WRD Exp. (GW) Aug. 1964 Verified ERC	
U. S. DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVE	Y
Water Resources Division Well Schedule Form	
MASTER CARD COUNTY N Record by D. AARONSON Source of data FILE Date 10/28/65 Map 1:63,360	wy
State IOWA 16 County KOSSUTH	55
Latitude: $\begin{array}{c c} 4 & 3 & 2 & 3 & 0 & 0 \\ \hline \\ \hline \\ deg & 7 & \min & 9 \\ \hline \\ geg & 7 & \min & 9 \\ \hline \\ sec & 11 \\ \hline \\ sec & 11 \\ \hline \\ sec & 12 \\ \hline \\ cerrees \\ \hline \\ 12 \\ cerrees \\ \hline \\ 15 \\ min \\ sec & 18 \\ \hline \\ \\ sec & 18 \\ \hline \\ \hline \\ \\ sec & 18 \\ \hline \\ \hline \\ \\ sec & 18 \\ \hline \\ \hline \\ \\ sec & 18 \\ \hline \\ \hline \\ \\ \\ \\ sec & 18 \\ \hline \\ \hline \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ $	
Lat-long accuracy: $\begin{bmatrix} 2\\ 20 \end{bmatrix}$ T 99° S, R 29° Sec 19 , Nw k, NE k, NE k 5	19
well number: $0 9 9 2 9 w 19 A 5 B$ other w-2217	•
Local use: 02217 $45CISTY$ 23 0 0 0 0 0 0 0 0 0 0	
Owner or name: SWEACTY Address: SWEACTY, IA	
CC) (F) (N) (F) (W) Ownership: County, Fed Gov't, City, Corp or Co, Private, State Agency, Water Dist	67 M
Use of (A) (C) (D) (F) (H) (I) (N) (S) (T) (U) (Water: Air cond, Comm, Dewatering, Fire, Dom, Irr, Ind, FS, Stock, Instit, Unused	68 P
Use of (A) (D) (G) (O) (P) (R) (S) (T) (U) (X) (Z) (Z) (Z) (Z) (Z) (Z) (Z) (Z) (Z) (Z	«»W
DATA AVAILABLE: Well data 2 Freq. W/L meas.: ANVENTORY OF Field aquifer char.	72
Hyd. lab. data:	73
Qual. water data; type:COMPLETE	74 C
Freq. sampling: INTERMITTENT	76
Aperture cards: yes	77
Log data: GEOLOGIST LOG	B 79
WELL-DESCRIPTION CARD	
SAME AS ON MASTER CARD Depth well: 270 ft 270 Meas.	46
Depth cased: 200 ft 200 Casing 20 STEEL; Diam. B in	8
(C) (F) (G) (H) (O) (P) (S) (T) (W) (Z) Finish: porous gravel w. horiz. open perf., screen, sd. pt., shored, open (Z)	30
Method (A) (B) (C) (D) (H) (J) (P) (R) (T) (V) (Y) <u>Drilled</u> . air bored, cable, dug, hyd jetted, air reverse trenching, driven, drive percussion, rotary.	
Date Dilled: O C 7. 1945 9 4 5 Pump intake setting: ft 130 33 35 9 9 10	38
Driller: BERT SHARFF, MASON CITY, IA	
(A) (B) (C) (J) multiple, multiple, (N) (P) (R) (S) (T) (Z) (type): air, bucket, cent, jet, (cent.) (turb.) none, piston, rot, submerg, turb, other 39 Shallow	D
Power nat LPG (type): diesel, elec, gas, gasoline, hand, gas, wind; <u>H.P.</u>	
Descrip. MP ft below 1sd, Alt. MP 1177. 2	
Alt. LSD: $(177, 2)$ $(1/7, 7, 7)$ $(aurrec)$ $(aurrec$	7
Date JAN. 1246 53 / 4 6 55 Viold Over 200	H
Drawdown: fr Accuracy:	61-
QUALITY OF 2.9 5 Sulfare 292 6 PLING 0.5 0 472	17
$\frac{ppm}{ppm} \xrightarrow{69} ppm \xrightarrow{70} \frac{ppm}{ppm} \xrightarrow{70} \frac{ppm}{pate} \xrightarrow{ppm} \frac{71}{pate}$	12
Taste color ere VERW S/164T YELLOW (S) COLAR DA RECEIPT IN LAD	79
there, cours, con i war i we the contraction and the state.	

099-29W-19AAB

Well Number 43 23 00 \$ 094 18 42
d m s d m s HYDROGEOLOGIC CARD
SAME AS ON MASTER CARD Physiographic CENTRAL LOWLAND 12 Section: WESTERN
LAKE B Drainage Basin: 2 8 Subbasin:
Topo of well site: local depression, flat surface, hilltop, hillside, terrace, valley flat, 23 (T) (V) 27
MAJOR AQUIFER: ORDOVICIAN, UPPER 03 MAQUOKETA FM UM
system series 28 29 aquifer, formation, group 30 31
Lithology: Length of 70 710 Depth to
1 well open to: It 28 Cop of: It 41 MINOR 1<
AQUIFER:, series 44 45 aquifer, formation, group 46 47
Lithology: Origin: Thickness: ft
Length of well open to:fttop of:ft
31 53 34 30 37 37 <u>Intervals</u> <u>Screened</u> : <u>NONE</u>
Depth toftSource of data:64
Depth toftSource of data:69
SAMON FILL DI Characteristics: POOR 72 4
Coefficient Trans: gpd/ft Coefficient Storage: 76-78-78-78-78-78-78-78-78-78-78-78-78-78-
Coefficient 73 75 Perm: gpd/ft; Spec cap: gpm/ft; Number of geologic cards:

0

200 OF B" CASING.



GPO 844-225

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Published:

IOWA GEOLOGICAL SURVEY Iowa City, Iowa

Well Log Record									
Owner of well Swea City County Kassuth									
Tenant Form Surea aty									
Location NWIVENE sec. 19, T. 99 N., R. 29 W. Two									
Curb elevation //86 ft. depth ft. depth ft. depth ft. depth ft. depth									
Static level: (Depth to water below curb) 27 ft. level 39 ft. at 300 g.m.									
Contractor G. B. Vandenburg Date drilled 1935									
Description*	FEET			Description*	I	FEET			
	Thick	From	To		Thick	From	То		
				· · · · · · · ·					

*Abbreviate descriptions: use one line for each formation.

Remarks on water zones and casings _ " crg \$ 208' "crg 208-268' .

Temperature: Air _____ °F., Water <u>49</u> °F. at ____ P.M. _____ 19

Record obtained from _____ Recorded by



John C. Moore Corporation, Rochester, N. Y. Binder and holes in leaves Patented. FORM 410546

MODRE'S MODERN JULY 4 denler - Bert Schouff (tobe drilled) fossuth Co Swea City town well LOC. NW 1/4 NEI/2 Sec. 19 T. 99 N R.29W Kossuth Co Elev. 1177.2 Eled. is 208 lower than tracks of the Chicago R.E. R.R. atdebat Oldwell 276' in I.S. Corerice) Pumps /mgpm now. Town Marshall & Pumb Reeker Stated by loe drobbed 3' when the limestone was reached To start drilling new well July 15- 1944 the above logotion & dougtion are for new well as well as oldone. Both N.A.M.

9-185—July 1935 Revised

UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY WATER RESOURCES BRANCH

WELL SCHEDULE

Da	te	, 19	Field No.	
Re	cord by		Office No	
Sou	irce of data			
1.	Location: State /our	County K	rssuth:	
	1/4 sec	Т	N R	EW
2.	Owner: Swea City	Address		
	Tenant	Address		
	Driller	Address		
3.	Topography			
4.	Elevation ft. above			
5.	Type: Dug, drilled, driven, bored, jette	ed19		
6.	Depth: Rept ft. Meas	283' ft.		
7.	Casing: Diam in., to in.,	, Type		
	Depth ft., Finish _ pen ha	de		
8.	Chief Aquifer	From	ft. to	ft.
	Others			
9.	Water level 30.24 ft. rept. Ja	un 22 19	the above top o	,f
	cara crete purp base	which is _2_	00 ft. above surfa	ce
10.	Pump: Type	Capacity		
	Power: Kind	Horser	oower	
11.	Yield: Flow G. M., Pump	G. M., I	Meas., Rept. Est.	
	Drawdown ft. after	hours pumping	g G. I	M.
12.	Use: Dom., Stock, PS., RR., Ind., Irr.	, Obs		
	Adequacy, permanence			
13.	Quality		Tempo	F.
	Taste, odor, color	8	Sample Yes	
	Unfit for		110	
14.	Remarks: (Log, Analyses, etc.)			
				-
	G. S. GOVERNMENT PRINTING C	11102 0 14/0		

IOWA PRESS CLIPPING BUREAU Des Moines, Iowa

Register Bancroft, Iowa

MAR 281948

SWEA CITY HAVING **TROUBLE WITH ITS** SUPPLY OF WATER

New Pump Quits After Being Used Short Time

The town of Swea City has been having more than its share of trouble with its city water supply.

The following story of the situation appeared in Thursday's Swea City Herald:

The future of the town's water supply remained uncertain this Thursday morning. More trouble developed last week when the new standby well quit after the new pump, used for the first time, ran only a short time. Water supply from the well became exhausted for some reason not yet explained.

Meanwhile partial service is being maintained from the the old well with the use of a small one-horse jet pump. The old pump cannot be used until repairs are received.

The Swea City school closed Monday afternoon at 3 o'clock because of low water pressure. When school opened Thursday morning the building was comwithout water. pletely After waiting an hour or so Supt. A. H. Schuler assembled the bus drivers and started rural pupils to their homes. He stopped work in the school cafeteria before the noon lunches were under way.

Contractor Bert Scharff of Mason City was expected to return this Thursday with a three horse jet pump. Pumping dihorse jet pump. Pumping di-rectly into the mains this pump was expected to maintain water pressure at adequate levels. When he left for Mason City

earlier in the week Mr. Scharff was uncertain how he would proceed to straighten out the present predicament. He thought that sinking the new well to a lower water vein was a possibility.

IOWA PRESS CLIPPING BUREAU Des Moines, Iowa

Globe Gazette Mason City, Iowa

JUN 171946 SAND PERILS WATER SUPPLY

Swea Cityans on Shorter Rations

Swea City-The hot days of last week brought such a decrease in the water supply in reserve in the city well and storage tank that Mayor A. G. Eggers and the coun-cil have decided to request users to conserve water until the new pumps are again in working order.

Trouble with the city water supply began in March when the well completed a short time be-fore began pumping sand. The Swea City school was forced to close for several days and business places and homes were compelled to haul water from private wells. New pumps installed in the old and the new city wells gave out presumably because of the sand.

As an emergency measure a jet pump was installed. While ade-quate for moderate use, the jet pump throws only about 50 gal-lons a minute or about ¹/₄ the normal capacity of the water plant. It is pointed out by the mayor and council that sprinkling mayor and council that sprinkling of lawns and gardens will not be possible under the present situation.

tion. Contractor Scharff will remain until the standby well is com-pleted and the new pump is in-stalled which is not expected to arrive until late in the summer. In the meantime, the Forest City Produce company, probably the heaviest water consumer in town, plans to sink a well for use at the start of the turkey dress-ing season which begins Aug. 1. This is expected to relieve the drain on the city water plant.

IOWA PRESS CLIPPING BUREAU Des Moines, Jowa

Herald

Swea City, Iowa

NOV 1 - 1945 Second Town Well is Completed

Contractor Bert Sharff of Mason City completed the job of sinking the town's second or standby well Sunday. A second centrifugal type pump was put in place and the two were operated for four and a half hours. Each pumped more than 200 gallons a minute.

The new well which was sunk outside the building will be enclosed as soon as workmen can get to it. It was sunk to the same vein as the old well this being necessary because the filtering system has been conditioned to this type of water.

Town authorities are confident the two wells will be ample to supply the town's needs for some time to come. The next move in the water department will be to extend the water mains, an improvement which was stopped by the war. It is hoped this work can be done next spring. IOWA PRESS CLIPPING BUREAU

Des Moines, Iowa

Upper Des Moines Algona, Iowa

NOV 8 1945 Swea City Well Is Now Completed

Swea City: A new city well was completed last week, here.

This second well was sunk in the same vein as the old one and just outside the building. It will be enclosed as soon as workmen can get to it.

Town authorities think the two wells will take care of the local needs for some time to come, and they hope to extend the water mains next spring. IOWA PRESS CLIPPING BUREAU Des Moines, Iowa

Herald

Swea City, Iowa

5 1941

Council Lets Contract for Second Well

The council has let the contract for digging the second town well to Bert Sharff of Mason City, who dug the present well some years ago. The price is \$4 a foot. The present well is 278 feet deep.

A turbine pump has been purchased from the Fairbanks-Morse company for \$912. This pump is similar to the present one, but will have an extra pulley so a tractor may be used in case of failure of electric power.

Altogether the improvement will cost around \$2,000, and will be paid for from present surplus and interest-bearing warrants. Mayor Christensen said this week it is probable the cost of the improvement could be completed inside a year from water revenues.

Mr. Sharff has contracted to have the well dug in August. A representative of the Fairbanks-Morse company said there should be no delay in the delivery of the pump.

There has long been a feeling among town authorities a second well should be dug for emergency purposes. This improvement will accordingly safeguard the town against vater failures.

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IOWA PRESS CLIPPING BUREAU Des Moines, Iowa

Globe Gazette Mason City, Iowa

SINK 2ND WELL AT WATER PLANT

1945

Swea City Officials Expect Ample Supply

Swea City — Contractor Bert Sharff of Mason City arrived with crew and equipment to sink the 2nd well at the town water plant.

The new well will be placed 8 feet from the present one, and will be at a depth of 278 feet to strike the present water vein. This

arrangement was necessary be cause the water softening solution is "geared" to the analysis of the present vein.

A 2nd deep water turbine will be installed, and the town expects to be prepared to meet any water emergency. IOWA PRESS CLIPPING BUREAU Des Moines, Iowa

Herald Swea City, Iowa

Work on Second Town Well is Started This Week

Contractor Bert Sharff of Mason City arrived this week with crew and equipment to sink the second, or standby, well at the town water plant.

The new vell will be placed eight feet from the present one, and will be at a depth of 278 feet to strike the present water vein. This arrangement was necessary because the water softening solution is "geared" to the analysis of the present vein.

A second deep water turbine will be installed, and the town should be prepared to meet any water emergency.

Altogether the improvement will cost \$2,000 which will be paid for from water revenues.

> IOWA PRESS CLIPPING BUREAU Des Moines, Iowa

Herald Swea City, Iowa WORK ON TOWN WELL DELAYED

Contractor Bert Sharff of Mason City is delayed in starting the new standby well at the water plant because of a breakdown of equipment. July 9, 1945

Mr. Bert Sharff Well Contractor Swea City, Iowa

Dear Mr. Sharff:

I have just learned that you are drilling the Swea City well and have just sent you a telegram which you undoubtedly received long before this letter arrived.

I am particularly anxious to have as much information as possible from the drilling of the Swea City well, not necessarily because of the water, which is interesting, but primarily because of the geology involved. Swea City is located in a very special place geologically and our information there is not nearly as complete as it should be. I will appreciate it, therefore, if you will save samples of each 5 feet drilled or of each formation if less than 5 feet thick, and a detailed log.

I am anxious to know if there is any limestone in or above the Dakota sandstone, and where and how much shale or clayey material occurs within the sandstone. Quite often within the Dakota there are beds of coal-like material. Generally speaking, these are really lignite and generally they are not thick enough to be of any commercial value. The report of coal at Swea City several years ago was never completely cleared up, so that I am anxious to get any additional information that might result from your drilling.

Sample sacks are being forwarded to you under separate cover.

Very truly yours,

H. G. Hershey

hgh'm

IOWA PRESS CLIPPING BUREAU Des Moines, Iowa

Upper Des Moines Algona, Iowa

MAY 30 1941

SWEA CITY DIGS NEW WELL TO COST NEAR \$2000 MARK

Swea City: Acting on the hint given in the old adage, "We never miss the water till the well runs dry", the town council has let a contract for disging a second town well. The present well is in good condition, but it was felt that a second one would be a wise venture in case of emergency. Bert Sharff of Mason City, who dug the present well, was awarded the contract for the new project at \$4 a foot. Work is to be completed in August. The present well is 278 feet deep and it is not anticipated that it will be necessary to exceed that depth in locating the new one. A turbine pump with an extra pulley for tractor operation in case of failure of the electric current, has been purchased from Fairbanks-Morse for early delivery. The new well and pump, to cost about \$2000, are to be paid for from present surplus and interest-bearing warrants.

Swea City Quad 2305 0941827-01 IONA GEOLOGICAL SURVEY. W - 22/7-29W-19 AABO. In Cooperation with U. S. Geological Survey O field located by D. Karsten RECORD OF WELL Location: (SW):County Town: SWPA sec. 19 I 99 N., R. 29 W. Harri NWW NEW NEW Twp. Well name and number Hy TOWN Well No. Owner Town of Address Tenant Address Contractor Reet Address Drillers and the second second second second Drilling dates Oct. 28, completed 1945 Well data: Elevations: Drilling curb feet; Land surface //77.2 feet well surby land sup face, 18 2.3' below R.R. station Determined by Topographic position Total depth: Reported 270 feet, Measured feet the second second second second second second Drilling method and a second Hole and casing data and the second and the second and a second • .• •• above Original depth to water ft. below Date Original elevation of water level ft.; Source of data Sources of water: Principal ORD. ? ; Others and the second second

Production data:	Date				
Static depth to water	Measuring	point	iskog gairas ek		
Pumping level	at	1	g•p•m•		
	oli <u>ttick (a</u>	-islan hi	- decai	ocial .	
		and the state of the			
				0	
Specific capacityg.p	•m• per ft• drawd	own; Temper	rature	F•	
Pump data; Type pump <u>Turbine</u> Cylinder or bowls: Dia	Column Dia Length	Suct	Length		
Power	Airline				
Estimated rate of production: Use of water		g•p•m• fo	or	hrs. a day	
W	ATER ANALYSES (in	parts per	million)	A COLORED OF C	
Date samples		1 I			
Sampled by					
Total solids					
Insoluble matter					
Alkalinity (Meo)				-	
Alkalinity (Phn)					
		•			
Alkali as sodium					
Calcium					
Magnesium					
Iron (unfiltered)					
Nanganese					
Nitrate				analisan si kana manganikana manganikan	
Fluoride					
Chloride					
Sulfate					
Bicarbonate					
Hardness (ppm)					
Percerks					
Laboratory data:	Sa	mple storag	e location		
Sample range <u>10-210</u> No.	spls. <u>kk</u>	No. dupls.	& cond.	20 F-P	
Driller's log and cond	sned range <u>20</u>	0-270	by <u>P.J.</u>		
Insoluble residues: Prepared by	Studie	l by	Strin 10)g	
Microscopic study 0-270 Es	4 strip log	2/14/46	El.	5	
Gen. log	Correl. b	5 6 Ac	hult		
		and the second sec			

CLIPPING BUREAU

Des Moines, Iowa

Herald Swea City, Iowa

COUNCIL STARTS TALK OF SECOND WELL

MAR 14 1943

The council at its regular meeting Tuesday night started a discussion of a second well for the town's water system. The present equipment has been in use eight years, and while it shows no sign of wear, there is a feeling an auxiliary outfit should be installed as a precaution and to help relieve the heavy demand on the town's water system.