

MASTER CARD - A

9-26-69

STATE	COUNTY	LATITUDE			LONGITUDE			NO.
		DEG.	MIN.	SEC.	DEG.	MIN.	SEC.	
1	2	3	4	5	6	7	8	9
10	11	12	13	14	15	16	17	18
19	20	21	22	23	24	25	26	27

WELL SCHEDULE
US GEOLOGICAL SURVEY
IOWA DISTRICT WRD

WELL NO. 099-42W-13 DB CO. OSCEOLA
OWNER SIBLEY CITY #3 ADDRESS SIBLEY, IOWA
DRILLER VARNER WELL CO. DATE DRILL 1960
MAP COUNTY HWY 1:63,360
SOURCE OF DATA FILE
DESCRIPTION M. P. LSD FEET (ABOVE) 1496
(BELOW)

CONTINUED FROM ABOVE	LOCAL WELL NUMBER										LOCAL USE										OWNER OR NAME																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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5/79 field located by S. Senter

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

W12223

Location:

Town: SIBLEY (NE)
SW NW NW SE (SW) County OSCEOLA
NW SE sec. 13 T. 99 N., R. 42 (*) HOLMAN Twp.

Well name and number

Owner SIBLEY CITY WELL #3 Address

Tenant (1960) Address

Contractor VARNER WELL CO. Address DUBUQUE, IOWA

ENGINEERS

~~Drillers~~ DEWILD - GRANT - BECKERT & STEVENS, ROCK RAPIDS, IOWA

Drilling dates MAY 5 - AUG. 16, 1960

Well data:

Altitudes: Drilling curb feet; Land surface feet 1496.5

Topo Elev 1496.5

Determined by

Topographic position

Total depth: Reported 740' - SAMPLES feet; Measured feet

734' - VARNER, AND ENGINEERING CO.

Drilling method ROTARY TOOLS

Hole and casing data 26" OD CASING 0-337

12" INNAN PIPE 0-447

10" PIPE 447-634

10" STAINLESS STEEL SCREEN 634-734 - CEMENTED 0-614

Original depth to water 280' above GRAVEL PACKED 614-734
ft. below Date

Source of data

Sources of water: Principal DAKOTA SANDSTONE 634-734

Others _____

PRODUCTION DATA

Date _____

Static water level 280'

Pumping water level 310'

Yield (g.p.m.) 500 TEMP. = 51° - WATER CLEAR - NO ODOR

Measuring point _____

Duration of pumping 12 HOURS

Specific capacity 16 2/3 G.P.M. PER FOOT OF DRAWDOWN

LABORATORY DATA

Well No. W 12228 Sample range 0-740 No. of samples 149

No. of dupls. and cond. 147 - good Washed range 465-740'

Samples prepared by W. Rhoads Date 7/29/60

Logged by NORTBUP Date 11/7/60

Correlations by _____ Date 11/7/60

MAR 19 1963

IOWA GEOLOGICAL SURVEY

Iowa City, Iowa

WELL OR WATER SAMPLE DATA

Bottle No.

TOWN SibleyCOUNTY Osceola

LOCATION

sec.

T.

N., R.

W.

Twp.

OWNER OF WELL City of SibleyWELL NO #5USE OF WATER: City Supply (☒) Private-Domestic (☐) Public Drinking (☐) Livestock
Industrial (☐) School Supply (☐) Air Conditioning (☐) Cooling (☐)CONSTRUCTION OF WELL: Drilled (☒) Gravel-Pack type (☒) Driven (☐) Dug (☐) Bored (☐)
Jetted (☐)CONTRACTOR Karner & Co Dubuque Iowa DATE STARTED May 1960
DATE FINISHED Oct 1961CASING OR CURBING DATA: (Show by diagram on opposite side of sheet the kind, length
and depth of top and bottom of each size of pipe, the amount of overlaps, position of
seals or packers, pipe perforation and screens, etc.)

WELL DATA

Curb Elevation Ft. Present Depth Ft. Final Depth 734 Ft.Ground Elevation Ft. Topographic Position Static Level (Depth to Water (~~Above~~) (Curb) 284' Ft. Pumping Level 309 Ft.)
(~~Below~~)Amount of Drawdown 25' Ft. pumping at 500 g.p.m. in 60 hrs. Sec.Specific Capacity 20 g.p.m. per ft. drawdownType of Pump turbine Submersible Power ElectricDepth of Bottom of Pump 400' ft. with none ft. of suction pipe.TEMPERATURE: Air °F.; Water 51 °F., measured after well had pumped 24 hours
mins. at 500 g.p.m.; 0 ft. from pump after water had passed through the
following pipe From 9 AM Aug 15, 1960 to 9 AM Aug 16, 1960 Time (A. M.
(P. M.)

SOURCE OF WATER: Recent (Type and Depth)

Glacial Formations (Type) at ft. to ft.

Limestone or

Dolomite (Age) at ft. to ft.Sandstone (Age) at ft. to ft.Principal Producing Formation GravelREMARKS: Copy of analysis to Louis F. Whitney Co.1714 E. Ave N.E., Cedar RapidsSample taken for: Mineral Analysis (☒) Sanitary Analysis (☐) Data collected by H. M. Wright
Date

REPORT Analysis to H. G. Hershey, Iowa Geological Survey, Iowa City

Sample to Follow

UNITED STATES DEPARTMENT OF THE INTERIOR
Geological Survey
Water Resources Division

Sibley city well (1960)
W-12223

Water Quality
(ppm)

Card Q

State: Iowa 16 County: Osceola 72 Town: Sibley

Latitude 432340N Longitude 0954500 Seq. No. 1 Date 08/16/60

Well No. 432340N Sampling Depth 734 Type 1 Kx10⁶ 2960 pH 7.3 Temp. °F 51

SiO₂ 25 Ca 416 Mg 114 Na 186 K 12

HCO₃ 399 CO₃ 0 SO₄ 1510 Cl 35 Source No. 3 Q

Card R

Duplicate Columns 1-25 from Card Q

F 0.5 NO₃ 0.9 PO₄ 0.1 B 0.1 Al 0.1 Fe 0.24

Mn 0.22 Cu 0.1 Pb 0.1 Zn 0.1

Determined 2770 Solids 0 Calc. 0 Ca, Mg 1510 Hardness Non-Carb. 1180

Color 0 No. R

Card S

Duplicate Columns 1-25 from Card Q

Br 0.1 I 0.1 Alk. as CaCO₃ 327 Free CO₂ 0 SAR 0

RSC 0 ABS 0 0 0

Alpha (pc/l) 0 Beta (pc/l) 0 Ra (pc/l) 0 U (ug/l) 0

No. 5
80

Verified PMJ

Recorded by: P.J. Horick

Punched by: Punched FCH Date:

Published:

UNITED STATES DEPARTMENT OF THE INTERIOR
Geological Survey
Water Resources Division

099-42 W-13 DB
KDD

Sibley city well (1960)
W-12223

Water Quality
(ppm)

Card Q

State: Iowa 16 County: Osceola 72 Town: Sibley

Well No. 432340N 0954500 Seq. No. 1 Date 051563

Sampling Depth 734 Type 1 Kx10⁶ 3050 pH 7.1 Temp. °F 51

SiO₂ 20 Ca 385 Mg 140 Na 190 K 17

HCO₃ 398 CO₃ 0 SO₄ 1490 Cl 26 Source No. 3 Q

Card R

Duplicate Columns 1-25 from Card Q

F 0.4 NO₃ 0.4 PO₄ 1 B 1 Al 1 Fe 10

Mn 0.33 Cu 1 Pb 1 Zn 1

Solids 1970 Calc. 1540 Ca, Mg 1540 Hardness Non-Carb. 1210

Color 1 No. R

Card S

Duplicate Columns 1-25 from Card Q

Br 1 I 1 Alk. as CaCO₃ 326 Free CO₂ 1 SAR 1

RSC 1 ABS 1 1

Alpha (pc/l) 1 Beta (pc/l) 1 Ra (pc/l) 1 U (ug/l) 1

No. 5
80

Recorded by: P. J. Horick

Verified PMJ
Punched by: Punched FCH Date:
Published:

UNITED STATES DEPARTMENT OF THE INTERIOR
Geological Survey
Water Resources Division

09242W-13DB
KDD
SIBLEY #3 1960
W-12223

Water Quality
(ppm)

Card Q

State: IOWA 16 County: OSCEOLA 72 Town: SIBLEY, IA

Latitude Longitude Seq. No. Date

Well No. 432340N 0954500 1 020966

Sampling Depth 734 Type 1 Kx10⁶ 3100 pH 7.2 Temp. °F 50

SiO₂ 251 Ca 392 Mg 1361 Na 2041 K 161

HCO₃ 412 CO₃ 0 SO₄ 15001 Cl 311 Source No. 3 Q

Card R

Duplicate Columns 1-25 from Card Q

F 4 NO₃ 4 PO₄ 1 B 1 Al 1 Fe 30

Mn 20 Cu 1 Pb 1 Zn 1

Solids 2800 Hardness 1540

Determined 2800 Calc. 1540 Ca, Mg 1540 Non-Carb. 1202

Color 1 No. R

Card S

Duplicate Columns 1-25 from Card Q

Br 1 I 1 Alk. as CaCO₃ 338 Free CO₂ 1 SAR 1

RSC 1 ABS 1 1

Alpha (pc/l) 1 Beta (pc/l) 1 Ra (pc/l) 1 U (ug/l) 1

Verified PMJ

No. 5
80

Recorded by: D. AARONSON

Punched by: Punched ERC Date:

Published:

April 8, 1960

Mr. R. D. Reckert
De Wild, Grant, Reckert & Stevens
Rock Rapids, Iowa

Dear Mr. Reckert:

Thank you very much for your excellent letter of April 7 containing pertinent information on the municipal well at Sibley.

We will obtain the samples from the Varner Well and Pump Company for processing here so that we can report to you just as soon as possible.

Very truly yours,

H. G. Hershey

HGH:t

DEWILD - GRANT - RECKERT & STEVENS

JOHN A. DEWILD, P. E.
R. W. GRANT, P. E.
R. D. RECKERT, P. E.
WAYNE STEVENS, A. I. A.
REX H. ROGERS, P. E.
ARTHUR RUPPERT, P. E.

TELEPHONE 965

ROCK RAPIDS, IOWA

ENGINEERS
ARCHITECTS

April 7, 1960

Dr. H.G. Hershey, Director
Iowa Geological Survey
Geological Survey Building
Iowa City, Iowa

Re: Municipal Well
Sibley, Iowa

Dear Dr. Hershey:

The well driller for this project, Varner Well & Pump Co. of Dubuque, has completed the 6 inch diameter test hole and the bore has been electrically logged. One set of tagged formation samples were left in his possession for delivery to your office.

The ground elevation at the test hole location is 1496.5 ft. above mean sea level (tied into C & GS monument) with the hole bottoming out at a depth of 723 ft. (773.5 ft. above M.S.L.) in definite Sioux quartzite. From the log of the existing City Well No. 1 (drilled in 1946) it appears that we encountered the Sioux quartzite about 10 ft. higher than it was located to be in City Well No. 1. The ground level at our test hole is about 15 ft. lower than at City Well No. 1.

In your letter to us of December 10, 1959, you comment that the coarse sandstone (in City Well No. 1) is definitely not Dakota nor Jordan. Our drill samples from the test hole certainly confirm this; we have never worked in any Dakota sandstone that resembles this material.

We have not received the driller's report on the test hole which will include the driller's log, electric log and screen sieve analyses of the water bearing material. We will forward a copy of this report to you when it is available and will appreciate very much your comments after you have had an opportunity to review it and the drill samples. It will be helpful to us if you will make

Dr. H.G. Hershey

-2-

April 7, 1960

a geological classification of the formations encountered when
you have the necessary information.

Yours very truly,

DEWILD, GRANT, RECKERT & STEVENS

A handwritten signature in cursive script, appearing to read "R. D. Reckert". The signature is written in dark ink and is positioned above the printed name.

R.D. Reckert

RDR:jlc

VARNER WELL AND PUMP CO. *Established 1906*

WATER WELLS - DEEP WELL PUMPS - WELL REPAIRS - SOUNDINGS

*Contractors*_____

POST OFFICE BOX 237—TEL. DUBUQUE 3-8226
222 EAST FOURTH STREET
DUBUQUE, IOWA
October 31, 1960

IOWA GEOLOGICAL SURVEY

NOV 1 1960

Iowa Geological Survey
Geology Annex
Iowa City, Iowa

Attention: Dr. H. G. Hershey

Re: Sibley, Iowa

Gentlemen,

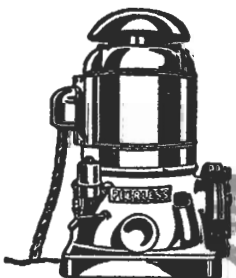
We are attaching a print of the construction of the Sibley well #5.

We are also attaching a copy of the electric log we ran on the test hole which may be of some interest to you. We must have hit a boulder since we didn't get as deep with the test hole before hitting quartzite.

Yours very truly
VARNER WELL & PUMP CO.



E. C. Teal
President



(DISTRIBUTORS OF PEERLESS PUMPS)

November 8, 1960

Mr. E. C. Teal
Varner Well and Pump Company
P. O. Box 237
Dubuque, Iowa

Dear Mr. Teal:

Thank you very much for the print and the
copy of the electric log on the Sibley well No. 5.
This information will be useful to us and I appreciate
your cooperation in furnishing it.

Sincerely yours,

H. G. Hershey

HGH:t

Oseola County

November 2, 1960

Mr. E. C. Teal, President
Varner Well Company
Dubuque, Iowa

Dear Mr. Teal:

In Dr. Hershey's absence, we are sending you a copy of the water analysis from the new well that your Company constructed for the town of Sibley.

As Dr. Hershey explained to you on the phone, there is some doubt as to the true amount of iron in the water. At our first opportunity, we will have another iron determination made in order to secure a correct analysis.

Please let us know when we can be of service.

Very truly yours,

Charles N. Brown

CNB/jsm
Enclosure

Sub
Sugg
CH 3-1161
-2091-
-2670-
1-2 rows

November 2, 1960

Mr. G. W. Wright
City Supt. of Utilities
Sibley, Iowa

Dear Mr. Wright:

The enclosed mineral analysis sheet represents the standard report form send out by the Water Laboratory Division of the State Hygienic Laboratory. The old form used by the Iowa Geological Survey is being discontinued. This change is being made to simplify handling, and conform to the State Water Laboratory procedure.

If you have any questions or if we can be of service in any way, please feel free to write or call us.

Very truly yours,

H. G. Hershey

PJH/jsm
Enclosure

copy sent to
Mr. Robert D. Reckert
DeWild, Grant, Reckert and Stevens Engineers
Rock Rapids, Iowa

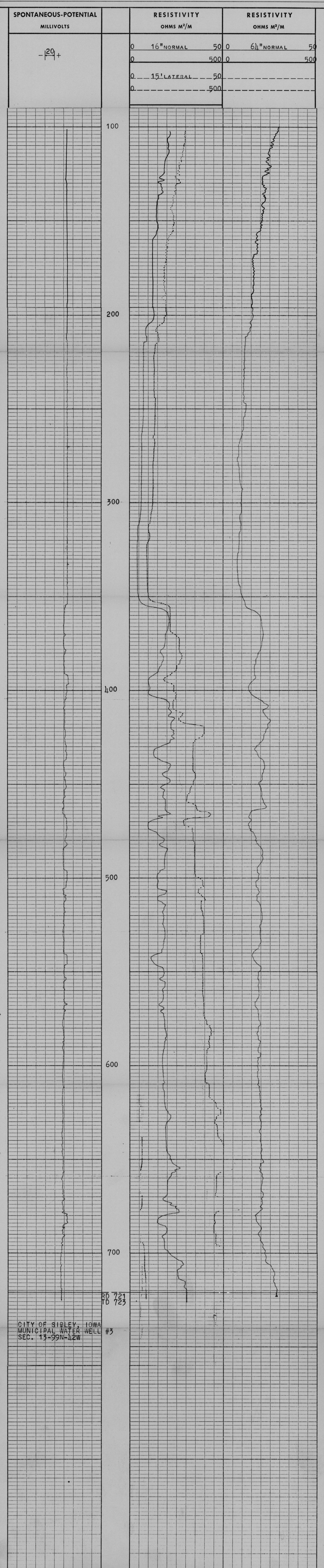


BIRDWELL
Electric Log

COMPANY		CITY OF SIBLEY, IOWA	
WELL		MUNICIPAL WATER WELL # 3	
FIELD		CITY OF SIBLEY, IOWA	
COUNTY		OSCEOLA STATE IOWA	
LOCATION:		OTHER LOGS:	
SEC. 13		TWP. 99N	
RGE. 12W		ELEV. N.A.	
PERMANENT DATUM		GROUND LEVEL	
LOG MEASURED FROM		G.L. FT. ABOVE PERM. DATUM	
DATE		3-30-60	
RUN NO.		ONE	
DEPTH-DRILLER		721	
DEPTH-LOGGER		723	
BTM. LOG INTER.		721	
TOP LOG INTER.		100	
CASING-DRILLER		N.A. @ N.A.	
CASING-LOGGER		N.A. @ N.A.	
BIT SIZE		6"	
TYPE FLUID IN		GEL	
DENS.		VISC.	
PH		FLUID LOSS	
SOURCE OF SAMPLE		PIT	
Rm @ MEAS. TEMP.		5.5 @ 59 OF	
Rmf @ MEAS. TEMP.		5.2 @ 59 OF	
Rmc @ MEAS. TEMP.		1.3 @ 59 OF	
SOURCE Rmf		Rmc	
Rm @ B.H.T.		N.A. @ N.A. OF	
Rmf @ B.H.T.		N.A. @ N.A. OF	
Rmc @ B.H.T.		N.A. @ N.A. OF	
TIME SINCE CIRC.		1 HR.	
MAX. REC. TEMP.		N.A. OF	
EQUIP. LOCATION		13 12 23	
RECORDED BY		HURRING	
WITNESSED BY		E.C. TEAL	

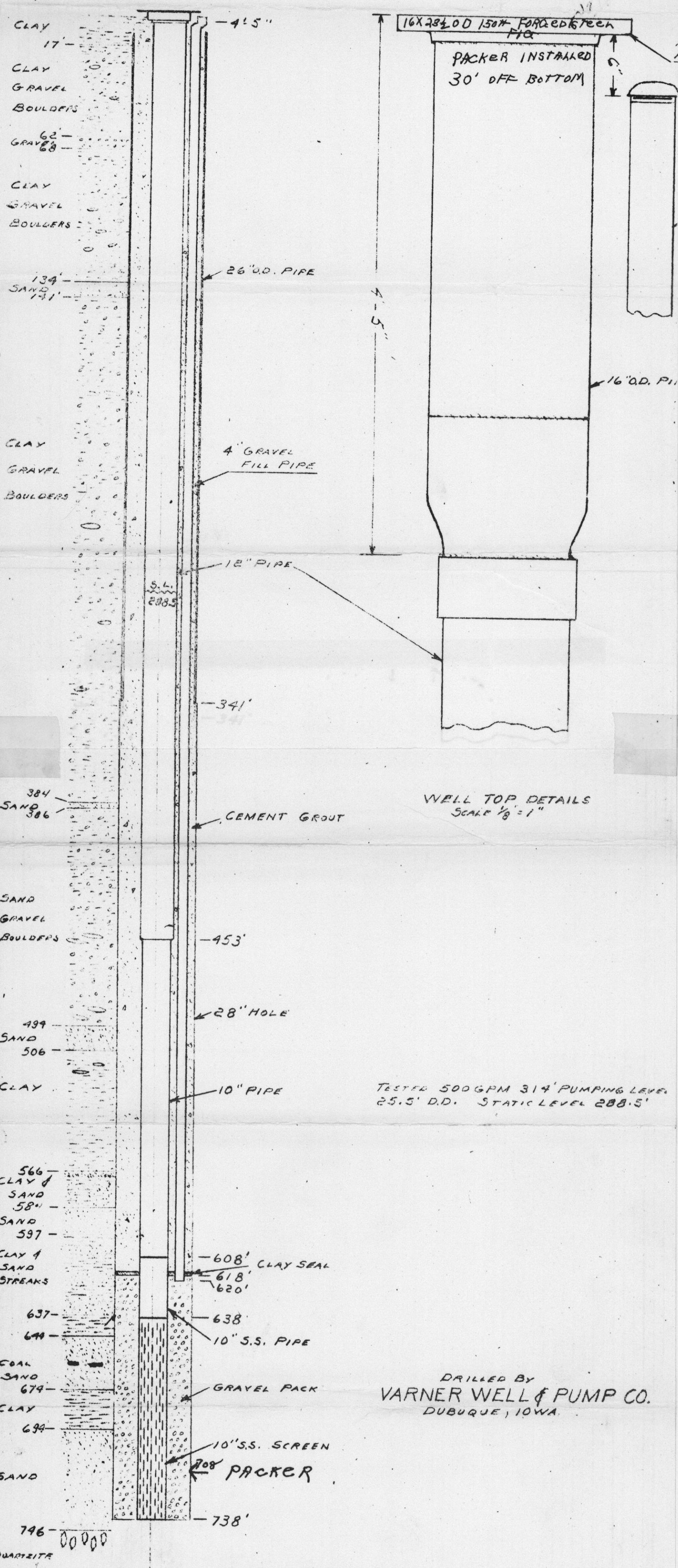
THIS HEADING AND LOG CONFORM TO API RECOMMENDED STANDARD PRACTICE RP-31

REMARKS	
CHANGES IN MUD TYPE OR ADDITIONAL SAMPLES	SCALE CHANGES
DATE SAMPLE NO.	TYPE LOG
DEPTH-DRILLER	DEPTH
TYPE FLUID IN HOLE	SCALE UP HOLE
DENS. VISC.	SCALE DOWN HOLE
PH FLUID LOSS	
SOURCE OF SAMPLE	
Rm @ MEAS. TEMP.	
Rmf @ MEAS. TEMP.	
Rmc @ MEAS. TEMP.	
SOURCE Rmf Rmc	
Rm @ B.H.T.	
Rmf @ B.H.T.	
Rmc @ B.H.T.	



CITY OF SIBLEY, IOWA
MUNICIPAL WATER WELL #3
SEC. 13-99N-12W

ITY OF SIBLEY, IA. WELL #5 COMPLETED AUGUST 1960



CITY OF SIBLEY, IA. WELL #5

COMPLETED AUGUST 1960

