1 Active Yes Standby _____ Abandoned _____ Replaced by No. _____

LOCATION: Street East end Main St. NE quarter, Sec. 34, T 92, N range 23 W. Sec. _____ T. _____ N.R. _____ East: West

Lot _____ Block _____ Township _____

OWNERSHIP Municipal Date Installed drilling started 6/1949 completed 7/1947

CONTRACTOR Layne-Western Address Des Moines, Iowa

DATE RECONDITIONED Oct. 1954 Contractor Layne Western Address Ames

CONSTRUCTION EMPLOYED: Deep well - drilled - casing grouted.

10' of 18" casing of 0 to 10' - apparently pulled at time of grouting 8" casing to ground surface - depth of grouting 20+ casing extends 120+

CURB ELEVATION 1280' REFERENCE _____

TYPE OF CONSTRUCTION Deep well - drilled Depth 225 ft. Diameter 8 in.

CASING: Material Steel Condition New when installed in 1947

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

WELL SEALED Yes How 30" sq. concrete pedestal 30" high Approved Yes

WELL VENTED Yes How 1" turned down pipe Approved Yes

TYPE OF PUMP V.T. Make Layne-Western Capacity 120 GPM Lubricated ?

DEPTH TO CYLINDER _____ ft. Tail Pipe _____ ft.

PUMP CONTROL: Manual _____ Automatic X Semi-Automatic _____

STATIC LEVEL 24 ft. Pumping Level 70 at 110 gpm ft. Drawdown 46 ft.

OPTIMUM SPECIFIC YIELD 120 gpm for 24 hr. test in 1947 GPM Drawdown _____ ft. Time _____ hrs.

RATE OF DRAWDOWN _____ Rate of Recovery _____

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

DRAWDOWN GAUGE INSTALLED Yes

TOPOGRAPHICAL POSITION OF WELL Reasonably high

WELL SITE INVESTIGATED Yes Approved See Report dated Nov. 18, 1946 & May 9, 1947 Why not _____

WELL CONSTRUCTION REVIEWED Patera Consulting Engineer Approved _____ Why not _____

PIT CONSTRUCTION: Purpose None Size and Description _____

CONDITION: _____ Drainage Facilities _____

PUMP INSTALLATION: Approved Yes Why Not _____

CUTTINGS FROM WELL PRESERVED: Yes Where State Geological Survey

DEPTH TO BED ROCK 215 to 225 Depth to Water-bearing Stratum _____

SOURCE OF WATER: Principal Formation _____ Other _____

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OPTIMUM SPECIFIC YIELD 120 gpm for 24 hr. test in 47 GPM Drawdown ft. Time hrs.

RATE OF DRAWDOWN Rate of Recovery

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

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SOURCE OF WATER: Principal Formation Other

See Mineral analysis
Total Hardness 334 ppm. Total Iron 1.95 ppm. Sulfates 7.4 ppm. Fluorine .6 ppm.
Manganese 25.4 ppm. pH 7.8 CO₂ ppm.

REMARKS: 1st pump test in July 1947 affected shallow wells in vicinity.

Distribution system, pumphouse and E.S.T. finished in 1948 (late summer)

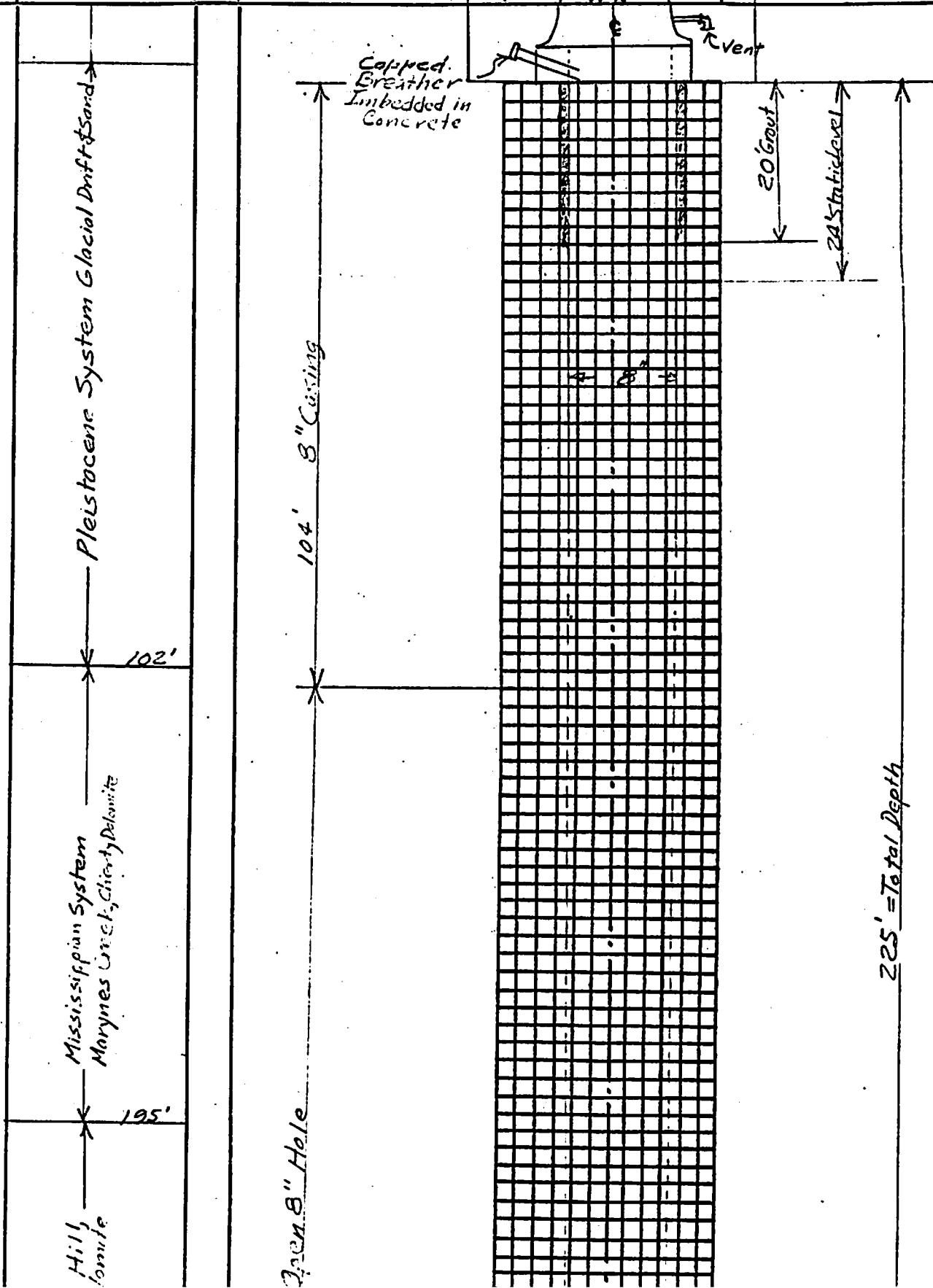
David Laird, driller for Layne-Western Co.

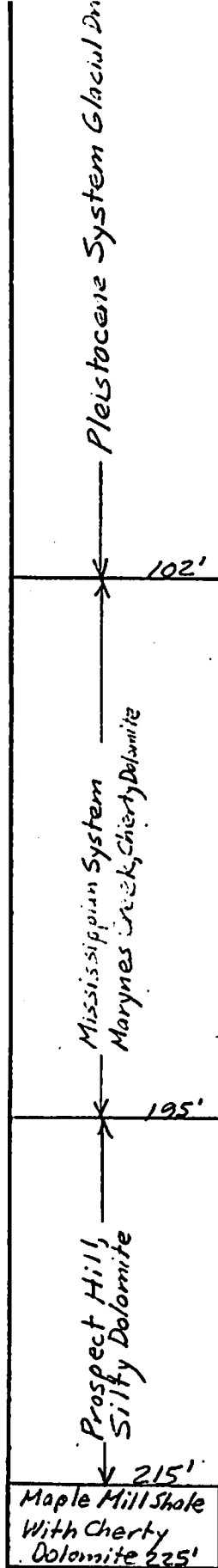
In Oct 1954 C.W. installed new pump shaft - Unaffected - & pump out to waste - xxx

Data secured by 4/12/53

Hollow Tile
8' x 6' Pump House

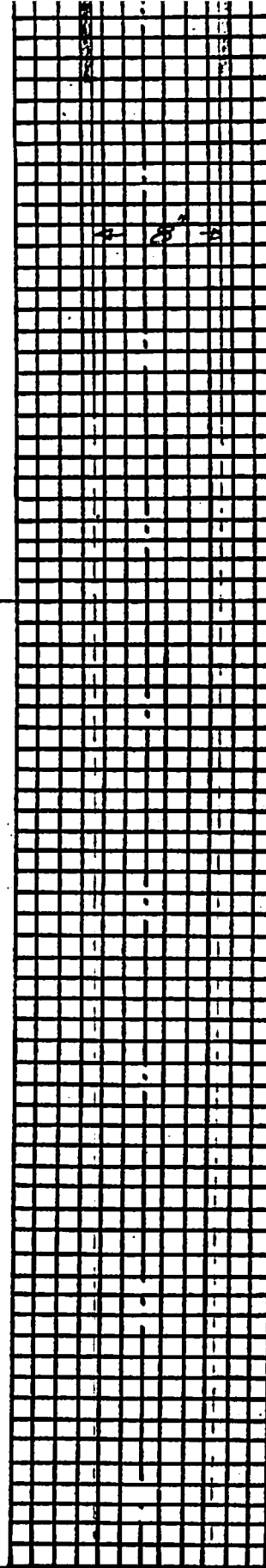
GEOLOGICAL DATA			CASING DATA	WELL DATA	
Formation	Material and distance from surface in ft.	Series	Position, kind and extent of casing, liners, shoes, etc.	Scale: Horizontal Vertical	Position of seals, screens, static level, etc.





104' 3" Casing

Open 8" Hole



225' = Total Depth