

DRILLER'S NOTEBOOK

W-101

WELL RECORD

DRILLER Lane Drill & Expl. Co.

ADDRESS Omaha, Neb.

OWNER U.S. G.S.

ADDRESS Iowa City, Ia.

RETURN TO
IOWA GEOLOGICAL SURVEY
IOWA CITY, IOWA

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.

PB-D-6467

WELL RECORD

Well is located 1 miles ^N_E and 1/2 miles ^N_E from
W W

Clilo in Wayne
(Nearest Town) (County)

in the SE 1/4 SW 1/4 Sec. 5 T. 67N R. 22W

Owner J. S. S. Well No. 6-101

Postoffice address Fowlesburg, Ia

Contractor Lane Drilling & Expl. Co.

Address M. Norman

Driller M. Norman

Well begun June 27, 1963;

completed June 27, 1963

Rig used—Cable, Rotary, Jet, or.....

Depth of well 125
(Feet)

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

5" 0-125'

Main water supply at.....
(Feet below surface)

Final water head.....
(Feet above or below surface)

Is well pumped?.....

Yield.....
(Gallons per minute)

Water level when pumping.....

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

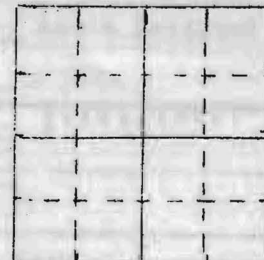
Sample No.	DEPTH		THICKNESS
	From	To	
	0	5	SOFT Yellow
P.D.	5	10	Yellow
P.D.	10	15	Yellow
P.D.	15	20	Yellow
P.D.	20	25	Dark
P.D.	25	30	Blue
Can	30	35	15
	35	40	Blue
	40	45	11
Can	45	46	11
	46	47.5	SAND
	47.5	50	Blue
P.D.	50	55	Blue
P.D.	55	60	11
Can P.D.	60	65	Yellow
P.D.	65	70	11
P.D.	70	75	11

DESCRIPTION OF BEDS			
KIND OF ROCK, COLOR, HARD OR SOFT, WATER, ETC.			
POLE Fill			
+ Brown Mixed	9:58	9:59	
with Brown Mixed	9:59	10:00	
Traces of Gray	10:00	10:02	
Brown & Gray Mixed	10:09	10:10	
Gray Traces of Yellow	10:10	10:12	
Gray + Traces of Yellow	10:12	10:13	
" " "	10:20	10:22	
Gray	10:22	10:24	
"	10:24	10:26	
"	10:30	10:31	
2 in	10:31		
Gray	10:33	10:35	
Gray + Yellow Mixed	10:36	10:37	
" " "	10:37	10:39	
Gray Mixed	10:45	10:46	
" " "	10:46	10:48	
" " "	10:48	10:50	

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

W-0101

RECORD OF WELL



Location:

Town: Mt. Pleasant (N E)
(S W); County HENRY
NEW NW 1/4 NE 1/4 sec. 9 T. 71 N., R. 6 W. Center Twp.

Well name and number City of Mt. Pleasant No. 1

Owner City of Mt. Pleasant Address _____

Tenant _____ Address _____

Contractor J.D. Shaw Address Davenport

Drillers _____

Drilling dates Completed in 1915

Well data:

Elevations: Drilling curb 732.62 feet; Land surface _____ feet

Determined by K.E.A.

Topographic position Upland

Total depth: Reported 1820 feet, Measured _____ feet

Drilling method Cable tool

Hole and casing data 68' 1/2-inch W.I. pipe from 0' to 68', 500' of 10-inch W.I. pipe from 0' to 574'; 67' of 8-inch W.I. pipe attached to 1103 feet of 6-inch pipe position of seals and packers; cementing; how finished--perforated pipe, screen, from 507' to 1677 feet. (Lead seal between 10-inch pipe, pack at bottom of 6-inch pipe. Open hole from 1677' to 1820 feet.

Original depth to water 74 ft. ^{above} curb Date 1915

Original elevation of water level _____ ft.; Source of data Vol. 33

Sources of water: Principal Jordan ss at 1715'; Others 198' in Miss.-Bur.
1346' in N. Richmond
1103' in Galena, 1560' in Onota, 1668' in Onota

Production data:

Date Dec. 29, 1941Static depth to water 124.26Measuring point 124 feet above concrete floorPumping level 160.55at 120 gpm g.p.m.Specific capacity 3 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 dayUse of water

WATER ANALYSES (in parts per million)

Date sampled				
Sampled by				
Total solids				
Insoluble matter				
Alkalinity (Neo)				
Alkalinity (Phn)				
pH				
Fe ₂ O ₃ + Mn ₂ O ₃ + Al ₂ O 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 68-1815 No. spls. 74 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 yesGen. log Correl. by

WATER LEVEL DATA

Measuring point _____

Date	Depth to water	Altitude	Remarks
Mar. 1921	Non-pumping 85'		Pumping level
Aug 1924	91'		
Aug 1927	100'		142'
Aug 1930	107'		141'
Aug 1931	116'		

REMARKS

Date Non-pumping level

Aug 1935 113'

Aug 1938 119'

Dec. 1941 124'

LLS REPORTED WELL TO BE FILLED IN (AUG 20, 1963)

IOWA GEOLOGICAL SURVEY
In Cooperation with U. S. Geological Survey
RECORD OF WELL

Location:

Town: CHIO (NE) (SW) County WAYNE (E)

SE - SW sec. 5 T. 67 N., R. 22 (W) Twp.

Well name and number U.S.G.S. TEST W-101

Owner U.S. GEOL SURVEY Address IOWA CITY, I.A.

Tenant _____ Address _____

Contractor LANE DRG & EXPL. Address OMAHA, NEBR

Drillers M. NORMAN

Drilling dates 6/27/63

Well data:

Altitudes: Drilling curb _____ feet; Land surface _____ feet ?

Determined by _____

Topographic position SIDE HILL

Total depth: Reported 125 feet; Measured _____ feet

Drilling method ROTARY

Hole and casing data 5" 0 - 125

SAMPLES LOST - SAMPLE LOG FROM

DRILLER'S LOG.

Original depth to water, _____ above
ft. below _____ Date _____

Source of data _____



Davis

December 29, 1941

Mt. Pleasant deep city well No. 1

Log of well copied from diagram at
Mt. Pleasant water office

Rock	Depth
Clay	68
Limestone	286
Kindershook shale	568
Sea level at 732.73'	
Limestone	810
Maquoketa shale	845
shale	1103
(Limestone 10-15' thick)	
shale	1148
St. Peter ss.	1188
(shale 20'-30')	
Limestone	1495
Limestone	1560
Limestone (water)	1592
Limestone	1668
(Limestone in ss. 20'±)	
Sandstone	1715
Jordan sandstone	1738
Total Depth	1820



Davis

December 29, 1941

Mt. Pleasant deep city well No. 1.

Casing record
from diagram Mt. Pleasant water office

12" casing surface to 67'

10" " " " 574'

8" liner at bottom of 10" casing - joined
to 6" casing below. 8" liner is
wholly within 10" casing with
lead sredded joint.

6" casing 574' to 1677'

Wall packer 3' x 6" at bottom of
6" casing.133' of open hole below bottom of
6" casing.[There may be a leak at the
seals]

Mt. Pleasant, Henry
City Wells

Well No 2	1800' at light plant.	731.01'
" " 3	Top of 18" casing	672.81'



Mt. Pleasant (Henry)

K. E. A.
12-29-41

Mr. Lee F. Speaker, mgr. waterworks

Old deep well (No. 2) in pump house in N.W. corner
of Light & Water office.

Drilled 1915

Pump 2-3 million gal. per month

Airlift pump

Date	SWL	PWL
Mar. 1921	- 85'	
Aug. 1924	- 91'	
- 1927	- 100'	142'
- 1930	- 107'	141'
- 1931	- 106'	-
- 1935	- 113'	140'
- 1938	- 119'	149'
Dec. 1941	- 124'	160' - 119 gpm

Curb Elev. 732.62' above sea level

Pumping Test 12-29-41

SWL = 124.20 M.E. = 1.24' above concrete floor
Temp. reported 70° by Mr. Speaker

TIME	D.W.	REMARKS
10:39 am	124.20	Compressor started
10:42		Pumping begins
10:44	141.17	
10:45	148.40	
10:46	158.87	Trident meter shows 183 gpm
10:47	158.90	of which 65% is
10:48	159.21	supposed to be correct
10:50	159.20	
10:51	159.57	∴ Prod. = 120 gpm ±
10:52	159.63	
10:53	159.68	
10:54	159.82	



TIME	DW	REMARKS
10:55 am	159.76	
10:56	159.97	
10:57	159.97	Prod. = 120 gpm $\pm$
10:58	160.10	
10:59	159.99	
11:00	160.18	
11:09	160.55	Pump shut off

New well - loc. SW of town, ^{in park} drilled 1934-35.

S.W.L. = about 54' } could not get line into well
Pumps 235 gpm }

Temp. measured at 70 $\frac{3}{4}$ °F, ^{at spigot} after passing
through 5' of 8" pipe, after 30 min. pumping
Pump house temp. = 54°F.