

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

40613

RECORD OF WELL

Location:

Town: Lime Springs (N E)
(S W); County Howard
E.
SW NE NE SE sec. 29 T. 100 N., R. 12 W. Forest City Twp.

	2	9	
			0

Well name and number No 1

Owner Town of Lime Springs Address _____

Tenant _____ Address _____

Contractor _____ Address _____

Drillers _____

Drilling dates 1913

Well data:

Elevations: Drilling curb 1232.5 feet; Land surface 1242.3 feet

Determined by _____

Topographic position _____

Total depth: Reported 140 feet; Measured _____ feet

Drilling method _____

Hole and casing data 10-12 feet of 10" casing

(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.)

Bowls set at 77' - turbine - capacity is 250 gpm.

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

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

Sources of water: Principal Devonian dolomite; Others _____

Production data:

Date _____

Static depth to water 6.0 Est.; Measuring point Pump basePumping level 30 Est. at 250 Est. g.p.m.Specific capacity 10± g.p.m. per ft. drawdown; Temperature 48 (Apr. 7, 1944) °F.Pump data: Type pump Turbine; Column: Dia. _____ Length _____

Cylinder or bowls: Dia. _____ Length _____; Suction pipe _____

Power Electric; Airline _____Estimated rate of production: 250 g.p.m. for _____ hrs. a dayUse of water Town supply - 30,000 - 40,000 gallons of water per day

WATER ANALYSES (in parts per million)

Date sampled	<u>April 17, 1944</u>			
Sampled by	<u>N.E. Hale</u>			
Total solids	<u>470</u>			
Insoluble matter	<u>17.5</u>			
Alkalinity (Meq)	<u>323.0</u>			
Alkalinity (Phn)	<u>0.0</u>			
pH	<u>7.5</u>			
Fe ₂ O ₃ +Mn ₂ O ₃ +Al ₂ O ₃	<u>5.5</u>			
Alkali as sodium	<u>13.0</u>			
Calcium	<u>115.8</u>			
Magnesium	<u>33.6</u>			
Iron (unfiltered)	<u>1.9</u>			
Manganese	<u>0.0</u>			
Nitrate	<u>3.5</u>			
Fluoride	<u>0.3</u>			
Chloride	<u>34.0</u>			
Sulphate	<u>87.9</u>			
Bicarbonate	<u>394.1</u>			
Hardness (ppm)	<u>431</u>			
Hardness (gpg)	<u>25.2</u>			
Remarks				

Laboratory data:

Sample storage location _____

Sample range _____ No. spls. _____ No. dupls & cond. _____

Spls. prepared by _____ Washed range _____ by _____

Driller's log and cond. _____

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

Microscopic study _____ strip log _____

Gen. log _____ Correl. by _____