

DRILLER'S NOTE

It is important that a driller's notebook, filled out as completely as possible, be sent to the Iowa Geological Survey at the completion of each hole. A number of drillers have found it convenient to string samples from a single well on a heavy wire and attach the log book to them. A hole has been punched in the log book for this purpose.

Sample sacks and log books will be furnished by the Geological Survey. A copy of the log book will be made and returned if desired by the driller.

SUGGESTIONS TO DRILLERS

1. Samples should be taken from each bed passed through, and never more than 5 feet apart, even in the same bed.
2. Samples should not be washed, except to remove excess drilling mud, as washed samples may give a wrong idea of the character of the bed.
3. Fill out the label on each sample bag with the name of the well and the depth interval which the sample represents.
4. Make frequent use of the "Description" column to explain the material being drilled.
5. Note depth and thickness of all water-bearing layers.
6. Note the quality of the water from each layer: as hard, soft, salty, alkaline, or sulphur bearing.
7. Note height to which water from each layer rises in well, and give flow or capacity in gallons per minute.
8. Fossils, such as oyster, clam, and other shells, are important and should be placed in bags with the material with which they are found and carefully labeled as to the depth from which they were obtained.
9. If you do not understand what is wanted, or desire information on any point, write to the Iowa Geological Survey, Iowa City, Iowa.
10. Samples may be boxed and sent to IOWA GEOLOGICAL SURVEY, IOWA CITY, IOWA, EXPRESS COLLECT.

The Iowa Geological Survey desires to assist and cooperate with owners and drillers in every way possible, and will be glad to answer questions and assist in the solution of problems at any time.

A-7397

WELL RECORD

Well is located $\frac{2}{2}$ miles S and $\frac{2}{2}$ miles E from $\frac{2}{2}$ W

in Franklin (County)

in the $\frac{1}{4}$ Sec 21 T. 22 N. R. 20 W

Owner Gold Key, Melt Well No. 2

Postoffice address Hampton, Iowa

Contractor Bill Beaman

Address RR 2, Waterloo City, Ia

Driller Bill

Well begun 10-1, 1926;

completed 10-16, 1926

Rig used—Cable, Rotary, Jet, or Revolving

Depth of well 246 (Feet)

Size of hole (note total amount of each size) 12"

At 38' 7"-96' 5" then 12' to 140'

Main water supply at 200 240 (Feet below surface)

Final water head 30 (Feet above or below surface)

Is well pumped? yes

Yield 30 (Gallons per minute)

Water level when pumping 140

Position of well upland (Upland, valley, side hill, etc.)

#32722

RECORD OF PERMANENT CASING

Size Pipe	SOURCE OF WATER		Water Level	Production in Gallons per Minute	Pumping Level	DIAGRAM OF WELL		
	Depth	Type of Rock				Amount of Pipe	Depth to Bottom of Pipe	Type ^o and Weight of Pipe
12"	38	0	38			38	0	38
7"	96	0	96			96	0	96
5"	228	12	240			228	12	240

°As cast, wrought iron, steel, concrete, etc.

Is screen used? Yes Diameter 12 (Inches)Length 228 (Feet) Depth to bottom 240Depth to top 38 Slot size 1/8"Are packers or seals used? NoKind SteelWhere used AtKind of pump Sub Dia. 12 (Inches)Capacity of pump 30 (g.p.m.)Power used 1/2 (Kind and amount)Depth to bottom of pump line 240 feet,
including 12 feet tailpiece.Remarks on construction of well With K packer

NOTE: Water levels should be recorded at time
of change AND at regular intervals; for example
each morning before drilling starts or at the end
of each 100 feet of drilling.

#32722

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
	0	5	
	5	18	
	18-	31	
	31	38	
	38	54	
	54	71	
	71	90	
	90	94	
	94	98	
	98	110	
	110	113	
	113	128	
	128	158	
	158	167	
	167	194	
	194	201	
	201	229	

DESCRIPTION OF BEDS

KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.

Popoal

Yellow Clay & sand

Blue Clay

Soft Yellow Green Rock

White yellow Rock

White yellow coarse

Grey shale & sandstone

Soft sandstone

Hard sandstone

Tan & Grey sandstone & sand

Green shale

Soft Multicolor Rock

Green shale

Soft Green Rock

Green shale

Brown Rock

Brown sandstone

over

DESCRIPTION OF BEDS

KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.

White Limestone
Brown Rock & Sandstone
Grey Shale
Steeper Dipping & well
Limestone from 200-230 ft
The well

THICKNESS

DEPTH

To

From

SAMPLE NO.

229 231

231 238

238 240