W-0 533 210-215' cleansd, uf.f, Ar 2172-221 5d, Nf-C, A-221 - 225 NO Samply an velope nots "4 piece of chert" (largest = 1 x 2 x 1") 225-2272 pale mudst w/obnt iron oxide spots Coxidized siderik) Conclusion - it all 100 ks Cretaclos to me Samples evaluated by Brian Witzke

Samples evaluated by Brian Witzke 5/1/2001

IOWA GEOLOGICAL SURVEY Generalized Log Based on Detailed Description of Drill Cuttings

Name	of Well Fenton City Well, Kossuth County St	rvey No	. W-053	3
Loca	tion SE SN NE SE SE sec. 18, T. 97 N., R. 30 W. Fenton	Twp.		
Dril	led by Thorpe Well Co., Des Moines, 1936, 1937			
Tota	l Depth 229 ft. Curb Elevation 1243 ft. Static I	Level _		ft
Pump	oing TestHoursMin; Gal. per minDrawdo	own	ft, i	nmi
Casi	ng Data			
No.	Description of Formations Rock Unit	Thick.	From (feet)	То
PLEI	STOCENE SYSTEM			
1.	Soil, black, silty, with 15% sand, very coarse-grained to granules, angular, polished quartz	31611	0	31611
2.	Clay, light yellow, calcareous, soft, silty, with 25% glacial sand consisting of quartz, limestone, and shale in rounded grains, light gray, noncalcareous, silty, massive	11*6"	31611	15
3.	Clay, light brown slightly yellowish, calcareous, silty, with 10% glacial sand, as in $3\frac{1}{2}$ to 15 feet	10	15	25
4.	Clay, light medium to medium gray, mottled brown, with 30% heterogeneous glacial sand as in 15 to 25 feet	10	25	35
5.	Sand and gravel, poorly sorted mostly 2 to 1 mm., but ranging upward to pebbles of 10 mm. diameter, angular, polished in part consisting of quartz, igneous, limestone, dolomite and shale grains	3	35	38
6.	Clay, dark gray, calcareous, soft with 10% glacial sand, as in 35 to 38 feet	2	38	40
7.	Gravel, average diameter 3 mm., angular, consisting mostly of light buff and brown limestone with dark igneous and quartz grains	2	40	42

Notes:

No.	Rock Unit Desc	eription	Thick	From	To
8.	Clay, medium gray slightly browni with 15% to 25% glacial gravel	sh, calcareous, silty, and pebbles embedded	48	42	90
9.	Gravel, mostly 2 to 4 mm. diameter composed of granite, dark igner and shale granules. Clay 30% a	ous, limestone, dolomite	10	90	100
10.	Clay, light medium brownish gray, 10% to 20% glacial sand as in 9 shale, medium gray, noncalcared	00 to 100 feet, and 15%	10	100	110
11.	Clay, with 30% glacial sand, as i	n 100 to 110 feet	27	110	137
	ACEOUS SYSTEM Dakota formation				
12.	Sandstone, mostly coarse, well so polished and frosted, quartz wi bonded loosely by silt, (2-1 mm $\frac{1}{2}$ - $\frac{1}{4}$ mm. 15%, $\frac{1}{4}$ -1/8 mm. trace)	th trace dark igneous,	44	137	173
13.	Sandstone, clear to yellow orange mostly fine, angular, polished quartz, $(1-\frac{1}{2}$ mm. 10%, $\frac{1}{2}-\frac{1}{4}$ mm. 40 Siltstone 10% from 200 to 210 f buff very soft and friable, non	in part, free, clean, %, \(\frac{1}{4}\)-1/8 mm. 50%). eet, very light yellowis	sh 37	173	210
14.	Sandstone, clear to trace pale ye medium well sorted, angular, sl frosted		5	210	215
15.	No sample		216n	215	21716"
16.	Sandstone, clear to pink, heavily mostly medium, angular, well po 1-\frac{1}{2} mm. 20%, \frac{1}{2}-\frac{1}{4} mm. 50%, \frac{1}{4}-1/8	lished, (2-1 mm. 10%,	3*6"	217161	
17.	Chert, medium gray stained brown,	large weathered pebbles	4	221	225
18.	Siderite concretions, very small, buff, soft	embedded in clay, light	21611	225	22716n
19.	No sample		1'6"	2271611	229
Total	1 depth				229

Notes on Fenton City Well Kossuth County Survey No. W-0533

Samples of this well are good. They have been taken in small intervals and apparently at lithologic breaks.

Pleistocene System. The clays which have included glacial gravel and sand show the same type of shale granules as do most of the wells of this area. The shale is medium gray, noncalcareous, silty, medium hard. It occurs usually as rounded granules in the drift.

Dakota. The Pleistocene - Dakota contact is fairly well defined with clay containing coarse pebbles of limestone, quartz, and igneous material above, and well sorted sand, loose to slightly bonded by silt mostly 1 to $\frac{1}{2}$ mm., angular, with a small amount of polish. The lack of polish may be due to the size of the grains, "Dakota polish" seldom being present on grains below 1 mm. diameter.

The chert from 221 to 225 feet seems to consist of broken weathered chert pebbles and may be the "Cretaceous Basal Conglomerate".

Elev. Confidental 6.06.

IOWA GEOLOGICAL SURVEY Generalized Log Based on Detailed Description of Drill Cuttings

Drilled by: Thorpe Well Company Date Nov. 4, 1936— 1937 Total Depth: 229 ft; Curb Elevation: ft; Static Level: Inn. 20 ft. Casing Data: 221 ft. of 10-inch-45 lbs. per ft. Pump and Screen Data: Pumping Test: Hours Min; Gal. Per Min. ; Drawdown ft. in min. No. Rock Unit Description of Formations No. Rock Unit Top soil; dark brown, 20% pebbles and sand for pebbles and gramules in the stone and shale sand and gravel; upper 2° poorly sorted coarse glacial sand, lower 2° pebble gravel. 2° band pebbly gray clay between. 6 36 42 (lay till; gray, calcareous, numerous pebbles for gravelly and sandy in parts for cast for gravelly and sandy in parts for sand(f); gray, medium-grained, fair sorting, for for clay above). Probably reworked Dakota sand-stone. CRETACEOUS SYSTEM Dakota sandstone Sandstone; buff, silty, medium grained, angular, fair to good sorting, 9% quartz sand, containing brown shale bands. CRETACEOUS SYSTEM Dakota sandstone; buff, silty, medium-grained to fine-grained, well sorted, clear, angular, fightly iron coated but clear, angular, slightly for coated but clear, angular, slightly for coated but clear for clay for clay for coated but clear for c	Name of Well: Fenton City Well Surv	ev No. W	0533	
Total Depth: 229 ft; Curb Elevation; ft; Static Level: 21 ft. Casing Data: 221 ft. of 10-inch-45 lbs. per ft. Pumping Test: 10 inchedum prained to fine-10 ft. Pumping Test: 10 ft. of 10-inch-45 lbs. per ft. Pumping Test: 10 ft. of 10-inch-45 lbs. per ft. Pumping Test: 10 ft. of 10-inch-45 lbs. per ft. Pumping Test: 10 ft. of 10-inch-45 lbs. per ft. Pumping Test: 10 ft. of 10 lbs. per ft. Pumping Test. 10 lbs.	Drilled by: Thorne Well Company Date Not	. 4. 19	36-	1937
Pump and Screen Data: Pumping Test: Hours Min; Gal. Per Min; Drawdown ft, in min. No. Rock Unit	Total Donthe 220 ft. Grant Florestians	-3 - 7	Jan.	20,
Pumping Test: Hours Min; Gal. Per Min. ; Drawdown ft. in min. No. Rock Unit Description of Formations RECENT 1. Top soil; dark brown, 20% pebbles and sand 3½ 0 3½ PLEISTOCENE SYSTEM 2. Clay till; buff, oxidized, calcareous, 10% of pebbles and sand 3. Clay till; olive buff, partially oxidized, calcareous, 30% small pebbles and gramules 10 15 25 4. Clay till; gray, calcareous, unleached and unoxidized, pebbly igneous material, limestone and shale 5. Sand and gravel; upper 2° poorly sorted coarse glacial sand, lower 2° pebble gravel. 2° band pebbly gray clay between. 6 36 42 6. Clay till; gray, calcareous, occasional pebbles 7. Clay till; gray, calcareous, numerous pebbles 7. Clay till; gray, calcareous, numerous pebbles 8. Sand(?); gray, medium-grained, fair sorting, angular to subangular, less than 2% igneous material (probably cave from clay above). Probably reworked Dakota sand- CRETACEOUS SYSTEM Dakota sandstone 9. Sandstone; buff, silty, medium grained, angular, fair to good sorting, 99% quartz sand, containing brown shale bands, angular, fair to good sorting, 99% quartz sand, containing brown shale bands, angular, fair to good sorting, 99% quartz sand, containing brown shale bands, angular, fair to good sorting, 99% quartz sand, containing brown shale bands, angular, fair to good sorting, 99% quartz sand, containing brown shale bands, angular, fair to good sorting, 99% quartz sand, containing brown shale bands, angular, fair to good sorting, 99% quartz sand, containing brown shale bands, angular, fair to good sorting, 99% quartz sand, containing brown shale bands, angular, 177 173 190 10. Sandstone; pele buff, medium-grained to fine-grained, yery well sorted, angular, slightly fron coated but clean 22 190 212	Grand Depth. 201 ft. of 10-inches lbs. per ft.	ric reve	1:	.JI.
Pumping Test: Hours Min; Gal. Per Min. jDrawdown ft. in min. No. Rock Unit Description of Formations No. Rock Unit Description of Formations RECENT 1. Top soil; dark brown, 20% pebbles and sand 3½ 0 3½ PLEISTOCENE SYSTEM 2. Clay till; buff, oxidized, calcareous, 10% of pebbles and sand 3. Clay till; olive buff, partially oxidized, calcareous, 30% small pebbles and grammles 10 15 25 4. Clay till; gray, calcareous, unleached and unoxidized, pebbly igneous material, limestone and shale 5. Sand and gravel; upper 2' poorly sorted coarse glacial sand, lower 2' pebble gravel. 2' band pebbly gray clay between 6 36 42 6. Clay till; gray, calcareous, occasional pebbles 7. Clay till; gray, calcareous, numerous pebbles 8. Clay till; gray, calcareous, numerous pebbles 9. Clay till; gray, calcareous, numerous pebbles 10. Sandstone; buff, silty, medium grained, sand stone. CRETACEOUS SYSTEM Dakota sandstone 9. Sandstone; buff, silty, medium grained, angular, fair to good sorting. 99% quartz send, containing brown shale bands. 10. Sandstone; buff, silty, medium grained, sandstone; very pale buff to white, medium grained, well sorted, clear, angular, clean—no silt or clay 11. Sandstone; pale buff, medium-grained to fine—grained, very well sorted, angular, slightly iron coated but clean 22. 190 212.	Casing Data:	-	************	
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No. Rock Unit Description of Formations Thick. From (Feet) RECENT Top soil; dark brown, 20% pebbles and sand 3½ 0 3½ PLEISTOCEME SYSTEM Clay till; buff, oxidized, calcareous, 10% of pebbles and sand 11½ 3½ 15 Clay till; olive buff, partially oxidized, calcareous, 30% small pebbles and grammles 10 15 25 Clay till; gray, calcareous, unleached and unoxidized, pebbly igneous material, limestone and shale Sand and gravel; upper 2' poorly sorted coarse glacial sand, lower 2' pebble gravel. 2' band pebbly gray clay between. 6 36 42 Clay till; gray, calcareous, occasional pebbles to gravelly and sandy in parts Clay till; gray, calcareous, numerous pebbles to gravelly and sandy in parts Sand(?); gray, medium-grained, fair sorting, angular to subangular, less than 2% igneous material (probably cave from clay above). Probably reworked Dakota sandstone. CRETACEOUS SYSTEM Dakota sandstone Sandstone; buff, silty, medium grained, angular, fair to good sorting. 99% quartz sand, containing brown shale bands. 30 143 173 10. Sandstone; very pale buff to white, medium grained, vell sorted, clear, angular, clean—no silt or clay 17 173 190 11. Sandstone; pale buff, medium-grained to fine—grained, very well sorted, angular, slightly iron coated but clean 22 190 212,		- Agreed and the French State of State	- Director Alexander Co.	and the second second
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PLEISTOCENE SYSTEM 2. Clay till; buff, oxidized, calcareous, log of pebbles and sand 3	Description of Formations			•
PLEISTOCENE SYSTEM 2. Clay till; buff, oxidized, calcareous, log of pebbles and sand 3	NO. ROCK Unit	Thick.	From	To
PLEISTOCENE SYSTEM Clay till; buff, oxidized, calcareous, 10% of pebbles and sand Clay till; buff, oxidized, calcareous, 10% of pebbles and sand Clay till; olive buff, partially oxidized, calcareous, 30% small pebbles and grammles 10 Clay till; gray, calcareous, unleached and unoxidized, pebbly igneous material, limestone and shale Sand and gravel; upper 2° poorly sorted coarse glacial sand, lower 2° pebble gravel. 2° band pebbly gray clay between. 6 Clay till; gray, calcareous, occasional pebbles To clay till; gray, calcareous, numerous pebbles to gravelly and sandy in parts Sand(?); gray, medium-grained, fair sorting, angular to subangular, less than 2% igneous material (probably cave from clay above). Probably reworked Dakota sandstone CRETACEOUS SYSTEM Dakota sandstone Sandstone; buff, silty, medium grained, angular, fair to good sorting, 99% quartz send, containing brown shale bands. CRETACEOUS SYSTEM Dakota sandstone Sandstone; very pale buff to white, medium grained, well sorted, clear, angular, clean—no silt or clay 17 173 190 La Sandstone; pele buff, medium-grained to fine—grained, very well sorted, angular, slightly iron coated but clean 22 190 212	RECENT		(reec)	
PLEISTOCENE SYSTEM 2. Clay till; buff, oxidized, calcareous, 10% of pebbles and sand 3. Clay till; olive buff, partially oxidized, calcareous, 30% small pebbles and grammles 10 4. Clay till; gray, calcareous, unleached and unoxidized, pebbly igneous material, limestone and shale 5. Sand and gravel; upper 2º poorly sorted coarse glacial sand, lower 2º pebble gravel. 2º band pebbly gray clay between. 6 6. Clay till; gray, calcareous, occasional pebbles 7. Clay till; gray, calcareous, numerous pebbles 8. Sand(?); gray, calcareous, numerous pebbles 9. Sandstone; pary, medium-grained, fair sorting, angular to subangular, less than 2% igneous material (probably cave from clay above). Probably reworked Dakota sandstone. CRETACEOUS SYSTEM Dakota sandstone 9. Sandstone; buff, silty, medium grained, angular, fair to good sorting. 99% quartz sand, containing brown shale bands. 30 143 173 10. Sandstone; very pale buff to white, medium grained, well sorted, clear, angular, clean—no silt or clay 17 173 190 11. Sandstone; pale buff, medium-grained to fine-grained, very well sorted, angular, slightly iron coated but clean 22 190 212		31	0	31
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4. Clay till; gray, calcareous, unleached and unexidized, pebbly igneous material, limestone and shale 11 25 36 5. Sand and gravel; upper 2' poorly sorted coarse glacial sand, lower 2' pebble gravel. 2' band pebbly gray clay between. 6 36 42 6. Clay till; gray, calcareous, occasional pebbles 38 42 80 7. Clay till; gray, calcareous, numerous pebbles to gravelly and sandy in parts 57 80 137 8. Sand(?); gray, medium-grained, fair sorting, angular to subangular, less than 2% igneous material (probably cave from clay above). Probably reworked Dakota sandstone. CRETACEOUS SYSTEM Dakota sandstone 9. Sandstone; buff, silty, medium grained, angular, fair to good sorting. 99% quartz sand, containing brown shale bands. 30 143 173 10. Sandstone; very pale buff to white, medium grained, well sorted, clear, angular, clean—no silt or clay clear, angular, slightly iron coated but clean 22 190 212	3. Clay till; olive buff, partially oxidized,	e 10	15	25
unoxidized, pebbly igneous material, limestone and shale 5. Sand and gravel; upper 2' poorly sorted coarse glacial sand, lower 2' pebble gravel. 2' band pebbly gray clay between. 6 6. Clay till; gray, calcareous, occasional pebbles 7. Clay till; gray, calcareous, numerous pebbles to gravelly and sandy in parts 8. Sand(?); gray, medium-grained, fair sorting, angular to subangular, less than 2% ig- neous material (probably cave from clay above). Probably reworked Dakota sand- stone. 6. CRETACEOUS SYSTEM Dakota sandstone 9. Sandstone; buff, silty, medium grained, angular, fair to good sorting. 99% quartz sand, containing brown shale bands. 10. Sandstone; very pale buff to white, medium grained, well sorted, clear, angular, cleanno silt or clay 11. Sandstone; pale buff, medium-grained to fine- grained, very well sorted, angular, slightly iron coated but clean 22. 190 212	4. Clay till: gray, calcareous, unleached and	0 40	4.3	e- /
coarse glacial sand, lower 2° pebble gravel. 2° band pebbly gray clay between. 6 36 42 6. Clay till; gray, calcareous, occasional pebbles 38 42 80 7. Clay till; gray, calcareous, numerous pebbles to gravelly and sandy in parts 57 80 137 8. Sand(?); gray, medium-grained, fair sorting, angular to subangular, less than 2% ig- neous material (probably cave from clay above). Probably reworked Dakota sand- stone. 6 137 143 CRETACHOUS SYSTEM Dakota sandstone Sandstone; buff, silty, medium grained, angular, fair to good sorting. 99% quartz sand, containing brown shale bands. 30 143 173 10. Sandstone; very pale buff to white, medium grained, well sorted, clear, angular, clean—no silt or clay 17 173 190 18. Sandstone; pale buff, medium-grained to fine- grained, very well sorted, angular, slightly iron coated but clean 22 190 212	unoxidized, pebbly igneous material,	9.9		26
coarse glacial sand, lower 2° pebble gravel. 2° band pebbly gray clay between. 6 6. Clay till; gray, calcareous, occasional pebbles 7. Clay till; gray, calcareous, numerous pebbles to gravelly and sandy in parts 8. Sand(?); gray, medium-grained, fair sorting, angular to subangular, less than 2% ig- neous material (probably cave from clay above). Probably reworked Dakota sand- stone. CRETACEOUS SYSTEM Dakota sandstone 9. Sandstone; buff, silty, medium grained, angular, fair to good sorting. 9% quartz sand, containing brown shale bands. 10. Sandstone; very pale buff to white, medium grained, well sorted, clear, angular, cleanno silt or clay 17 173 190 11. Sandstone; pale buff, medium-grained to fine- grained, very well sorted, angular, slightly iron coated but clean 22 190 212	limestone and shale	11	25	30
6. Clay till; gray, calcareous, occasional pebbles 38 42 80 7. Clay till; gray, calcareous, numerous pebbles to gravelly and sandy in parts 57 80 137 8. Sand(?); gray, medium-grained, fair sorting, angular to subangular, less than 2% ig- neous material (probably cave from clay above). Probably reworked Dakota sand- stone. 6 137 143 CRETACEOUS SYSTEM Dakota sandstone 9. Sandstone; buff, silty, medium grained, angular, fair to good sorting. 99% quartz sand, containing brown shale bands. 30 143 173 10. Sandstone; very pale buff to white, medium grained, well sorted, clear, angular, clean—no silt or clay 17 173 190 11. Sandstone; pale buff, medium-grained to fine- grained, very well sorted, angular, slightly iron coated but clean 22 190 212	coarse glacial sand, lower 2 pebble			
7. Clay till; gray, calcareous, numerous pebbles to gravelly and sandy in parts 57 80 137 8. Sand(?); gray, medium-grained, fair sorting, angular to subangular, less than 2% ig- neous material (probably cave from clay above). Probably reworked Dakota sand- stone. CRETACEOUS SYSTEM Dakota sandstone 9. Sandstone; buff, silty, medium grained, angular, fair to good sorting. 99% quartz sand, containing brown shale bands. 30 143 173 10. Sandstone; very pale buff to white, medium grained, well sorted, clear, angular, clean—no silt or clay 11. Sandstone; pale buff, medium-grained to fine- grained, very well sorted, angular, slightly iron coated but clean 22 190 212	gravel. 2° band pebbly gray clay between	1. 6	36	42
7. Clay till; gray, calcareous, numerous pebbles to gravelly and sandy in parts 57 80 137 8. Sand(?); gray, medium-grained, fair sorting, angular to subangular, less than 25 ig- neous material (probably cave from clay above). Probably reworked Dakota sand- stone. 6 137 143 CRETACEOUS SYSTEM Dakota sandstone 9. Sandstone; buff, silty, medium grained, angular, fair to good sorting. 99% quartz sand, containing brown shale bands. 10. Sandstone; very pale buff to white, medium grained, well sorted, clear, angular, clean—no silt or clay 11. Sandstone; pale buff, medium-grained to fine- grained, very well sorted, angular, slightly iron coated but clean 22 190 212	o. Clay till; gray, calcareous, occasional	38	42	80
S. Sand(?); gray, medium-grained, fair sorting, angular to subangular, less than 2% ig- neous material (probably cave from clay above). Probably reworked Dakota sand- stone. CRETACEGUS SYSTEM Dakota sandstone 9. Sandstone; buff, silty, medium grained, angular, fair to good sorting. 99% quartz sand, containing brown shale bands. 30 143 173 10. Sandstone; very pale buff to white, medium grained, well sorted, clear, angular, cleanno silt or clay 17 173 190 11. Sandstone; pale buff, medium-grained to fine- grained, very well sorted, angular, slightly iron coated but clean 22 190 212	7. Clay till; gray, calcareous, numerous pebble	25	60	200
angular to subangular, less than 2% ig- neous material (probably cave from clay above). Probably reworked Dakota sand- stone. 6 137 143 CRETACEOUS SYSTEM Dakota sandstone 9. Sandstone; buff, silty, medium grained, angular, fair to good sorting. 99% quartz sand, containing brown shale bands. 30 143 173 10. Sandstone; very pale buff to white, medium grained, well sorted, clear, angular, clean—no silt or clay 17 173 190 11. Sandstone; pale buff, medium—grained to fine— grained, very well sorted, angular, slightly iron coated but clean 22 190 212	to gravelly and sandy in parts		80	724
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CRETACROUS SYSTEM Dakota sandstone 9. Sandstone; buff, silty, medium grained, angular, fair to good sorting. 99% quartz sand, containing brown shale bands. 30 143 173 10. Sandstone; very pale buff to white, medium grained, well sorted, clear, angular, clean—no silt or clay 11. Sandstone; pale buff, medium-grained to fine- grained, very well sorted, angular, slightly iron coated but clean 22 190 212	neous material (probably cave from clay			
CRETACEOUS SYSTEM Dakota sandstone 9. Sandstone; buff, silty, medium grained, angular, fair to good sorting. 99% quartz sand, containing brown shale bands. 30 143 173 10. Sandstone; very pale buff to white, medium grained, well sorted, clear, angular, clean—no silt or clay 11. Sandstone; pale buff, medium—grained to fine— grained, very well sorted, angular, slightly iron coated but clean 22 190 212		6	137	143
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iron coated but clean 22, 190 212,	11. Sandstone; pale buff, medium-grained to fin	8-		
	grained, very well sorted, angular, sligh	22	190	212

Notes:

Fenton City Well--Page 2

		Thick.	(Feet)	To
13.	Sandstone; buff to brown, medium- grained, fairly well sorted, angular, partially coated with			
	iron oxide.	31	217	221
14.	Conglomerate; abraded and weathered, chert pebbles with coarse sand,			
7 #	cemented with iron oxide	4	221	225
15.	Hematite concretions cemented in a matrix of buff, highly limonitic			
16.	No sample driller's log reports	23	225	2273
	"Solid lime rock"	15	227	229 T.D.

wer in . . . The suggest the same in the same Kossuth April 25, 1938 Mr. Bert Sharff Mason City, Iowa Dear Mr. Sharff: Enclosed is our log of the Fenton city well which you requested at the time of my visit to Mason City. The delay in sending it has been caused by the fact that the samples had to be studied before the report could be made. We do not have a curb elevation of the well, so that you will have to take into consideration the difference in elevation between the city well and your proposed location. You will notice that 221 feet of 10-inch 45 pounds per foot casing was used in the city well and that apparently the sandstone was cased out. However, it seems possible that the casing was slotted through the sandstone. We have no report of how much water was encountered in the sandstone or the true static level of the present well. If you drill in the vicinity of Fenton, I hope that you will save samples of the cuttings. If you need sample bags, we will be glad to send them to you. According to the division of the state into well drilling districts, you are located in district No. 3, composed of Worth, Mitchell, Howard, Cerro Gordo, Floyd, Chickasaw, Franklin, Butler, Bremer, Hardin, Grundy, and Black Hawk counties. Mr. Glen Smith of Iowa Falls is the temporary chairman and will notify you of the first meeting. A permanent chairman will be elected at that meeting, and a discussion of legislation and well drilling regulations will be held. I hope that you will find it possible to take an active part in your district meetings. Very truly yours. HGH: A H. G. Hershey Enc.

N-053JAN 21 1937 Kossuth Co.

Fenton's New Well Finished Last Week

Fenton Reporter—Completion of Fenton's new city well this week revealed that residents of this place can look forward to a softer, more pleasant-tasting water in the future. That, at least, was the opinion of a number of people who tasted the water Wednesday.

Harold Flijah of Des Moines, who has been in charge of the work, finished testing the well Wednesday afternoon and reported that between 9:30 a.m. and 3:22 p.m. the special turbine pump brought here for the test produced an average flow of more than 300 gallons per minute from the well. The contract specified that it must test not less than 200 gallons a minute.

At one time during the test period the pump was throwing 700 gallons a minute, although the official maximum has been set at 600. Mr. Elijah estimates that, using a powerful enough pump, the well could easily produce 1200 gallons per minute. At the time the pump was running full speed the water level in the well dropped only 2 feet.

Approximate depth of the well—exact measurements will be taken later—is 229 feet. Elijah said the water flows from a porous limestone. Samples of dirt were taken every five feet during drilling operations and will be sent to the State Geological Survey at Iowa City. Each sample differed slightly from the others. A record of the well is being filed with the town clerk.

The well is lined with a steel casing 10 inches in diameter.

Mayor J. T. Waite announced Wednesday that the new well will not be ready for use until a new pump can be installed. The town will buy a turbine pump powerful enough to make use of the well's capacity and will probably use the old well only for emergencies.

Installation of this pump may later cause a lowering of fire insurance rates.

'W. H. Nannie of Clear Lake is now installing the new water filter plant which will be used with the new well. Capacity of the filter will be a hundred gallons a minute.

Cost of the well was set at about \$1500 when the contract was let and the filter was to cost \$2850. The Reporter has been unable to get an estimate of what the new pump will cost. The well, pump and filter will be financed by funding bonds, which will allow the town to pay for the total sum over a long period of years.

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In Cooperation with U. S.	Geological Survey
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Drillers	
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Well data:	20,173
Elevations: Drilling curb /243 feet; La	nd surface /2 /3 feet
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Total depth: Reported 229 feet, Me	asured feet
Drilling method <u>Cable tool</u>	
Hole and casing data 221' of 10" c	asins
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Original depth to water /7 ft. below	D-1-
Original depth to water 67 ft. below	
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