

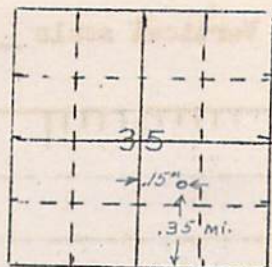
IOWA GEOLOGICAL SURVEY
In Cooperation with U. S. Geological Survey

W-0150

RECORD OF WELL

Location:

Town: Lowden (N E)
(S W); County Cedar
SE NW SE sec. 35 T. 82 N., R. 1 W. Springfield Twp.



Well name and number Lowden Town Well No. 2

Owner Town of Lowden Address _____

Tenant _____ Address _____

Contractor C. W. Varner Address Dubuque, Iowa

Drillers _____

Drilling dates _____ Finished Mar. 1933

Well data:

Elevations: Drilling curb 773.2 feet; Land surface 772.5 feet

775'

Determined by Altimeter

Topographic position hill top in northeast part of town

Total depth: Reported 1375+ feet; Measured _____ feet

Drilling method Cable tools

Hole and casing data 270 feet of 12-inch casing from 0 to 270 feet, 276 feet
(Give amount, size, kind, and depth of all casing; type and
of 8-inch casing from +1 to 275 feet, 250 feet of 6-inch casing from
position of seals and packers; cementing; how finished--perforated pipe, screen,
345 to 595 feet. Cement placed between 12 and 8-inch casing. 6-inch
gravel pack, open hole, etc.)
hole from 595 feet to bottom.

Original depth to water 131 ^{above} ft. below Top Casing Date Mar. 1933

Original elevation of water level 642 ft.; Source of data Information

in possession of town of Lowden

Sources of water: Principal Jordan Sandstone; Others Silurian

dolomite

Production data:

Date 1933Static depth to water 131; Measuring point _____Pumping level 136 at 110 g.p.m.Specific capacity 22 g.p.m. per ft. drawdown; Temperature 60 °F.Pump data: Type pump turbine; Column Dia. _____ Length 170

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

Power Electric 15hp.; Airline _____Estimated rate of production: 100 g.p.m. for 2 hrs. a dayUse of water Municipal Supply

WATER ANALYSES (in parts per million)

Date sampled	<u>April 12, 1944</u>			
Sampled by	<u>W.E. Hale</u>			
Total solids	<u>923.0</u>			
Insoluble matter	<u>15.0</u>			
Alkalinity (Meo)	<u>225.0</u>			
Alkalinity (Phn)	<u>0.0</u>			
pH	<u>7.3</u>			
Fe ₂ O ₃ +Mn ₂ O ₃ +Al ₂ O ₃	<u>2.5</u>			
Alkali as sodium	<u>198.9</u>			
Calcium	<u>78.3</u>			
Magnesium	<u>58.5</u>			
Iron (unfiltered)	<u>0.25</u>			
Manganese	<u>0.00</u>			
Nitrate	<u>6.2</u>			
Fluoride	<u>1.0</u>			
Chloride	<u>183.0</u>			
Sulphate	<u>310.3</u>			
Bicarbonate	<u>274.5</u>			
Hardness (ppm)	<u>354</u>			
Hardness (gpg)	<u>20.7</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 _____

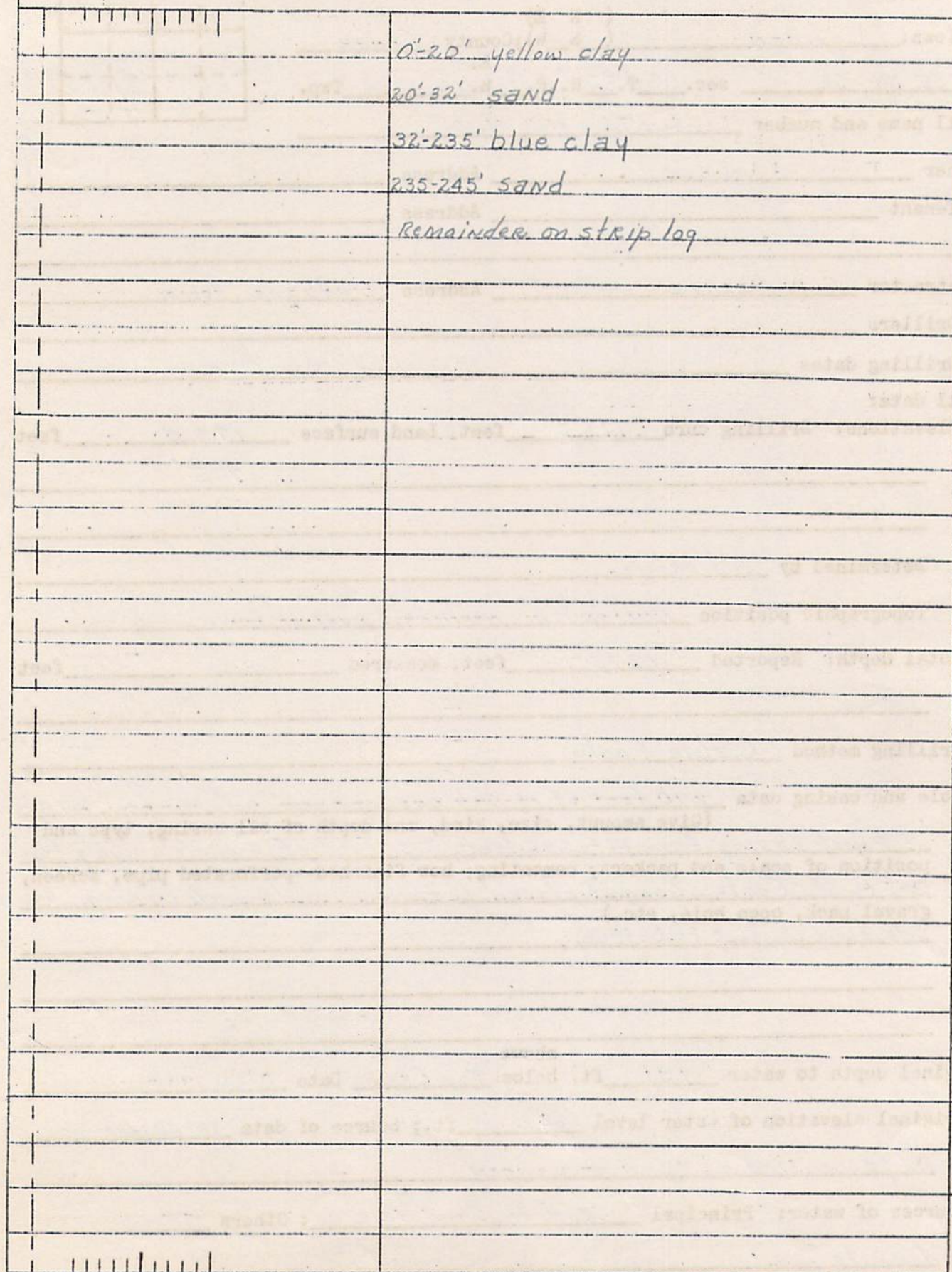
Microscopic study _____ strip log _____

Gen. log _____ Correl. by _____

Vertical scale _____

LOG

Vertical scale



772
719
55

Report on the Geology and Ground-Water Conditions
in
Vicinity of Lowden, Iowa

Geologic Section at Lowden town well

Geologic Section at Newden Town Well		Elevation	
	Thickness	FROM	to
Pleistocene			
Drift			
yellow clay	20	772.5	752.5
sand	12	752.5	740.5
blue clay	203	740.5	537.5
sand	10	537.5	527.5
Silurian			
Hopkinton (dolomite)	50	527.5	477.5
Kankakee-Edgewood (cherty dolomite)	60	477.5	417.5
Devonian			
Maquoketa (shale with some dolomite)	230	417.5	187.5
Galena (dolomite with some chert in lower part)	250	187.5	- 52.5
Decorah-Plattville			
shale	10	- 52.5	- 62.5
limestone	60	- 62.5	- 122.5
shale (Glenwood)	10	- 122.5	- 132.5
St. Peter (sandstone)	50	- 132.5	- 182.5
Willow River (dolomite with some sand)	110	- 182.5	- 292.5
New Richmond (sandy dolomite)	30	- 292.5	- 322.5
Onondaga (cherty dolomite)	180	- 322.5	- 502.5
Cambrian			
Jordan (sandstone with some dolomite)		- 502.5	

Lowden, Iowa and
Vicinity

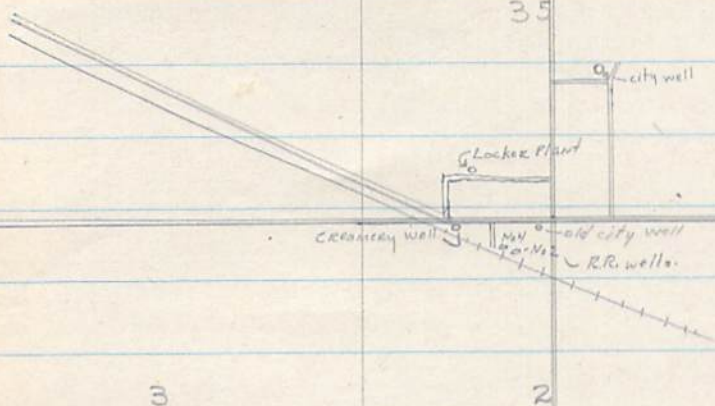
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