

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.....miles S and.....miles S from
N E
E E
W W
Fredonia.....in *Lewis*.....
(Nearest Town) (County)

in the..... $\frac{1}{4}$ $\frac{1}{4}$ Sec.....T.....R.....

Owner *Fred. Hunston*..... Well No.....

Postoffice address.....

Contractor *Latta + Sons*.....

Address.....

Driller *Jim Latta*.....

Well begun....., 19.....;

completed....., 19.....

Rig used—Cable, Rotary Jet, or.....

Depth of well *79*.....
(Feet)

Size of hole (note total amount of each size).....

Main water supply at *70-78*.....
(Feet below surface)

Final water head *30'*.....
(Feet above or below surface)

Is well pumped?.....

Yield.....
(Gallons per minute)

Water level when pumping.....

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

RECORD OF PERMANENT CASING

Date and Time	Water Level	SOURCE OF WATER		Production in Gallons per Minute	Pumping Level
		Depth	Type of Rock		

Size Pipe	Amount of Pipe	Depth to Bottom of Pipe	Depth to Top of Pipe	Type ^o and Weight of Pipe	DIAGRAM OF WELL
6"	70'			sch 40	

^oAs cast, wrought iron, steel, concrete, etc.

Is screen used? yes Diameter 6"
(Inches)

Length 10' Depth to bottom 79'
(Feet)

Depth to top 70 Slot size 15

Are packers or seals used? yes

Kind K

Where used 68 ft.

Kind of pump _____ Din. _____
(Inches)

Capacity of pump _____
(g.p.m.)

Power used _____
(Kind and amount)

Depth to bottom of pump line _____ feet,
including _____ feet tailpiece.

Remarks on construction of well Full length
grout with Portland

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.

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
	0	5	
	5	10	
	10	15	8
	15	20	18'-19'
	20	25	
	25	30	27'2"-28'2"
	30	35	3'4"
	35	40	
	40	45	
	45	50	
	50	55	
	55	60	
	60	65	
	65	70	
	70	75	
	75	80	
	80	85	

DESCRIPTION OF BEDS	
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.	
yellow-brown coarse sand	
reddish brown sand - fine to coarse - gravel	
blue clay	
reddish brown gravel, trace of blue clay	
blue clay	
fine red sand 12-15 s/lot	
"	"
"	"
"	"
"	"
"	"
"	"
yellow-red sand 15 s/lot	
"	"
yellow-red sand (dirty)	
"	"
coarse-pea gravel	

SAMPLE NO.	DEPTH		THICKNESS
	From	To	
	85'	90'	
	90'	95'	
	95'	100'	

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
trace of blue clay
more clay than sand gravel to fine sand
fine sand 10 slot

(this well is properly classified)