

13238

Name Conrad town well No. 3 (1962)

Loc NW NE NE 31-86N-17W Grundy Co.

T.D. 120'?

Drilled Hoeg & Ames April 1962

Log W-13238 Northrup

Casing 21' of 16" csg 0-21'; 32' of 10" csg 0-32' cemented

Prod data SWL 11.10'

PWL 34'

Yield 160 gpm

Started pumping 7/12/62

Meter reading 9/14/62 3,478,400 g.

62 days 56000 gpd

Analysis: No. 1765 (3492) 3/20/62

800	56000	70 g/d/gal	62	3478400	56000 gpd
				310	
				378	
				372	

Based on assumption that meter started at 0

Elev.

995

Formation

Depth

Top

base

Hampton

17

Maynes Crk

60

North Hill

83

Prospect Hill

100

Maple Mill

115



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HOEG & AMES, Inc.

WELL CONTRACTORS

WELL SUPPLIES

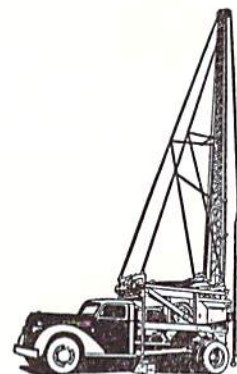
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LINCOLN, IOWA

IOWA GEOLOGICAL SURVEY

MAR 26 1962

LOG OF WELL



TOWN OF CONRAD, IOWA

Total depth of well - 120 ft.

Formation:

Yellow clay and fill	0-15	Ft.
Gravel - dry	15-21	Ft.
Sandy yellow limestone	21-45	Ft.
Yellow limestone	45-65	Ft.
Gray limestone	65-85	Ft.
White limestone	85-118	Ft.
Shale	118-120	Ft.

16 in. hole drilled	0-35 ft.
10 in. hole drilled	35-120 ft.
16 in. pipe in hole	0-21 ft.
10 in. pipe cemented in 16 in hole	0-32 ft.

The 16 in. hole was bailer tested at 30 ft. and produced 17 gal. per min. With a considerable drawdown, pumping the hole almost dry.

The 16 in. hole was drilled to 35 ft. and bailer tested again. At 35 ft. it produced 50 gal. per min. with no appreciable drawdown.

The 16 in. hole was filled back to 32 ft. and the 10 in. pipe was cemented in place from 0-32 ft.

13238



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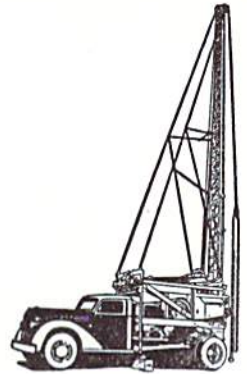
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WELL SUPPLIES

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LINCOLN, IOWA



TOWN OF CONRAD, IOWA - PUMPING RECORD

MARCH 19, 1962

<u>TIME</u>	<u>WATER LEVEL</u>	<u>DRAWDOWN</u>	<u>GAL. PER MIN.</u>	<u>REMARKS</u>
8:15 A.M.	10.80			Started pump.
8:20	29.6	18.8	145	Water dirty.
8:30	31.5	19.7	145	
8:45	36.8	26	160	
9:00	41.0	30.2	160	Water clearing.
9:15	40.2	29.4	160	
9:30	42	31.2	165	
9:45	48.8	38	172	
10:00	51.4	40.6	172	
10:30	44	33.4	160	Motor cutting out.
11:00	61	50.4	185	
11:30	83.4	72.6	190	Some air in water.
12:00 P.M.	87	76.4	190	Pumping some air, breaking suction.
12:30	87	76.4	190	Pumping some air, breaking suction.
1:00	87	76.4	190	Breaking suction - Slowed rate
1:15	38	27.2	150	Water clear.
1:30	37.5	26.7	150	
2:00	36.1	25.3	150	
2:30	35.9	25.1	150	
3:00	35.85	25.05	150	
3:30	35.75	24.95	150	
4:00	35.70	24.90	150	Water clear - No odor
4:30	35.65	24.85	150	
5:15	36	25.2	150+	Shut pump off.
5:16				<u>Recovery</u>
			17.5	
			14.7	
			13.6	
			13.25	
			13.05	
			12.85	



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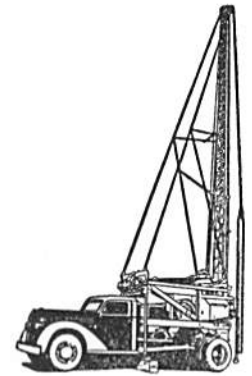
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WELL CONTRACTORS

WELL SUPPLIES

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LINCOLN, IOWA



TOWN OF CONRAD, IOWA - PUMPING RECORD

MARCH 20, 1962

<u>TIME</u>	<u>WATER LEVEL</u>	<u>DRAWDOWN</u>	<u>GAL. PER MIN.</u>	<u>REMARKS</u>
9:30 A.M.	10.15			Started pump.
9:45	33.8	23.65	160	Water clear.
10:00	33.4	23.61	160	Water clear.
10:15	36.8	26.65	160	
10:30	39	28.85	160+	Hardness 20 grain
11:00	37.45	27.30	160	Iron 0.2
11:30 11:30	42	31.85	173	
12:00 P.M.	37.7	27.55	160	
12:30	37.9	27.75	160	Collected sample - Shut off pump.
12:31	18			
12:32	14.25			
12:33	13.30			
12:34	12.70			
12:35	12.35			
12:36	12.10			

Conrad Feb. 13-1962

W 13238

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Time	W/h	D/O	G.P.M.	REMARKS
12:30	11.10			STARTED PUMP
12:35	33.80	22.70	160	11:45 A.M. Wilson Well
12:40	33.80	22.70	160	N.-APPROX 500 FT DISTANCE $\frac{W}{h}$ 13.70
12:45	33.80	22.70	160	FROM BOTTOM OF PIT
1:00	33.85	22.75	160	11:52 A.M. CURRY Well
1:15	33.95	22.85	160	800 FT DISTANCE N.W. $\frac{W}{h}$ 9.10
1:30	34.00	22.90	160	FROM BOTTOM OF PIT.
1:45	34.00	22.90	160	
2:00	34.00	22.90	160	Water clearing
2:15	34.00	22.90	160	
2:30	34.00	22.90	160	
3:00	34.00	22.90	160	INCREASED RATE
3:30			185	Water Surging (ELECTRIC LINE STUCK)
4:00			185	" " " "
				4:04 CURRY Well $\frac{W}{h}$ 10.80
				4:12 Wilson Well $\frac{W}{h}$ 14.70
4:30				Slowed rate "Elec line stuck"
5:00	Water	Turbid		Collected Water Sample
				77 ft of Pump in hole
				5 $\frac{9}{16}$ " O.D. Turbine hole
				3 $\frac{1}{2}$ " Column
				6" Test Hole

Duillus Log.

- 0-15 yellow clay and fill
- 15-21 Gravel "dry"
- 21-45 Soft yellow sandy rock
- 45-65 Good solid yellow Limestone
- 65-85 Soft Gray Limestone
- 85-110 White Limestone hard
- 110-115 white Limestone trace of Shale
- 115-120 Shale.

The Council would like a quick analysis of the water so they can decide on what to do at a special Council meeting to be held Fri eve. Feb 16. They don't need a complete analysis at this time only the important factors. they are particularly interested in - Iron - Nitrates - and Hardness and anything you may add.

The surging as you will note on the pumping record was because the turbine bowl being so large wouldn't let the water by as fast as we were pumping. At no time did the pump break suction.

any help you may offer will be greatly appreciated

Whitey.

- Partial analysis, Feb. 14, 1962

3

SO_4 (estimated) < 100 ppm

NO_3 8

Fe 0.2

Hardness 270