

TABLE 1
PUMPING TEST-LINN COUNTY MAINTENANCE GARAGE
LINN COUNTY August 31, 1965 GARAGE WELL

LOCATION: NE $\frac{1}{4}$, NW $\frac{1}{4}$, NW $\frac{1}{4}$, Sec. 16, T. 84N., R. 6W

TOTAL A pumping test was made by the W. H. White Drilling Company, August 31, 1965 on the new well at the proposed site for the new Linn County Maintenance Garage south of Central City on highway 13. The Geological Survey co-operated in obtaining rate of discharge and water-level measurements from the pumping well. A water sample was collected and delivered to the State Hygienic Laboratory for analysis.

223' 6" of 6"
The well was pumped for nearly 6 hours at a constant rate of 20 gallons per minute. The test began at 9:09 in the morning and was continued until 3:00 pm when the pump was shut off. Recovery measurements of the aquifer were then obtained. Total drawdown of the well amounted to 18.27 feet from the time the pump was started to the time it was shut off. Minor fluctuations of the level, after the drawdown had stabilized, may have been due to pumping of a well at the Linn county home about $\frac{1}{4}$ mile away. drop pipe

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AQUIFER Somewhat more water could probably be obtained from this well at the given pump setting. However, the 20 gallons per minute rate was kept constant throughout the test in an attempt to obtain significant data for determining the effect of constant pumping over a period of time.

Discharge rate measurement was by use of a water pressure meter which was checked by noting the time required to fill a 5 gallon bucket

OBSERVER: Norm Church

TABLE 1

LINN COUNTY MAINTENANCE GARAGE WELL

LOCATION:	NE $\frac{1}{4}$, NW $\frac{1}{4}$, NW $\frac{1}{4}$, Sec. 16, T. 84N., R. 6W
TOTAL DEPTH:	300'
CONTRACTOR:	W. H. White
DATE DRILLED:	August, 1965
CASING DATA:	35'6" of 12" 223'6" of 6"
WATER LEVEL:	SWL 45.75' below top of casing which protruded 3.37' above ground level
TEST PUMP:	1 $\frac{1}{2}$ horsepower REDA submersible 13 stage pump powered by a 220 volt gasoline generator. Pump is connected to the lower end of 105' of 1 $\frac{1}{2}$ " I.D. drop pipe
AQUIFER:	Silurian
MEASUREMENTS:	Water level measurements were made with an electric line. Discharge rate measurement was by use of a water pressure meter which was checked by noting the time required to fill a 5 gallon bucket
OBSERVER:	Norm Church

TABLE 11

LINN COUNTY MAINTENANCE GARAGE WELL

Time (min.)	Water Level (feet)	Drawdown (Feet)	Remarks
9:09 am	45.75 (SWL)		Pump on
1	53.41	7.66	Note: All measurements
2	57.09	11.43	are made from top of casing
3	58.88	13.13	which is 3.37' above ground
4	60.85	15.10	level
5	61.49	15.74	
6	62.33	16.58	
7	62.73	16.98	
8	63.09	17.34	
9	63.28	17.53	
10	63.64	17.89	
11	63.67	17.92	
12	63.70	17.95	
13	63.80	18.05	
14	63.87	18.12	
15	63.90	18.15	
16	63.97	18.22	Temperature 53 ° F
17	64.04	18.29	
18	64.05	18.30	
19	64.04	18.29	
20	64.15	18.40	
21	64.21	18.46	
22	64.27	18.52	
23	64.27	18.52	
24	64.29	18.54	
25	64.31	18.56	
26	64.32	18.57	
27	64.32	18.57	
28	64.33	18.58	Temperature 53° F
29	64.35	18.60	
30	64.40	18.65	
31	64.46	18.71	
32	64.40	18.65	
33	64.50	18.75	
34	64.50	18.75	
35	64.50	18.75	
36	64.50	18.75	
38	64.50	18.75	
40	64.50	18.75	
42	64.50	18.75	
44	64.50	18.75	
46	64.21	18.46	
48	64.21	18.46	
50	64.06	18.31	

TABLE 11 (Continued)

Time (min.)	Water Level (feet)	Drawdown (feet)	Remarks
52	64.00	18.25	
54	64.00	18.25	
56	64.00	18.25	
58	64.00	18.25	
60	64.00	18.25	
62	63.89	18.14	
64	63.89	18.14	
66	63.85	18.10	
68	63.85	18.10	
70	63.83	18.08	
72	63.79	18.04	
74	63.77	18.02	
76	63.73	17.98	
78	63.71	17.96	
80	63.77	18.02	
82	63.81	18.06	
86	63.83	18.08	
91	63.83	18.08	
96	63.79	18.04	
101	63.79	18.04	
106	63.79	18.04	
111	63.96	18.21	
116	63.98	18.23	
121	64.92	19.17	
126	64.92	19.17	
131	63.98	18.23	
136	63.89	18.14	
141	63.87	18.12	
146	63.87	18.12	
151	63.96	18.21	
156	63.89	18.14	
161	63.89	18.14	
166	63.89	18.14	
171	63.89	18.14	
176	63.89	18.14	
181	63.77	18.02	
186	63.75	18.00	
191	63.75	18.00	
196	63.71	17.96	
201	63.71	17.96	
206	63.71	17.96	
211	63.71	17.96	
216	63.69	17.94	
221	63.90	18.15	
226	63.96	17.94	
231	63.92	18.17	
241	63.96	18.21	
251	63.96	18.21	
261	64.04	18.29	

TABLE 11 (Continued)

Time (min.)	Water Level (feet)	Drawdown (feet)	Remarks
271	64.92	19.17	
281	63.97	18.22	
291	63.97	18.22	
301	64.02	18.27	
311	64.00	18.25	
321	64.08	18.33	
331	63.80	18.05	
341	64.00	18.25	
351	64.02	18.27	- - - Water temp 53° F and pump
352	56.40	10.65	shut off and recovery
353	52.72	6.97	measurements noted
354	49.70	3.95	
355	49.00	3.25	
356	48.29	2.50	
357	47.85	2.10	
358	47.53	1.78	
359	47.18	1.48	
360	47.00	1.25	
361	46.95	1.20	
362	46.90	1.15	
363	46.80	1.05	
364	46.75	1.00	
365	46.67	.92	
366	46.61	.86	
371	46.40	.65	
376	46.27	.52	
381	46.18	.43	
386	46.10	.35	
396	46.00	.25	