IOWA GEOLOGICAL SURVEY
Location:
Town: Menena (NE) SW); County <u>Clayton</u>
NE/C sec. 14 T. 95 N., R. 5 W. Monen Twp+
Well name and number Interstate Power Co # 2
Owner Interstate Buer Cancer Address
Tenant
Address
Contractor <u>C.N. Varner</u> Address <u>Dubuque</u>
Drillers
Drilling dates 1932
Well data:
Elevations: Drilling curb 1216 feet; Land surface feet
Determined by
Topographic position Unkand,
Total depth: Reported feet. Measured er feet
Drilling method
Holo and casing data <u>46'ef 12" casing c-46</u> <u>408' of 10" casing c-46</u> . (Give amount, size, kind, and depth of all casing; type and
position of seals and packers: cementing: how finished perforated pipe. screen.
gravel peck open hole etc.)
graver pack, open hore, ecc.
above Original depth to water ft. below Date
above Original depth to water ft. below Date
above Original depth to waterft.below Date Original elevation of water levelft.; Source of data
above Original depth to waterft.below Date Original elevation of water levelft.; Source of data
above Original depth to waterft.below Date Original elevation of water levelft.; Source of data Sources of water: Principal; Others; Others; Others;

Normal State

10-10

Production data:	Date	Date		
Static depth to water 427	Measuring			
Pumping level	at	27 g.p.m.		
		Contraction of the second second		
and the second s				
Specific capacity g.p.m.	per ft. drawdo	wm; Temperature. 3	<u>2 3/4 °F.</u>	
Pump data; Type pump	Column Dia.	Length_	550	
Cylinder or bowls: Dia	Length	Suction pipe	10	
Power <u>Electric</u>	Airline	a construction of		
Estimated rate of production:		g.p.m. for	hrs. a day	
Use of water				
WATER ANALYSES	6 (in parts per	million)		
Date sampled March 21, 1937				
Sampled by <u>IC.Tester</u>				
Total solids 257.0				
Insoluble matter	-	The second second second		
Alkalinity (Heo)				
Alkalinity (Phn) 0.0		and the second s		
рн				
Fe203+ Mn203+Al203		a provide the second	and the second second	
Alkali as sodium 9.5				
Calcium 66,8				
Magnesium 21.4				
Iron (unfiltered)				
Manganese		· · · · · · · · · · · · · · · · · · ·		
Nitrate			Constant of the second second second	
Fluoride Ty,				
Chloride 9.0				
Sulfate 39.1		and the second s		
Bicarbonate Z.S.G.Z				
Hardness (ppm) 255.0				
Hardness (gpg) _15,0				
Remarks		-		
Laboratory data:	Sam	ple storage location_		
Sample range 50- 815 No.	spls80	No. dupls. & c	ond.	
Spls. prepared by Wash	hed range	by		
Driller's log and cond		and the second second		
Insoluble residues: Prepared by	Studie	d byStrip	10g	
Microscopic study Mulf	strip log_	in the		
Gen. log	Correl. by	- Mille		

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COPY

THE STATE UNIVERSITY OF IOWA

STATE HYGIENIC LABORATORIES

IOWA CITY, IOWA

Mr. C. J. Welter, Monona, Iowa

> SANITARY WATER ANALYSIS Parts in 1,000,000

## Laboratory No 100629

Jan. 9, 1936

From Monona (collected by O.J. Welter) Source of Sample Drilled well 815' water level (37') City supply ~ Well#2 (NewWell) Date Collected Dec. 30, 1935 Date Received - Dec. 31, 1935 Color - None Odor very slight earthy Sediment - None Turbidity - None Ammonia Nitrogen = .024 Albuminoid Nitrogen = .000 Nitrite Nitrogen = .002 Nitrate Nitrogen = 0.1 Organic Nitrogen - x Nitrite Nitrogen = .002 Nitrate Nitrogen = 0.1 Chloride (as Cl) = 9. Sulfate (as SO) = x Phosphate (as P 0 ) - X Fluoride (as F) - 0 Alkalinity: to Methyl Orange - 212. to Phenolphthalein - x Calcium (as CA) - x Magnesium (as Mg) - Iron (as FE) - x Manganese (as Mn) - x Bacteria per ml. at 37°C on litmus lactose agar 0;0 Acid Colonies - 0 ; 0 Bacteria per ml. at 20°C on plain nutrient agar 1;0 Gas-forming bacteria in lactose broth at 37°C:

0.1ml. water. No. plantings1No. positive tests in 24 hours - 0in 48 hrs. 01ml. water. No. plantings1No. positive tests in 24 hours - 0in 48 hrs. 010ml. water. No. plantings5No. positive tests in 24 hours - 0in 48 hrs. 0

Colon-Aerogenes group organisms - Absent in quantity examined.

Remarks: Satisfactory at this time.

Jack J. Herman, Jr. Chief, Water Laboratory Division

## INTERSTATE POWER COMPANY



Dubuque, Iowa Apr. 23, 1937.

Dr. A.C. Tester, Iowa Geological Survey, 103 Geology Bldg., Iowa City, Iowa

Dear Sir:

We have your letter of March 31st, directed to Mr. Wuerth at Decorah, Iowa requesting details on the No.2 well at Monona. Mr. Wuerth asked Mr. Dupont to give you the information requested but, unfortunately, the latter has been gravely ill at Rochester and the matter has been delayed.

From our records we will herein attempt to answer your questions. We are sorry that this has not been attended to sooner.

When the No.2 well was put down, no log was kept by the driller. Through carelessness on the part of the company representatives, no samples were saved and sent in. It is unfortunate that such is the case and we can only say that a similar situation will not develop again. However, we are assured by everyone having anything to do with the hole that the formations encountered were very much the same as those found in the No.1 well of which an accurate log was kept. We are attaching a print of the log from the No.1 well which may be of some value in your study. The two holes are less than 50' apart.

The size of the hole and casing installed follows-

From the surface to the Galena Dolomite, the drift is cased out with 46 feet of 12" casing. This casing is merely land- v ed on the dolomite at the 46' level- no attempt to secure a seal was made.

The hole was continued at 12" through the rock formations to the 408' level where the 10" casing was seated using a drive shoe. Thus the well is cased 10" from the surface to the 408 level and is apparently sealed in the St.Peter Sandstone.

From the bottom of the casing the hole was continued at 10" to the 815' level. Between the 408' and the 815 levels, the hole is uncased. INTERSTATE POWER COMPANY

- 2 -



Static water level is at 427°. Draw down, pumping at the rate of 327 g.p.m., is to the 510' level.

Thanking you for your interest in this matter, we

are

Yours very truly,

INTERSTATE POWER COMPANY,

E. A. Wisco, Operating Engineer,

4 Misco

C.H.M- MD.