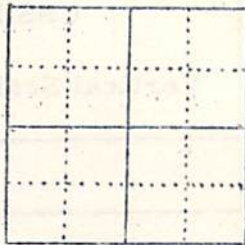


IOWA GEOLOGICAL SURVEY  
In Cooperation with U. S. Geological Survey  
RECORD OF WELL

W 8535



Location:

Town: Iowa City (NE) (SW) : County Johnson

NW SE NW sec. 10 T. 79 N., R. 6 W. Twp.

Well name and number \_\_\_\_\_

Owner BURGE Hall #2 Address \_\_\_\_\_

Tenant \_\_\_\_\_ Address \_\_\_\_\_

Contractor Hoeg & Anns Address \_\_\_\_\_

Drillers \_\_\_\_\_

Drilling dates July 19 - Aug 16, 1957

Well data:

Altitudes: Drilling curb \_\_\_\_\_ feet; Land surface 710.7 feet

Determined by \_\_\_\_\_

Topographic position \_\_\_\_\_

Total depth: Reported 430 feet, Measured \_\_\_\_\_ feet

Drilling method CABLE TOOLS

Hole and casing data 214' OF 12" CASING

Original depth to water \_\_\_\_\_ above  
ft. below \_\_\_\_\_ Date \_\_\_\_\_

Source of data \_\_\_\_\_

Sources of water: Principal \_\_\_\_\_

Others \_\_\_\_\_

Production Data

Date \_\_\_\_\_  
 Static water level \_\_\_\_\_  
 Measuring point \_\_\_\_\_  
 Pumping water level \_\_\_\_\_  
 Yield (g. p. m.) \_\_\_\_\_  
 Duration of pumping \_\_\_\_\_  
 Specific capacity \_\_\_\_\_

Pump Data

Type pump \_\_\_\_\_ Column diameter and length \_\_\_\_\_  
 Cylinder or bowls diameter and length \_\_\_\_\_  
 Suction pipe \_\_\_\_\_ Airline \_\_\_\_\_  
 Power \_\_\_\_\_ Production \_\_\_\_\_ g. p. m. for \_\_\_\_\_ hours per day  
 Use of water \_\_\_\_\_

Dissolved constituents and properties (in parts per million except as indicated)

Date sampled \_\_\_\_\_  
 Sampled by \_\_\_\_\_  
 Silica (SiO<sub>2</sub>) \_\_\_\_\_  
 Iron (Fe) \_\_\_\_\_  
 Manganese (Mn) \_\_\_\_\_  
 Calcium (Ca) \_\_\_\_\_  
 Magnesium (Mg) \_\_\_\_\_  
 Potassium (K) \_\_\_\_\_  
 Sodium (Na) \_\_\_\_\_  
 Carbonate (CO<sub>3</sub>) \_\_\_\_\_  
 Bicarbonate (HCO<sub>3</sub>) \_\_\_\_\_  
 Sulfate (SO<sub>4</sub>) \_\_\_\_\_  
 Chloride (Cl) \_\_\_\_\_  
 Fluoride (F) \_\_\_\_\_  
 Nitrate (NO<sub>3</sub>) \_\_\_\_\_  
 Dissolved solids \_\_\_\_\_  
 Hardness (as CaCO<sub>3</sub>) \_\_\_\_\_  
     Total \_\_\_\_\_  
     Grains per gallon \_\_\_\_\_  
     Noncarbonate \_\_\_\_\_  
 Alkalinity (as CaCO<sub>3</sub>) \_\_\_\_\_  
 pH \_\_\_\_\_  
 Specific conductance \_\_\_\_\_  
     (micromhos at 25°C) \_\_\_\_\_  
 Temperature (°F) \_\_\_\_\_  
 Analysis No. \_\_\_\_\_

Laboratory Data

Well No. W 8535 Sample range 16-430 No. of samples 12  
 No. of dupls. and cond. 82 good Washed range 40-430  
 Samples prepared by D. F. Dunbar 8/20/57 Date 8/20/57  
 Logged by NORTON Date 8/57  
 Correlations by \_\_\_\_\_ Date 8/57

UNITED STATES  
 DEPARTMENT OF THE INTERIOR  
 GEOLOGICAL SURVEY

 W-8535  
 U.S.G.S. Season,  
 File No. { Washington  
 District

Aug 23-57

 Burge  
 QUARTER-HALL WELL #2

Time	Static water level	AIRLINE Pressure	Draw Down	G.P.M.	Depth Airline	LENGTH of AIRLINE - Top of Bowls -
	121.88				326.40	
1		73	33.5			Commenced Pumping w/lt. turbidity
2						
3		70	41.6			
4		67	48.5			
5		65	52.1			
6						
7		63	56.7			
8						change <sup>slowed</sup> pump speed
9						
10		62+	59.0			
12		61+	61.3	112		
14		59				
16		58				
18		56				
20		55				
23		54				
27		52				
30		51				
35		49+	86.7			
40		48		129		
45		47				
50		46				
55		45	18.5			measured depth to HoD 139.7' also. Line +.1 ft. differential = 140.4
60		44				
70		42				changed to Alt. Gauge
80						Disregard above Pressure Readings - Leak in AIRLINE.
90		141.14	steel tape to H <sub>2</sub> O			slight w/lt. turbidity

68  
 2.3  
 40.6  
 126.40

3.4  
 63  
 272  
 326.40

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 File No. { Washington ..... 2  
 District .....

 Budget Hill Well #2  
 Pumping Test.  
 Aug 23/57

		elec. Line	D.O.	G.P.M.					
10:12	106	121.89	141.85						
	109		155	196					Increased pump speed
	112		154.6						
	115	5.1	154.9						
	120	4.95	155.05						
	127	4.35	155.65						
	135	3.75	156.25	196					
	139								Speeded up pump.
	145			224					
	150		164.2						
	156	<sup>170</sup> 4.3	165.7						
	162	<sup>170</sup> 3.4	166.6						
	168	<sup>170</sup> 2.9	167.3						
	175			252					Motor Speed Fluctuating
	185	<sup>170</sup> 2.75	165.25						
	190	<sup>170</sup> 3.7	166.3						
12:23	240	<sup>170</sup> 2.43	167.57						
	255	<sup>170</sup> 3.6	166.24	224					
	270								speeded up pump.
	272		175.5	280					
	280	<sup>170</sup> 2.0	178.0						
	285		181.25						
	290								
	295		180.5						
	300		180.7						
	315		182.6						
	320								speeded up pump.
	325	<sup>170</sup> 2.7	194.3	322					
	335		193.8						
	352		195.65	322					56°F

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 Biceps Hall Well #2  
 Pumping Test  
 Aug 23 - 57

Time	Depth in feet	V.O.	G.P.M.						
354									
359	24.55	215.45							Speeded up Motor
365	?	219.3	420						
390	+3.5	223.5							
410	-2.5	227.5	399						
415									slowed pump
417		198.2							
420		199.9	300						slowed pump
425		198.95	266						
430		181.1							slowed pump
435		180.57							
440		180.92							
449			258						slowed pump
450	4.0	166.0	151						
485	+3.3	163.30	168						

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BURGE HALL

TIME	MIN	M.P	W.L.	D/W	G.P.M								
7-15-57													
10:42A													
	1												
	2				329								
	3												
	4												
	5												
	6												
	7												
	8												
	9	140	-2.25	137.75									
	10		-1.85	138.15									
	12		-1.13	138.87									
	15		-0.25	139.75									
	20		0.94	140.94	364								
	25		1.50	141.50									
	30		1.82	141.82									
	35		3.06	143.06									TIGHTENED BELT W/L DROPPED SOME
	40		3.71	143.71	364								57°F
	50		4.41	144.41									
	60		4.84	144.84									
	75		4.01	144.01									
	90		4.25	144.25									
	105		4.58	144.58									
	120		4.18	144.18	294								
	132		-3.63	136.37									
	133		-4.38	135.62									
	134		-4.87	135.13									
	135		-5.36	134.64									
	136		-5.79	134.21									
	137	130	3.83	133.83									
	138		3.45	133.45									

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## BURGE HALL

TIME	TIME	M.P	W.L.	D/W	G.P.M								
140	7-15-57	130	2.82	132.82									
145		130	1.54	131.54									
150			0.55	130.55									
155			-0.40	129.60									
160			-0.82	129.18									
170		150	-2.48	147.52									STARTED PUMPING
175			-2.05	147.95									
180			-0.48	149.52	420								
185			0.88	150.88									
190			1.64	151.64									
195			2.50	152.50									
200			1.03	151.03									
205			1.29	151.29	392								
210			3.00	153.00									
220			3.10	153.10									
230													SHUT DOWN
254													STARTS PUMP
257		160	0.41	160.41	600								
265		160	2.62	162.62									
270			3.50	163.50									
275			4.77	164.77	560								
280			5.54	165.54									
290		170	-3.80	166.20									
300			-2.70	167.30									
310			-1.89	168.11									
320			-1.49	168.51									
330			-1.01	168.99									
340			-0.49	169.51									
347			-0.32	169.68									STOPS PUMPING
350		150	-2.05	147.95									RECOVERY
51			3.07	146.93									

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## BURGE HALL

TIME	MIN.	M.P.	W.L.	D/W	G.P.M.							
7-15-57	352	150	-3.95	146.25								
	353		-4.76	145.24								
	354		-5.41	144.59								
	355	140	3.88	143.88								
	356		3.26	143.26								
	357		2.76	142.76								
	358		2.20	142.20								
	359		1.76	141.76								
	360		1.28	141.28								
	362		0.35	140.35								
	364		-0.35	139.65								
	366		-1.08	138.92								
	368		-1.65	138.35								
	370		-2.26	137.74								
	375		-2.56	137.44								
	380		-2.97	137.07								
	385		-3.14	136.86								
	390		-3.53	136.47								



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District \_\_\_\_\_

BURGE HALL

TIME	MIN	M.P	W.L	D/W	G.P.M.						
7-16-57											START PUMPING
8:20 A	2	120	4.95	124.95							
	4	130	-2.65	127.35							
	6		-1.82	128.18							
	8		-1.27	128.73							
	10		-0.59	129.41							
	15		0.35	130.35							
	20		0.99	130.99							
	25		1.56	131.56							
	30		1.98	131.98							
	35		2.35	132.35							
	40		2.14	132.14							PUMP SMOKING
	50	140	0.19	140.19	320						SPEED UP
	55		-4.31	135.69							PUMP DECREASED PUMP SPEED
	60		-4.22	135.78							
	65		-1.60	138.40	234						SPEED UP
	70		-1.10	138.90							
	80		-0.46	139.54							
	90		0.13	140.13	224						
	105		0.82	140.82							
	120		1.37	141.37	224						
	135		1.69	141.69							
	142		5.75	145.75							SPEED UP
	145	150	-3.50	146.50							
	150		-2.83	147.17							
	160		-1.71	148.29	317						
	170		-0.85	149.15							
	180		2.80	152.80							
	195		4.31	154.31							
	198										DRIVE SHAFT BTOKE

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CURRIER HALL

TIME	MIN	SETTING	READING	D/W	ZO GAL	G.P.M
7-16-57		160	51	109		
8:20A						
	1		38	122		
	2		38	122		
	3		37	123	8.3 SEC	144
	4		36	124		
	5		36	124		
	6		36	124		
	7		36	124		
	8		35	125		
	9		34	126	8.8 SEC	136
	10		34	126		
	12		34	126		
	14		34	126	9.0 SEC	133
	16		33	127		
	18		33	127		
	20		33	127	9.0 SEC	133
	25		32	128		
	30		32	128	9.0 SEC	133
	35		32	128		
9:00A	40		31	129	9.0 SEC	133
	45		30	130		
	50		29	131		
	55		29	131		
	60		28	132		
	65		28	132		
						BURGE HALL 234 GPM
9:30A	70		27	133		
	80		26	134	9.0 SEC	133
	90		26	134		
10:00A	100		25+	135		
	110		24	136		
	120		24	136		

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CURRIER HALL

TIME	MIN.	SETTING	READING	D/W	20 GAL							
7-16-57												
10.30A	130	160	24	136								
	145		23	137								
	150		23	137								
	155		22	138								
11:00A	160		21	139								
	165		20	140								
	170		20	140								
11:15A	175		20	140								
	180		19	141								
	185		18	142								
11:30A	190		18	142								
	195		18	142								
11:45A	205		19	141								
1:00P			28	132								

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*Burge Hall*

	Time	Hold	Wet	depth	
N. well	9:28	130.0	11.09	118.91	Tape - taken at entrance pipe into casing
S. well	9:38	150.0	13.50	146.50	Tape - uncertain; <sup>at pump</sup> well pumping w/ splash
7/21/59 N. well	9:20A	130.2	0.0	130.2	elect L. taken aa well pump 22 hrs
	9:30	130.55	0.0	130.55	
S well	9:50	154.5	0.0	154.5	elect L. well pumping

