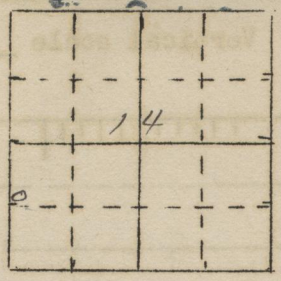
V-2075

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

RECORD OF WELL



Location:

Town: Roland (N E / S W); County Story

SW - NW - SW sec. 14 T. 85 N., R. 23 E. W. Howard Twp.

Well name and number Roland Town Well #4

Owner Roland town Address

Tenant Address

Contractor Larson Address

Drillers Larson

Drilling dates finished June 1945

Well data:

Elevations: Drilling curb feet; Land surface feet

Determined by

Topographic position Upland

Total depth: Reported feet; Measured feet

Drilling method cable

Hole and casing data 52' of 10" 0 to 52'; 82' of 8" casing 0' to 82'
(Give amount, size, kind, and depth of all casing; type and position of seals and packers; cementing; how finished--perforated pipe, screen, gravel pack, open hole, etc.)

Original depth to water ft. above / below Date

Original elevation of water level ft.; Source of data

Sources of water: Principal ; Others

Production data: Date _____

Static depth to water 28' 4"; Measuring point _____

Pumping level 28' 6" at 110 g.p.m.

32' 8" 240

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 sampled				
Sampled by				
Total solids				
Insoluble matter				
Alkalinity (Meo)				
Alkalinity (Phn)				
pH				
$Fe_2O_3+Mn_2O_3+Al_2O_3$				
Alkali as sodium				
Calcium				
Magnesium				
Iron (unfiltered)				
Manganese				
Nitrate				
Fluoride				
Chloride				
Sulphate				
Bicarbonate				
Hardness (ppm)				
Hardness (gpg)				

Remarks _____

Laboratory data: Sample storage location _____

Sample range 53-225 No. spls. 34 No. dupls & cond. 34-F-9

Spls. prepared by Pete+Schaal Washed range 53-236 by Pete + Schaal

Driller's log and cond. _____

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

Microscopic study 53-235 strip log Aug 1, 1945 P

Gen. log _____ Correl. by Mary Parker

Roland - Story ROLAND TOWN WELL NO. 4 W-2075

8/1/45 M.C.P.

Loc. SW-NW-SW Sec. 14 T85N R23W El. 1044' T.D. 235'

0-50 N.S.
50-75 Warsaw
75-175 Burlington
175-210 Gilmore City ?
210-235 Hampton

Warsaw--- 30% to 50% of the samples are pale to lt. gray, tan to brown conch. chert with a trace of chalcendony. The dolomite is medium brn. fn. gr. sacc. The bse of the Warsaw is marked by the presence of a light gray silty limestone and a change in the chert of the samples below.

Burlington-- The top of the Brulinton is marked by a change in the chert from above to white to gray mottled semi-transl and the presence of abundant glaconite. The dolomite is light gray calcarious silty and grades into a buff v. fn xtln. dense limesto There is a heavy consentration of chert st the base of the

Burlington which differs from that of the upper chert in that it is white with glaconite embedded. The limestone is a gray-green 50% of the limestone is glaconite. There is also a lot of crystaline and orthogenic quartz at the base.

Gilmore City? The limestone is light buff to fine to coarse xtln for 10' which is lunderlain by 15' of white v. fn. xtln, dense fractured limestone under which is 10' of buff to dark gray limestone rather dense.

Hampton - 25' of calcareous dolomite grading into dolomitic limestone containing crinoid stems