

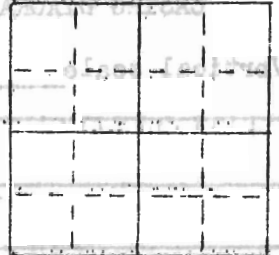
IOWA GEOLOGICAL SURVEY
In Cooperation with U. S. Geological Survey

W-2443

RECORD OF WELL

Location:

Town: Hartley (NE) (SW): County O'Brien
SE 1/4 NE 1/4 NE 1/4 sec. 36 T 97 N., R. 39 W. Twp.



Well name and number Hartley Town Test Well #20 (1946)

Owner _____ Address _____

Tenant _____ Address _____

800' south of #17 test

Contractor Layne - Western Address _____

Drillers _____

Drilling dates June 21, 1946

Well data:

Elevations: Drilling curb 1372 feet; Land surface _____ feet

level with section corner

Determined by _____

Topographic position _____

Total depth: Reported 40 feet, Measured _____ feet

Drilling method Rotary

Hole and casing data 4-inch hole

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

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

Sources of water: Principal _____ ; Others _____

Production data:

ATAG Date 11/11/46

Static depth to water See Remarks Measuring point _____

Pumping level _____ at _____ g.p.m.

Remarks	Static depth to water	Date

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	<u>6/21/46</u>	_____	_____
Sampled by	<u>Henry Winters for</u>	_____	_____
Total solids	<u>464</u>	_____	_____
Insoluble matter	<u>17.5</u>	_____	_____
Alkalinity (Meo)	<u>328</u>	_____	_____
Alkalinity (Phn)	_____	_____	_____
pH	<u>7.9</u>	_____	_____
Fe ₂ O ₃ + Mn ₂ O ₃ + Al ₂ O ₃	<u>3.5</u>	_____	_____
Alkali as sodium	<u>15.6</u>	_____	_____
Calcium	<u>111.8</u>	_____	_____
Magnesium	<u>29.4</u>	_____	_____
Iron (unfiltered)	<u>.3</u>	_____	_____
Manganese	<u>.03</u>	_____	_____
Nitrate	<u>49.0</u>	_____	_____
Fluoride	<u>.5</u>	_____	_____
Chloride	<u>8.1</u>	_____	_____
Sulfate	<u>184.6</u>	_____	_____
Bicarbonate	<u>278</u>	_____	_____
Hardness (ppm)	<u>401</u>	_____	_____
Hardness (gpg)	<u>23.5</u>	_____	_____

Remarks _____

Laboratory data:

Sample storage location _____

Sample range 0-40 No. spls. 8 No. dupls. & cond. 8 fair

Spls. prepared by MCP & ES Washed range none by _____

Driller's log and cond. Yes very good

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

Microscopic study 0-40 Ed strip log in folder

Gen. log _____ Correl. by _____

Loc. SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$

W-2443

Sec. 36, T. 97 N., R. 39 W.

20

Elev. 1372

T.D. 40'

0



sd clean f. med.
sd crse & f. gray same clay cement

Till drb v. sdy f. pbls abndt

T.D. = 40'