

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

RECORD OF WELL

	130	

Location:

Town: Ryan (NE) (SW): County Delaware
E. NE NW SE sec. 13 T 87 N., R. 6 W. Adams Twp.

Well name and number Ryan Town Well #3

Owner _____ Address _____

Tenant _____ Address _____

Contractor Layne-Western Address Ames

Drillers Jewel Black

Drilling dates Feb-March 1945

Well data:

Elevations: Drilling curb 1027 feet; Land surface 1027 feet

Determined by SEJof

Topographic position hill top

Total depth: Reported 410 feet, Measured _____ feet

Drilling method cable tool

Hole and casing data 12 inch hole to 130 ft.; 8-inch
pipe cemented + 1 to 130'
0-131 ft.; 8-inch hole 130 to 190 ft
53 ft of 6-inch liner 133-186 ft
Open 6-inch hole to 410 feet

Original depth to water 99 ft. ^{above} below land surface Date March 20, 1946

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

Sources of water: Principal Silurian 186-406; Others _____

Production data:

Date _____

Static depth to water 99

Measuring point _____

Pumping level 131.5at 87-90

g.p.m.

Specific capacity 2.4g.p.m. per ft. drawdown; Temperature 50

°F.

Pump data:

Type pump TURBINE

Column Dia. _____

Length 131.5

Cylinder or bowls: Dia. _____

Length _____

Suction pipe 0Power Gasoline Engine

Airline _____

Estimated rate of production: _____

g.p.m. for _____

hrs. a day

Use of water city supply

WATER ANALYSES (in parts per million)

Date samples	<u>March 20, 1946</u>	<u>Dec. 15-47</u>		
Sampled by	<u>W.E. Hale</u>	<u>Morris + Hale</u>		
Total solids	<u>378</u>	<u>373</u>		
Insoluble matter	<u>9.0</u>	<u>8.5</u>		
Alkalinity (Meo)	<u>312.0</u>	<u>298</u>		
Alkalinity (Phn)	<u>0.0</u>	<u>None</u>		
pH	<u>9.0</u>	<u>7.6</u>		
Fe ₂ O ₃ + Mn ₂ O ₃ + Al ₂ O ₃	<u>2.5</u>	<u>2.5</u>		
Alkali as sodium	<u>25.0</u>	<u>24.7</u>		
Calcium	<u>76.4</u>	<u>81.2</u>		
Magnesium	<u>29.6</u>	<u>30.4</u>		
Iron (unfiltered)	<u>0.3</u>	<u>.42</u>		
Manganese	<u>0.0</u>	<u>None</u>		
Nitrate	<u>2.2</u>	<u>.53</u>		
Fluoride	<u>0.4</u>	<u>.5</u>		
Chloride	<u>.5.0</u>	<u>2</u>		
Sulfate	<u>56.0</u>	<u>53.9</u>		
Bicarbonate	<u>380.6</u>	<u>364</u>		
Hardness (ppm)	<u>313</u>	<u>329</u>		
Hardness (spg)	<u>18.3</u>	<u>19.2</u>		

Remarks _____

Laboratory data:

Sample storage location _____

Sample range 120-410No. spls. 58No. dupls. & cond. 58 ESpls. prepared by PJH + ESWashed range 325-410by PJH

Driller's log and cond. _____

Insoluble residues: Prepared by _____

Studied by _____

Strip log _____

Microscopic study 120-410 Edstrip log March 1946 Ed

Gen. log _____

Correl. by E. Schultz

IOWA GEOLOGICAL SURVEY
Water Analysis Report

County Delaware Date Sampled _____

Town Ryan Sampled by _____

Location of Well Ryan sec. _____, T. _____ N., R. _____ E.
W.

Owner Town Well No. _____ Depth 400 ft.

Type of Well Drilled Static Level _____ ft. Curb Elevation _____ ft.

Producing Formation(s) Silurian. Depth range _____

Remarks on Condition of Well, Casing or Formations:

Constituents	Parts Per Million	Constituents	Parts Per Million
Total Solids.....	<u>374</u>	Iron (Fe ⁺⁺) (unfiltered)	<u>5.0</u>
pH	_____	(filtered)	_____
Alkalinity (MeO).....	<u>300</u>	Manganese (Mn ⁺⁺)	<u>0.0</u>
Alkalinity (Phn)	_____	Nitrogen as Nitrate (NO ₃ ⁻).....	<u>1.20</u>
Insoluble Matter	<u>13.0</u>	Fluoride (F ⁻)	<u>0.0</u>
Fe ₂ O ₃ + Al ₂ O ₃ + Mn ₂ O ₃ <u>7.4</u>		Chloride (Cl ⁻)	<u>2.0</u>
Alkalies as Sodium (Na ⁺) <u>21.1</u>		Sulphate (SO ₄ ⁻⁻)	<u>43.2</u>
Calcium (Ca ⁺⁺)	<u>69.2</u>	Bicarbonate (HCO ₃ ⁻)	<u>366.0</u>
Magnesium (Mg ⁺⁺)	<u>29.6</u>	Calculated Hardness as CaCO ₃	<u>304</u>
		Calculated Hardness (Grains per U. S. Gallon)	_____

Temperature: Air _____ °F. Water _____ °F.

Remarks:

Analysis by State Water Laboratory, Iowa City, Iowa.

Lab. No. _____, Date _____

Sent to:

Date:

