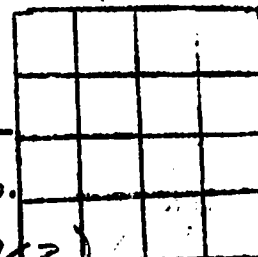


IOWA GEOLOGICAL SURVEY
In Cooperation with U. S. Geological Survey
RECORD OF WELL

Location:

Town: Maquoketa (NE) (SW) County Jackson (E)

SWSESW sec. 24 T. 84 N., R. 2 Twp.



Well name and number Maquoketa City Well (1963)
City of

Owner Maquoketa Address Maquoketa, Iowa

Tenant Address

Contractor Varner Well Co. Address Dubuque, Iowa

Drillers

Drilling dates Aug 28, 1962 - APR 19, 1963

Well data:

Altitudes: Drilling curb feet; Land surface feet 737.5

Determined by Johnson 1963

Topographic position UPLAND

Total depth: Reported 2310 feet; Measured feet

Drilling method Cable Tool

Hole and casing data 13' 9" OF 24" OD CSC. 0-13' 9"

155' 4" OF 18" OD CSC. 0-155' 4"

891' 7" OF 12" ID CSC. 0-891' 7" (CEMENT GROUTED)

WITH 829 SACKS CEMENT AND 62 SACKS BENTONITE)

Original depth to water, above
ft. below Date

Source of data

Sources of water: Principal _____

Others _____

PRODUCTION DATA

Date _____

Static water level _____

142'

Pumping water level _____

263'

Yield (g.p.m.) _____

1590

Measuring point _____

Duration of pumping _____

Specific capacity _____

LABORATORY DATA

Well No. 113997 Sample range 0 - 2310 No. of samples 455No. of dupls. and cond. 455 Good Washed range 15 - 2310Samples prepared by R. B. C. S. Date 11-14-62Logged by NORTHUP Date 1962-1963

Correlations by _____ Date _____

DATE STARTED Aug. 28, 1962 DATE COMPLETED April 19, 1963

TOTAL DEPTH 2309'6"

LOCATION Maquoketa, Iowa

DIAMETERS: 25" from Surface to 13'9"
19" from 13'9" to 155'
17" from 155' to 455'
15 1/2" from 455' to 891'
12" from 891' to 2309'6"

CASING

RECORD: 24" O.D. pipe from Surface to 13'9"
18" O.D. pipe from Surface to 155'4"
12" I.D. G.W.I. 49.56 lb./ft. pipe from Surface
to 891'7" cement grouted in place using
829 sacks of cement and 62 sacks bentonite.

STRATA RECORD

From	To	Thickness	Description of Beds
0	15	15	Top soil & yellow clay
15	35	20	Yellow clay
35	60	25	Sandy yellow clay
60	67	7	Sand
67	134	67	Sand & fine gravel
134	137	3	Sand & lime
137	142	5	Sand, lime & gravel
142	155	13	Sand & lime
155	166	11	Gray & brown lime
166	170	4	Sand, lime & clay
170	186	16	Gray lime
186	203	17	Gray & brown lime
203	208	5	Brown lime
208	213	5	Gray, brown & white lime
213	228	15	Gray lime & chert
228	236	8	Gray lime
236	242	6	Gray lime & chert
242	246	4	Blue-green shale & lime
246	293	47	Shale
293	315	22	Shale & brown lime
315	431	116	Shale
431	434	3	Shale-trace of lime
434	437	3	Brown shale & lime
437	447	10	Brown shale
447	449	2	Brown shale & lime
449	460	11	Brown lime
460	465	5	Brown shale & lime
465	467	2	Brown lime & pyrite
467	470	3	Brown & gray lime & pyrite

CITY WELL NO. 5

MAQUOKETA, IOWA

<u>From</u>	<u>To</u>	<u>Thickness</u>	<u>Description of Beds</u>
470	473	3	Gray lime & pyrite
473	485	12	Gray lime & chert
485	487	12	Brownlime
497	539	42	Lime
539	542	3	Lime & chert-hard
542	549	7	Lime-crevice at 546' & 547'
549	554	5	Sandrock & pyrite-sand both fine &
554	557	3	Sand-very fine-brown coarse
557	568	11	Dolomite & chert
568	570	2	Dolomite & chert & pyrite
570	575	5	Dolomite & pyrite-crevices
575	580	5	Dolomite, pyrite, chert-crevice rock & white shale-static level dropped
580	590	10	Dolomite, chert & pyrite
590	629	39	Gray & brown lime
629	656	27	Lime & chert
656	715	59	Lime
715	719	4	Lime & shale
719	730	11	Lime
730	735	5	Lime & trace of green shale
735	742	7	Green shale
742	751	9	Shale & lime
751	754	3	Gray & brown lime
754	765	11	Gray lime
765	768	3	Lime & shale
768	800	32	Gray lime
800	802	2	Gray lime & shale
802	810	8	Blue-green shale
810	848	38	Sandy shale
848	853	5	Sand & white rock
853	859	6	White sand
859	862	3	White sand-trace of shale
862	865	3	Sand, shale & gravel
865	871	6	Lime & shale
871	875	4	Gray lime
875	886	11	Gray lime & shale
886	890	4	Gray lime
890	906	16	Gray & brown lime
906	913	7	Gray lime
913	920	7	Reddish brown lime
920	976	56	Gray lime
976	979	3	Gray lime-trace of shale
979	987	8	Gray lime & shale
987	997	10	Light gray lime
997	1010	13	Gray & brown lime
1010	1035	25	Gray lime
1035	1071	36	Gray & brown lime
1071	1094	23	Gray lime
1094	1099	5	Brown & gray lime
1099	1146	47	Brown & gray lime
1146	1160	14	Brown lime & green shale

<u>From</u>	<u>To</u>	<u>Thickness</u>	<u>Description of Beds</u>
1160	1173	13	Brown lime
1173	1182	9	Brown & white lime
1182	1212	30	Gray lime & sand
1212	1216	4	Brown lime
1216	1220	4	Brown & gray lime
1220	1227	7	Gray lime
1227	1230	3	Gray & brown lime
1230	1234	4	Gray lime
1234	1247	13	Brown lime
1247	1252	5	Gray lime
1252	1283	31	Brown lime
1283	1291	8	Brown & red lime
1291	1317	26	Brown lime
1317	1337	20	Red-brown lime
1337	1352	15	Brown lime
1352	1357	5	Brown shale
1357	1361	4	Brown shale & lime
1361	1370	9	Gray shale-sandy
1370	1375	5	Green-gray sandy shale
1375	1405	30	Green shale
1405	1410	5	Green-gray shale & lime
1410	1414	4	Gray lime
1414	1419	5	Green shale
1419	1432	13	Lime & shale
1432	1476	44	Sandy shale
1476	1493	17	Sandstone & domomite
1493	1495	2	Sandstone & lime
1495	1611	116	Sandstone
1611	1629	18	Sandstone & shale
1629	1641	12	Sand, shale & lime
1641	1725	84	Shale & lime
1725	1751	26	Sandy shale
1751	1796	45	Gray sand
1796	1807	11	Brown lime & sand
1807	1823	16	Dolomite & sand
1823	1846	23	Sand
1846	1860	14	Sand & domomite
1860	1866	6	Sand & lime
1866	1961	95	Sandstone
1961	1965	4	Sandstone & red shale
1965	2059	94	Sandstone &
2059	2069	10	Sandstone & dolomite
2069	2137	68	Sandstone
2137	2147	10	Sandstone & red shale
2147	2222	75	Sandstone-2191 to 2206 red sand
2222	2227	5	Sandstone & red shale
2227	2232	5	Red sand
2232	2235	3	Sand & red shale
2235	2237	2	Sand, shale & lime
2237	2245	8	Sand & lime
2245	2309'6"	64'6"	Sand

STATIC WATER LEVELS

<u>From</u>	<u>To</u>	<u>Level</u>	<u>From</u>	<u>To</u>	<u>Level</u>
0	180	None	1657	1715	133'
180	246	61'	1715	1751	131'
246	278	59'	1751	1796	139'
278	317	60'	1796	1856	134'
317	358	68'	1856	1970	136'
358	419	68'	1970	1993	134'
419	439	65'	1993	2030	135'
439	455	61'	2030	2059	131'
455	470	63'	2059	2090	134'
470	485	62'	2090	2115	133'
485	517	60'	2115	2150	132'
517	549	59'	2150	2211	133'
549	553	79'	2211	2229	132'
553	557	81'	2229	2235	128'
557	562	78'	2235	2238	133'
562	568	79'	2238	2251	132'
568	590	78'	2251	2270	133'
590	607	80'	2270	2295	131'
607	622	79'	2295	2309' 6"	129'
622	638	77'			
638	670	78'			
670	683	69'			
683	712	78'			
712	737	80'			
737	765	83'			
765	788	78'			
788	833	80'			
833	851	79'			
851	856	78'			
856	868	79'			
868	897	78'			
897	910	None recorded			
910	920	162'			
920	973	164'			
973	987	160'			
987	1002	158'			
1002	1025	155'			
1025	1045	150'			
1045	1099	147'			
1099	1115	145'			
1115	1200	143'			
1200	1212	140'			
1212	1252	133'			
1252	1277	134'			
1277	1400	133'			
1400	1428	139'			
1428	1463	137'			
1463	1532	135'			
1532	1581	134'			
1581	1657	135'			