

5 5/8"
Well

G.W.MATTERN. W1175
2 Mi. south of
Donnellson, Iowa.

160 Feet
Deep

Drilled in May 1940

- 0 - 26 Clay: grey, brown.
26 - 51 Clay: brown, sandy.
51 - 65 Clay: grey.
65 - 66 Sand: fine.
66 Water: 2½ gallon per minute.
66 - 86 Limestone: brown.
86 - 88 Limestone: grey, brown.
88 - 89 Shale: bluish-grey.
89 - 107 Limestone: grey.
107 - 113 Shale: grey.
113 - 121 Limestone: grey.
121 - 125 Shale: grey.
125 - 152 Limestone: grey.
152 - 160 Limestone: grey, white.

Waterhead is 18 feet.

Tested 2½ gallon per minute at bottom.

There is 67 feet of 5 5/8" casing.

Cost of drilling	\$ 254.00
Cost of casing	<u>67.00</u>
Total cost	\$ 321.00

067-06W-17AAB

IOWA GEOLOGICAL SURVEY
In Cooperation with U. S. Geological Survey

W-1175-

RECORD OF WELL

Location:



Town: Dannellson (NE) County Lee
(SW)

NW-NE-NE sec. 17 T 47 N., R. 6 W. Charleston Twp.

Well name and number G.W. Mattern.

Owner G.W. Mattern. Address Dannellson.

Tenant Virgil Shepherd. Address _____

Contractor J.M. Schlicher Address Dannellson.

Drillers L.E. Schlicher

Drilling dates April 12-28, 1940

Well data:

Elevations: Drilling curb 696 feet; Land surface _____ feet

Determined by _____

Topographic position upland.

Total depth: Reported _____ feet; Measured 160 feet

Drilling method cable.

Hole and casing data 67' of 5 1/2" casing.

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

Original elevation of water level _____ ft.; Source of data _____

Sources of water: Principal _____ ; Others _____

Production data: _____ Date _____

Static depth to water 18 _____ Measuring point _____
Pumping level _____ at 3 1/2' _____ g.p.m.

Specific capacity _____ g.p.m. per ft. drawdown; Temperature _____ °F.

Pump data: Type pump _____ Column Dia. _____ Length _____
Cylinder or bowls: Dia. _____ Length _____ Suction pipe _____

Power _____ Airline _____

Estimated rate of production: _____ g.p.m. for _____ hrs. a day
Use of water _____

WATER ANALYSES (in parts per million)

Date samples	_____	_____	_____	_____
Sampled by	_____	_____	_____	_____
Total solids	_____	_____	_____	_____
Insoluble matter	_____	_____	_____	_____
Alkalinity (Meo)	_____	_____	_____	_____
Alkalinity (Phn)	_____	_____	_____	_____
pH	_____	_____	_____	_____
Fe ₂ O ₃ + Mn ₂ O ₃ +Al ₂ O ₃	_____	_____	_____	_____
Alkali as sodium	_____	_____	_____	_____
Calcium	_____	_____	_____	_____
Magnesium	_____	_____	_____	_____
Iron (unfiltered)	_____	_____	_____	_____
Manganese	_____	_____	_____	_____
Nitrate	_____	_____	_____	_____
Fluoride	_____	_____	_____	_____
Chloride	_____	_____	_____	_____
Sulfate	_____	_____	_____	_____
Bicarbonate	_____	_____	_____	_____
Hardness (ppm)	_____	_____	_____	_____
Hardness (gpg)	_____	_____	_____	_____
Remarks	_____	_____	_____	_____

Laboratory data: _____ Sample storage location _____

Sample range 0-160 No. spls. 34 No. dupls. & cond. 34 (cond)

Spls. prepared by Summerford Washed range _____ by _____

Driller's log and cond. Yes - good

Insoluble residues: Prepared by _____ Studied by _____ Strip log _____

Microscopic study Shelf & Larson strip log Shelf & Larson

Gen. log _____ Correl. by Shelf & Larson