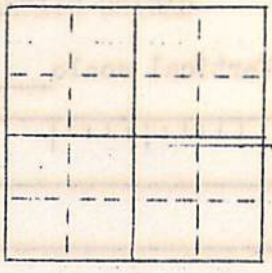
IOWA GEOLOGICAL SURVEY
In Cooperation with U. S. Geological Survey

W-0119

RECORD OF WELL



Location:

Town: Winfield (N E / S W):County Henry

NE-NE sec. 16 T 73 N., R. 5 W. Scott Twp.

Well name and number City well

Owner _____ Address _____

Tenant _____ Address _____

Contractor McCarthy Address _____

Drillers _____

Drilling dates 1921

Well data:

Elevations: Drilling curb _____ feet; Land surface 709 feet

Determined by _____

Topographic position _____

Total depth: Reported 1268 feet, Measured _____ feet

Drilling method _____

Hole and casing data Cased to rock & through Kinderhook & Maquoketa shales.

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 73 Measuring point _____
Pumping level 157 at 150 g.p.m.

_____ _____

_____ _____

_____ _____

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				
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				
Sulfate				
Bicarbonate				
Hardness (ppm)				
Hardness (gpg)				

Remarks _____

Laboratory data: Sample storage location _____

Sample range 190-1268 No. spls. 9 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 _____

Vol 33

Henry Co.

(4)

Winfield

Owner: city of Winfield, Well No. 3

Location: , T. 73 N., R. 5 W., Scott Twp.

Curb elevation: feet

Total Depth: 1268 feet

Contractor: McCarthy Well Company, St. Paul, Minnesota

Date Drilled: February 9 to April 23, 1921

Size of hole and casing: Cased from 0 to 83 feet and from 0 to 829 feet, or through the Maquoketa shale. All shales were reportedly "sticky" to drill and the Maple Mill and Maquoketa shales showed a tendency to cave.

Water data: A pumping test was made for 24 hours produced 150 g.p.m. with a drawdown of 84 feet. The static water level is 73 feet below the surface. The Willow River member of the Prairie du Chien formation, from 1180 to 1268 feet is the chief water producer

Generalized log

Samples studied by: W. H. Norton Log by: W. H. Norton supplemented by driller.

— Winfield —

Pleistocene system			
1. "Loam and black soil"	3	0	3
2. "Clay"	77	3	80
Mississippian system			
Iowa series			
Meramec-Osage-Kinderhook groups (undifferentiated)			
3. "Limestone, hard, many seams or layers"	110	80	190
Kinderhook group			
Maple Mill formation			
4. Shale, blue, plastic	320	190	510
Devonian system (undifferentiated)			
5. Limestone, dolomitic, or dolomite, drab, with some lighter colored limestone	108	510	618
Ordovician system			
Cincinnatian series			
Richmond group			
Maquoketa formation			
6. Shale, light blue, plastic, "in streaks of color running from green to brown"	190	618	808
7. Shale, brown, hard, slightly calcareous, feebly inflammable	10	808	818
8. Shale, brownish drab, plastic	10	818	828

Mohawkian series			
Trenton group			
Galena - Decorah - Platteville formations (undifferentiated)			
9. Limestone, blue, earthy	286	828	1114
Platteville formation			
Glenwood member			
10. "Sandstone, white, fine-grained, very hard"	14	1114	1128
11. Shale, green and drab, hard	15	1128	1143
Chazyan series			
St. Peter formation			
12. Sandstone, white, fine-grained, well rounded and frosted grains	37	1143	1180
Beekmantownian series			
Prairie du Chien formation			
Willow River member			
13. Dolomite, dark gray. Chert, white. Shale, drab.	88	1180	1268

T.D. 1268 feet.