## 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

	N E		N E	
Well is located		ndmil		
Shell Rock (Nearest Town)	in	(Cou	nty)	
in the¼¼	Sec	T	.R	
Owner City War	verly	Well No.	7	
Postoffice address				
Contractor _ Happy	rel Co	whichor	9	
Address Wau	( )			
Driller - Freu			·	
Well begun_ No-			, 1989.;	
completed	b1.7		, 19 <u>90</u>	,i
Rig used—Cable, Ro	tary, Jet, o	r Roto		
Depth of well	50 (Fe	et)		
Size of hole (note to	otal amount	of each size		<b>50</b> ′)
(20"-95") ()			-150)	
Main water supply a	(Feet b	elow surface	·	
Final water head.	672 (Feet above	ve or below s	urface)	
Is well pumped?				
Yield35	Gallons p	er minute)		
Water level when p	oumping	-7/		
Position of well	Upland, vall	ey, side hill,	etc.)	

Deta	W	SOURCE	OF WATER	Production	Pumping Level	
Date and Time	Water Level	Depth	Type of Rock	in Gallons per Minute		
		150'	Fractine	400		
				kal n	33	
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		100	187			
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			969 - G	2.5		

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.

## RECORD OF PERMANENT CASING

Size Pipe	Amount of Pipe	Depth to Bottom of Pipe	Depth to Top of Pipe	Type* and Weight of Pipe	DIAGRAM OF WELL
16"	95'			,375	Way  Way  Way  Way  Way  Way  Way  Way

*As cast, wrought iron, steel,	concrete, etc.
Is screen used?	Diameter(Inches)
Length Depth	to bottom
Depth to top	Slot size
Are packers or seals used?	
Kind	
Where used	
Kind of pump	(Inches)
Capacity of pump	(g.p.m.)
Power used(Kind	and amount)
Depth to bottom of pump lin	nefeet,
including	feet tailpiece.
Remarks on construction of	

DESCRIPTION	THICKNESS	DEPTH		SAMPLE
KIND OF ROCK, COLOR, HARI	- IHICKNESS	То	From	NO.
Black Pirt	16, 52	るま ′	0	
Light red clay		20'	22	
Clay Sand & gravel		25'	20'	
Light red clay		32'	25'	
Park gray Jay		47'	32'	
Fractured limestone	water bearing	120'	47'	
Light gray rock		139'	120'	
loyers of green shall	Total AA"	150'	139'	
	eking or A			
	0 19 Shi A	- 100		
	339394364	as assess detailed	1.14.024	
		NFA)	Company Services	
	100 100 100			100000
		Service acres		

DESCRIPTION OF BEDS
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.
Black Pirt
Light red clay
Clay Sand & gravel mixture
Light red clay
Park gray clay
Factured 1: extend 300-350 GPM
Light gray rock 132'- 140 water bearing
layers of green shall of limestone