

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

W13454

Location:

Town: STUART (NE)  
(SW) County GUTHRIE  
(E)  
SW sec. 33 T. 78 N., R. 30 (W) Twp.


Well name and number

Owner STUART TOWN WELL Address STUART, IOWA  
(1962)

Tenant Address

Contractor THORPE WELL CO. Address DES MOINES, IOWA

Drillers

Drilling dates APRIL 1 - DEC. 6, 1962

Well data:

Altitudes: Drilling curb feet; Land surface feet 1220

Determined by

Topographic position

Total depth: Reported 2801 feet; Measured feet

Drilling method CABLE TOOLS

Hole and casing data 260' OF 22" CSG. 0-260'

830' OF 14" OD CSG. 0-830 - CEMENTED

8" CSG. SET @ 2375' CEMENTED INTO THE 14" STRING

Original depth to water above  
ft. below Date

Source of data

Sources of water: Principal

2375'-2800'  
PRAIRIE-du CHIEN, JORDAN, ST. LAWRENCE

Others

### PRODUCTION DATA

Date

Static water level

370'

Pumping water level

440'

Yield (g.p.m.)

500 - TEMP. WATER 76° - HARDNESS - 29 GRAMS

Measuring point

Duration of pumping

48 HOURS

Specific capacity

### LABORATORY DATA

TL4- 621-625 incl

Well No.

W17454

Sample range

0-2800

No. of samples

418

No. of dupls. and cond.

418; Good

Washed range

351-2800

Samples prepared by

Brooks  
Larry Pabst KOBES  
ET AL.

Date

APR. TO DEC. 1962

Logged by

NORTHUP

Date

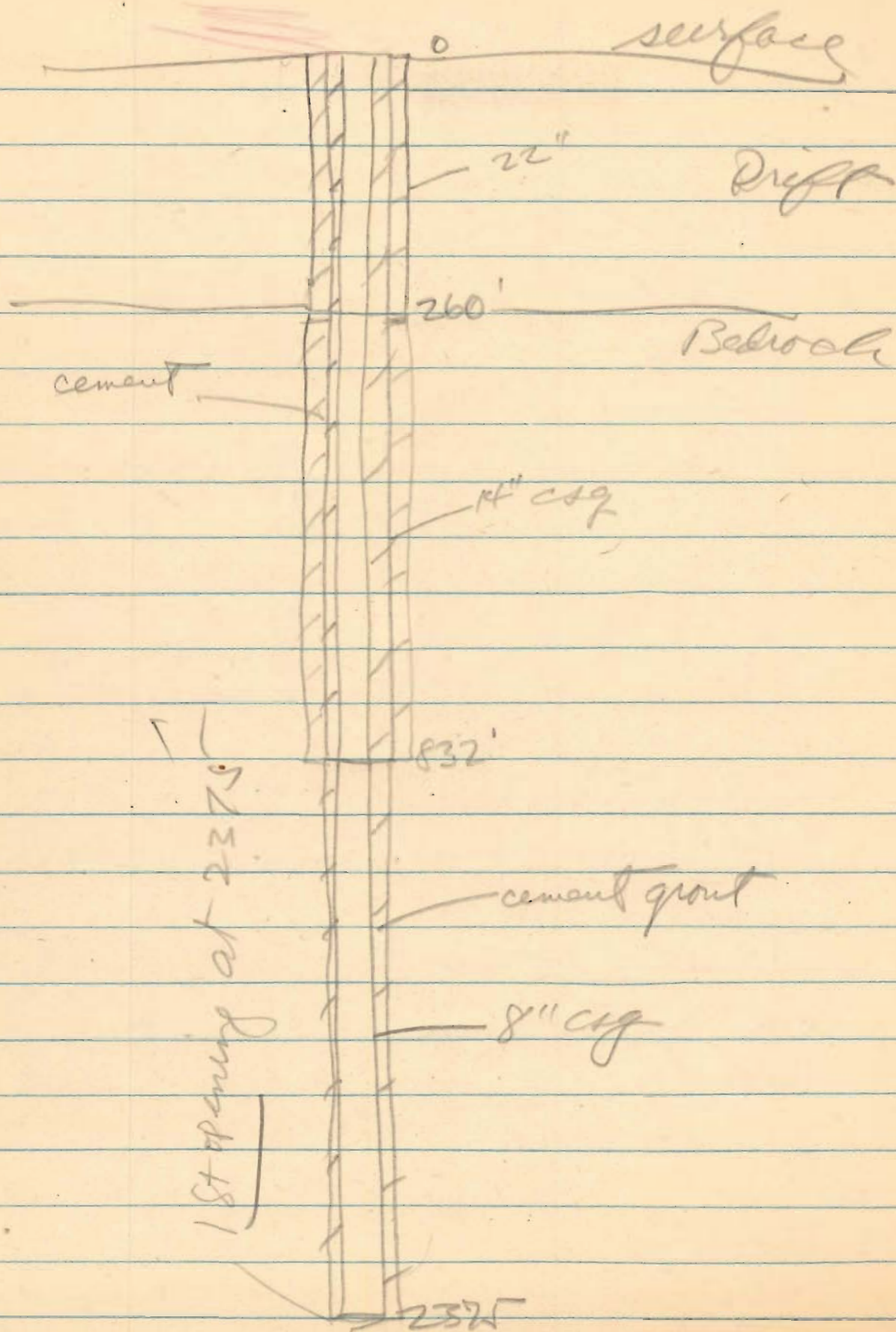
1962

Correlations by

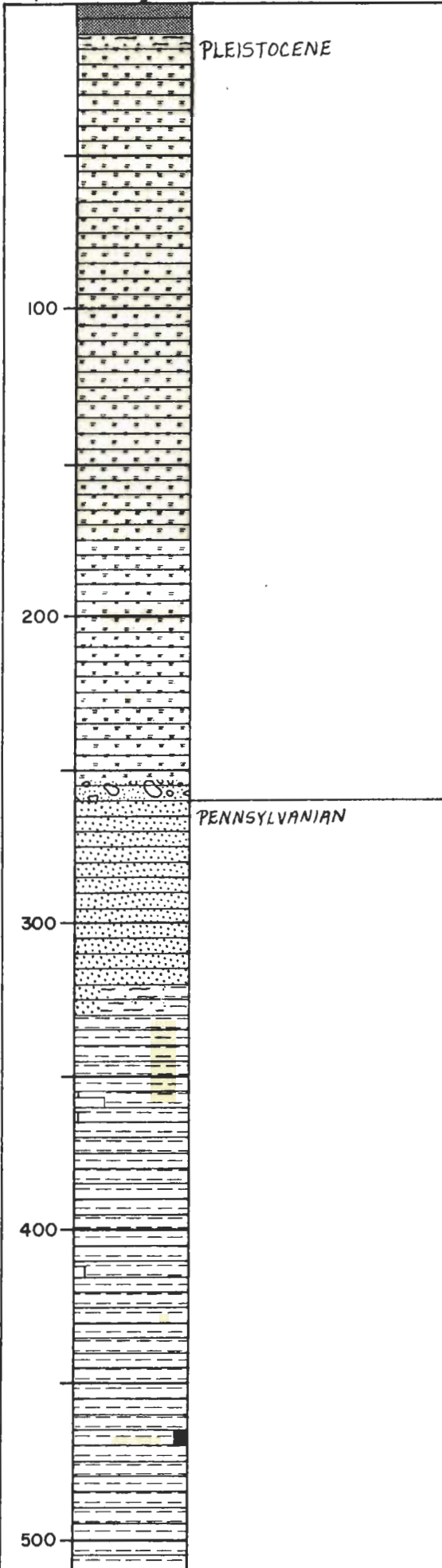
Date

1962

93  
20  
960



Depth Log Formation



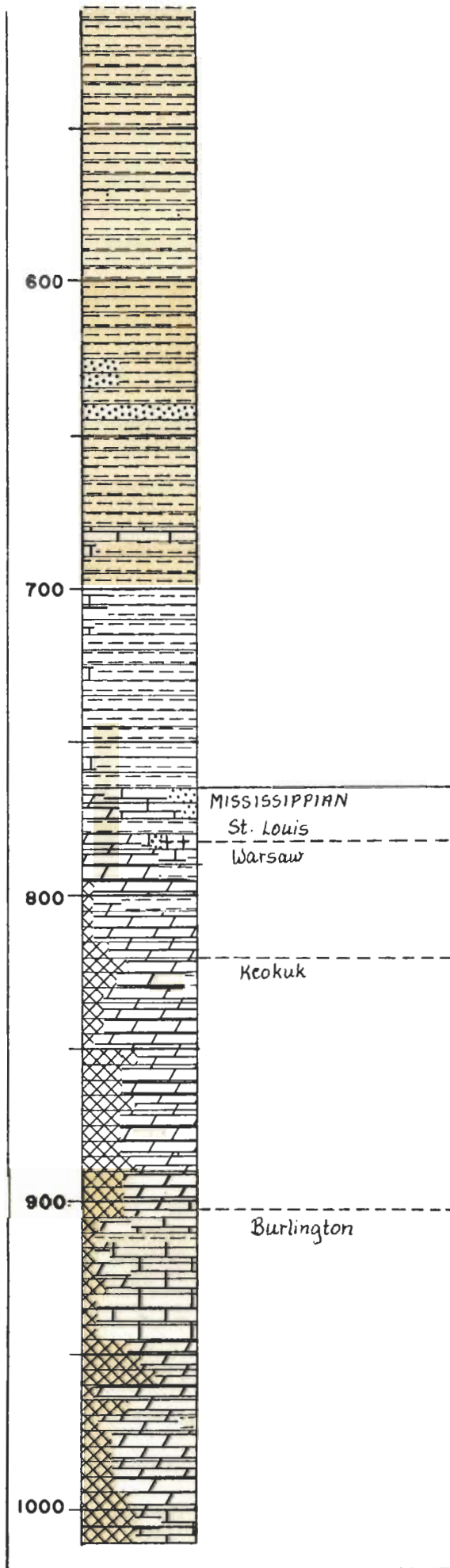
IOWA GEOLOGICAL SURVEY  
In Cooperation with  
U. S. GEOLOGICAL SURVEY  
Iowa City, Iowa

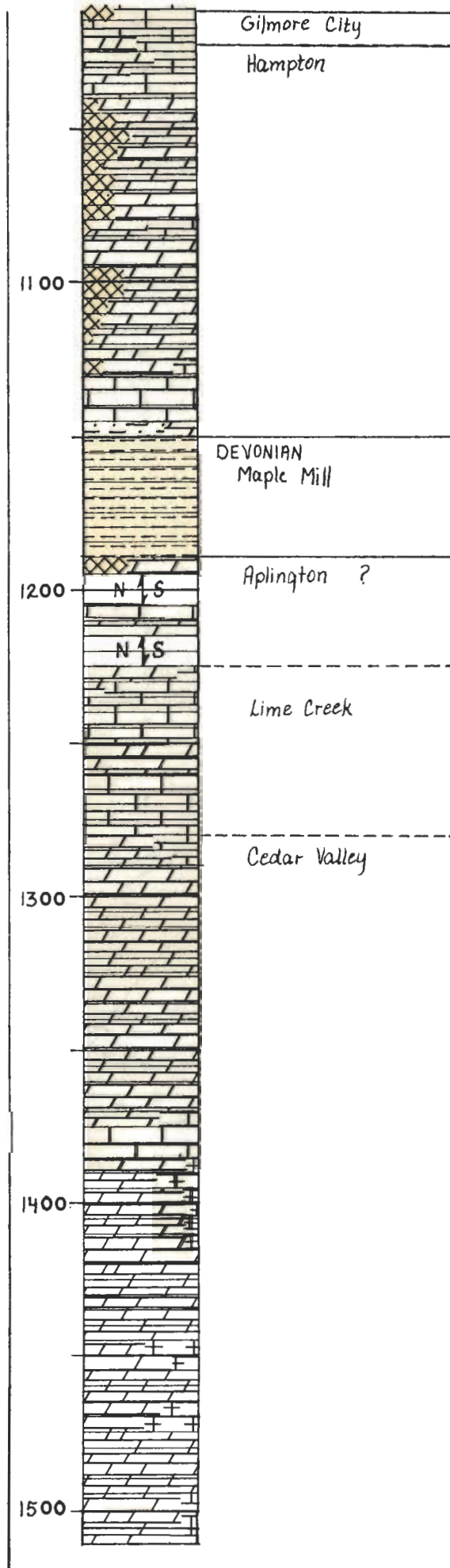
Name Stuart City Well (1962)		State Iowa	
Town Stuart	County Guthrie	Loc.	
Contractor Thorpe Well Company		Sec. 33	
Drilling Dates April 1 - December 6, 1962		T. N., R. 78 N. 30 W.	
Casing Record 260' of 22" csg. 0-260' 832' of 14" csg. 0-832' 8" csg. set at 2375' and cemented into the 14" string			
S.W.L. 370'	G.P.M. 500		D.D. 70'
Remarks Water temp. 76°			Elev. 1220' ±
Water hardness 29 grains		T.D. 2801'	
Logged By Northrup 1962		I.G.S. No. W-13454	

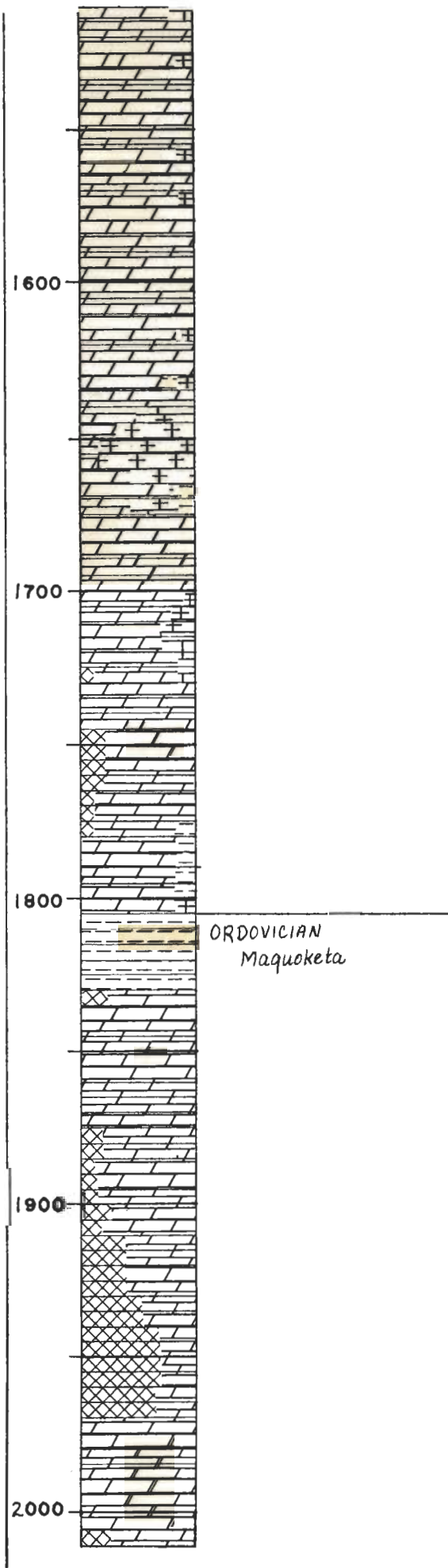
Explanation  
of Colors

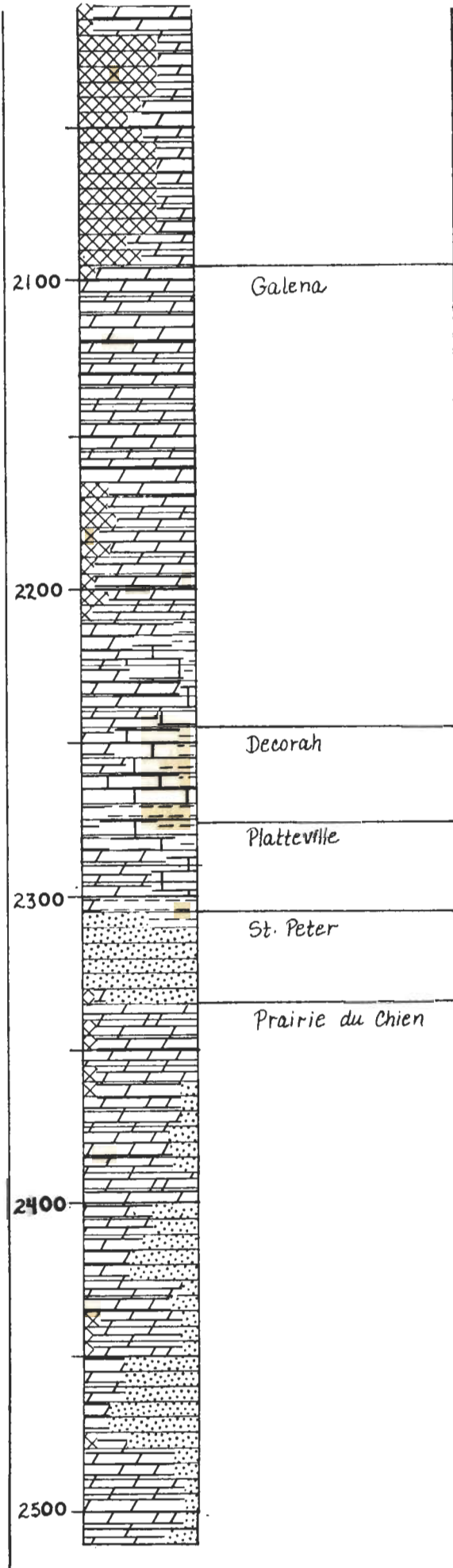
- Soil
- Loess, Silt or Siltstone
- Drift
- Sand & Gravel
- Shale
- Sandstone
- Limestone
- Dolomite
- Chert
- Gypsum or Anhydrite
- Coal
- No Samples
-



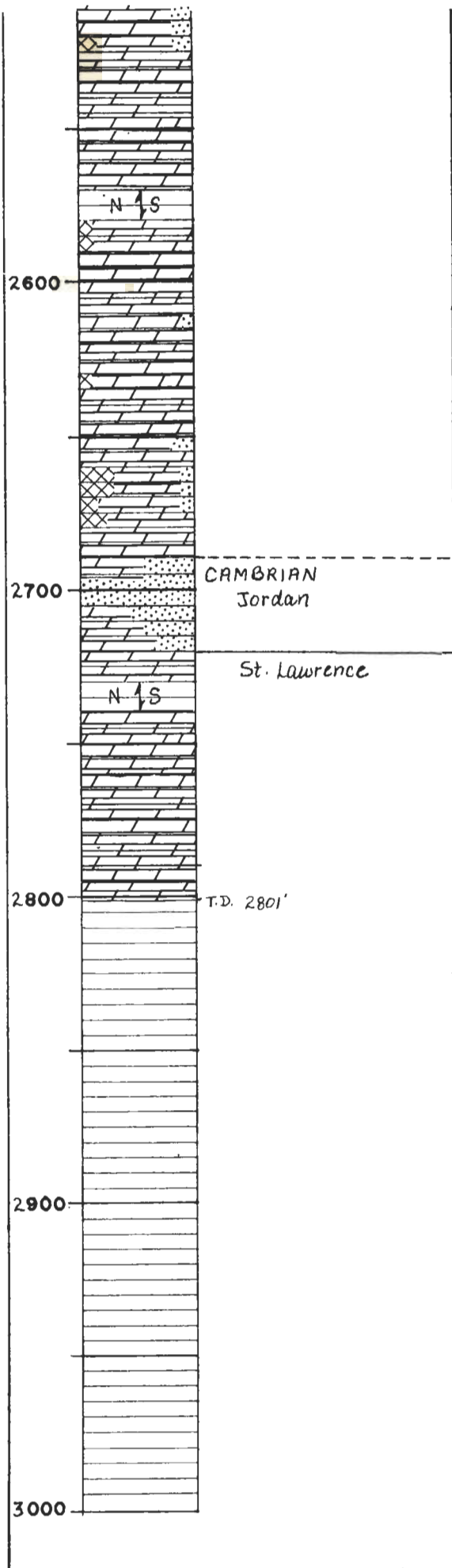












G-W files  
Stuart (Guthrie)  
Gen. Data

M E M O

June 13, 1962

To: Dr. H. G. Hershey and Dr. C. N. Brown  
Re: Stuart Town Well

Mr. Atchison called from Thorpe Well Co. on Wednesday morning after sending us samples from the new Stuart town well taken from 790'-820'. He asked me to check them and see if they were into the Mississippian yet. Although the samples are very cavey with Pennsylvanian Shale and sandstone, the cuttings from 790' to 800' and from 805' to 810' show what appears to be St. Louis type limestone. Also limestone can be found in the other samples after washing out the shale. A total depth of 830 feet has now been reached ~~and~~<sup>where</sup> cherty limestone and dolomite has been reported. These remaining ten feet as well as the samples from the entire upper part of the hole are now on the way to us.

I phoned Mr. Atchison back after checking the samples which arrived today, and he plans to set and cement a string of 14" of casing from surface to 830'. This will case off all the Pleistocene and Pennsylvanian section. At present there is a 22" string of casing from the surface to 260 feet.

Unfortunately we have no samples from the old Stuart well down to 1180', but the new well seems to have picked up the Mississippian a bit higher than our forecast, and is running close to the Menlo town well just four and a half miles west.

IOWA PRESS  
CLIPPING BUREAU  
Des Moines, Iowa

Herald  
Stuart, Iowa

JUN 28 1962

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Des Moines, Iowa

Herald  
Stuart, Iowa

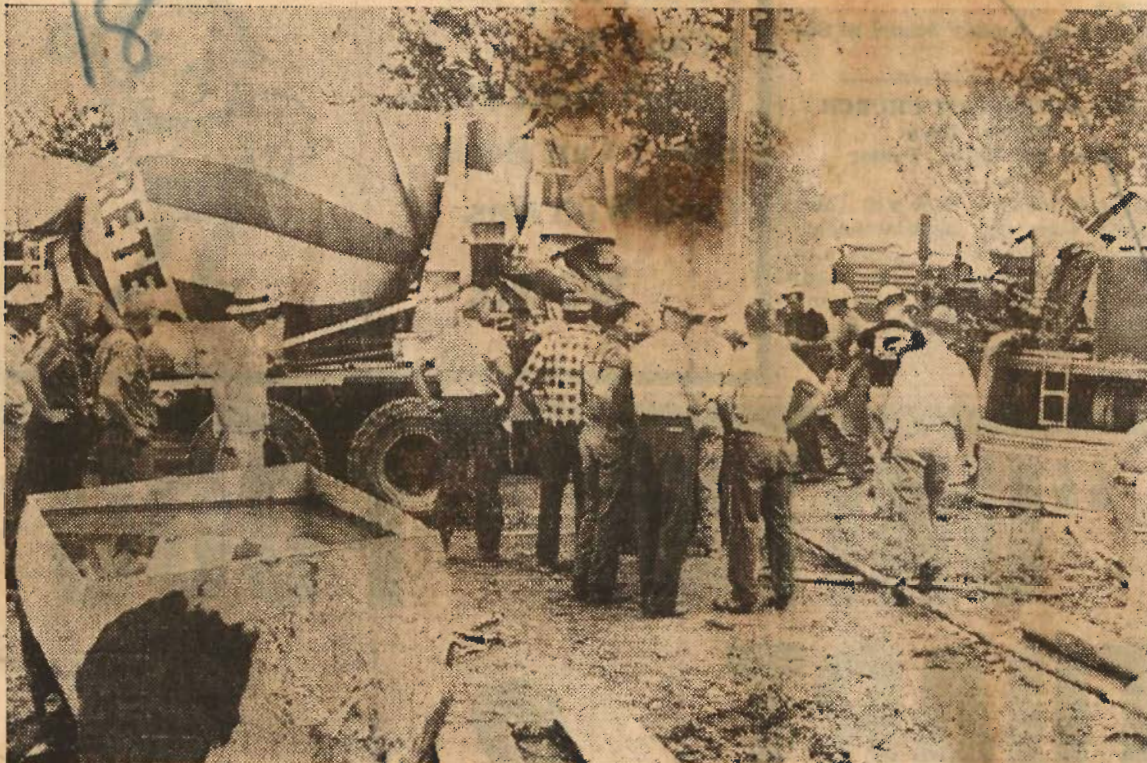
JUN 28 1962

## Progress Report On Stuart's New Well

A report the first of the week from the new deep well for Stuart says that the drilling is now down 830 feet. At this depth they are putting casing down to cement the first stage.

Work continues 24 hours a day and is progressing satisfactorily.

## First Section of Stuart's New Well Is Cemented



Pictured above is the machine which was used to cement the casing of the new Stuart well. Two of the ready-mix trucks used to haul the bulk cement can also be seen in the picture. Before work could be started all trucks had to be at the well site because when once they start they cannot stop until the job is completed.

Work on drilling had progressed last week to the point where on Friday they cemented the first 832 feet of the new Stuart well. This first section is a 14 inch casing and is cemented on the outside. This cementing will prevent any surface or seepage water entering the well.

The Haliburton Cement Co. of El Dorado, Kans. did the work. This is accomplished by placing a plastic valve in the bottom of the 14 inch casing. A two inch pipe is connected to the valve and pure Portland cement mixed with water at the rate of 15 pounds to the gallon is forced up around the outside of the casing until the space is completely filled and forced out at the top.

Cement for this operation was hauled from Des Moines. Dry cement was transported in ready-mix trucks, eight of them being used. They mixed 893 sacks of cement and forced it into place in just 57 minutes.

This concrete is being let set while the drilling machine is being overhauled. The plans are to start drilling again on Thursday.

An eight inch casing will be put down to a depth of 2450 feet and this cemented in. Then drilling will be continued to the final depth of 2850 feet where the Jordan vein of water is located.



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Des Moines, Iowa

Herald  
Stuart, Iowa

DEC 13 1962

Stuart

## Drilling on Stuart well completed at 2801 ft.

Drilling for water for the new Stuart well was completed last Friday morning, Dec. 7. It was necessary to wait until the report from the State Geological Department was received in order to be sure that the correct depth had been reached.

The depth of the new well is 2801 feet. Workmen were busy Wednesday installing a test pump. This test pump is capable of pumping 400 gallons per minute. Until the

test is made there is no way of determining what or how much the new well will be capable of delivering. Size of the new pump to be installed will depend on results of these tests.

So many factors enter into the length of time after test pumping is completed until the new well is ready for use, that it is impossible to estimate when this will be. Since there is presently an adequate supply of water, this is not

too important — now that officials know they have the water available if an emergency should arise.

Drilling for the new well was completed in just over eight months. The company was very fortunate in that there were no serious delays, break downs, or time spent retrieving lost equipment.

More information about the well should be available within the next week or so.