

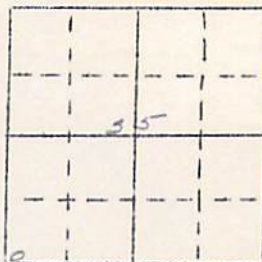
IOWA GEOLOGICAL SURVEY  
In Cooperation with U. S. Geological Survey

RECORD OF WELL

W-0427

Location:

Town: M<sup>2</sup> Greager ( N E )  
          SE NW SW SW \* ( S W ); County Clayton  
          S 1/2 sec. 35 T. 95 N., R. 3 W. Mendenhall Twp.



Well name and number Pikes Peak State Park.

Owner State Conservation Com. Address \_\_\_\_\_

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

Contractor C.W. Varner Address Dubuque

Drillers \_\_\_\_\_

Drilling dates 6/28/36 - 8/11/36

Well data:

Elevations: Drilling curb 1184 feet; Land surface \_\_\_\_\_ feet

\* From 7.5' top of Clayton location to agree with elevation  
seems to be SE NW SW SW. A location of SE SW gives elev. of 1085.  
(Clayton Co. Report)  
DR 11/22/67

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

Topographic position Upland ridge Also agree.

Total depth: Reported \_\_\_\_\_ feet, Measured 630 feet

Drilling method cable

Hole and casing data 8" hole to 58'; 6" hole to 630' 40' of 6" casing  
(Give amount, size, kind, and depth of all casing; type and

position of seals and packers; cementing; how finished--perforated pipe, screen,  
gravel pack, open hole, etc.)

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

Original elevation of water level \_\_\_\_\_ ft.; Source of data \_\_\_\_\_

Sources of water: Principal Jordan; Others \_\_\_\_\_



## Production data:

Date July 21 1937Static depth to water 495Measuring point Quarb.Pumping level 510at 15 g.p.m.Specific capacity 1 g.p.m. per ft. drawdown; Temperature 54 1/2 °F.

Pump data; Type pump \_\_\_\_\_ Column Dia. \_\_\_\_\_ Length \_\_\_\_\_

Cylinder or bowls: Dia. \_\_\_\_\_ Length \_\_\_\_\_ Suction pipe \_\_\_\_\_

Power \_\_\_\_\_ Airline \_\_\_\_\_

Estimated rate of production: \_\_\_\_\_ g.p.m. for \_\_\_\_\_ hrs. a day

Use of water Public Drinking

## WATER ANALYSES (in parts per million)

|                                                                                                  |                     |  |  |  |
|--------------------------------------------------------------------------------------------------|---------------------|--|--|--|
| Date sampled                                                                                     | <u>July 21 1937</u> |  |  |  |
| Sampled by                                                                                       | <u>A.C. Tester.</u> |  |  |  |
| Total solids                                                                                     | <u>369</u>          |  |  |  |
| Insoluble matter                                                                                 | <u>10</u>           |  |  |  |
| Alkalinity (Meo)                                                                                 | <u>352.0</u>        |  |  |  |
| Alkalinity (Phn)                                                                                 | <u>0.0</u>          |  |  |  |
| pH                                                                                               | <u>7.1</u>          |  |  |  |
| Fe <sub>2</sub> O <sub>3</sub> + Mn <sub>2</sub> O <sub>3</sub> + Al <sub>2</sub> O <sub>3</sub> | <u>4.8</u>          |  |  |  |
| Alkali as sodium                                                                                 | <u>5.4</u>          |  |  |  |
| Calcium                                                                                          | <u>86.6</u>         |  |  |  |
| Magnesium                                                                                        | <u>27.4</u>         |  |  |  |
| Iron (unfiltered)                                                                                | <u>0.7</u>          |  |  |  |
| Manganese                                                                                        | <u>0.08</u>         |  |  |  |
| Nitrate                                                                                          | <u>0.74</u>         |  |  |  |
| Fluoride                                                                                         | <u>0.0</u>          |  |  |  |
| Chloride                                                                                         | <u>4.0</u>          |  |  |  |
| Sulfate                                                                                          | <u>54.0</u>         |  |  |  |
| Bicarbonate                                                                                      | <u>307.4</u>        |  |  |  |
| Hardness (ppm)                                                                                   | <u>330.0</u>        |  |  |  |
| Hardness (gpg)                                                                                   | <u>19.3</u>         |  |  |  |
| Remarks                                                                                          |                     |  |  |  |

## Laboratory data:

Sample storage location \_\_\_\_\_

Sample range 15-630No. spls. 132No. dupls. & cond. 121 P. 7.

Spls. prepared by \_\_\_\_\_

Washed range \_\_\_\_\_

by \_\_\_\_\_

Driller's log and cond. yes Partial

Insoluble residues: Prepared by \_\_\_\_\_

Studied by \_\_\_\_\_

Strip log \_\_\_\_\_

Microscopic study Hershey & Andersonstrip log Anderson & GulfGen. log yesCorrel. by K.E.A.



## PIKE'S PEAK STATE PARK

McGREGOR, IOWA

DATE STARTED 6-28-36

COMPLETED 8-11-36

DEPTH 630'

DIAMETER 8" to 58'--6" to 630'

CASING 60' of 6"

Capacity: 15 G.P.M. with 15' Drawdown

Static Water Level- 495'

*Buller's log*

|                                                  |         |
|--------------------------------------------------|---------|
| <i>glw clay</i>                                  | 0-9     |
| <i>lime, lt brown</i>                            | 9-55    |
| <i>lime, lt brown</i>                            | 55-80   |
| <i>lime, brown</i>                               | 80-95   |
| <i>shale</i>                                     | 95-96   |
| <i>lime, lt gray with gtz &amp; gray lime</i>    | 100-130 |
| <i>shale</i>                                     | 130-135 |
| <i>lime, dark gray</i>                           | 135-150 |
| <i>blue lime</i>                                 | 150-185 |
| <i>sand rock</i>                                 | 185-200 |
| <i>sand</i>                                      | 200-255 |
| <i>sand, brw lime &amp; pitilly-like</i>         | 255-265 |
| <i>ls</i>                                        | 265-280 |
| <i>lime, brown</i>                               | 280-455 |
| <i>lime, gray</i>                                | 455-475 |
| <i>"break" gray lime, flint &amp; brown lime</i> | 475-480 |
| <i>And particles of lime</i>                     | 480-520 |
| <i>sand, very fine</i>                           | 520-565 |
| <i>sand</i>                                      | 565-580 |
| <i>dark gray, muddy lime</i>                     | 580-590 |
| <i>gray ls, hard</i>                             | 590-620 |
|                                                  | 620-630 |



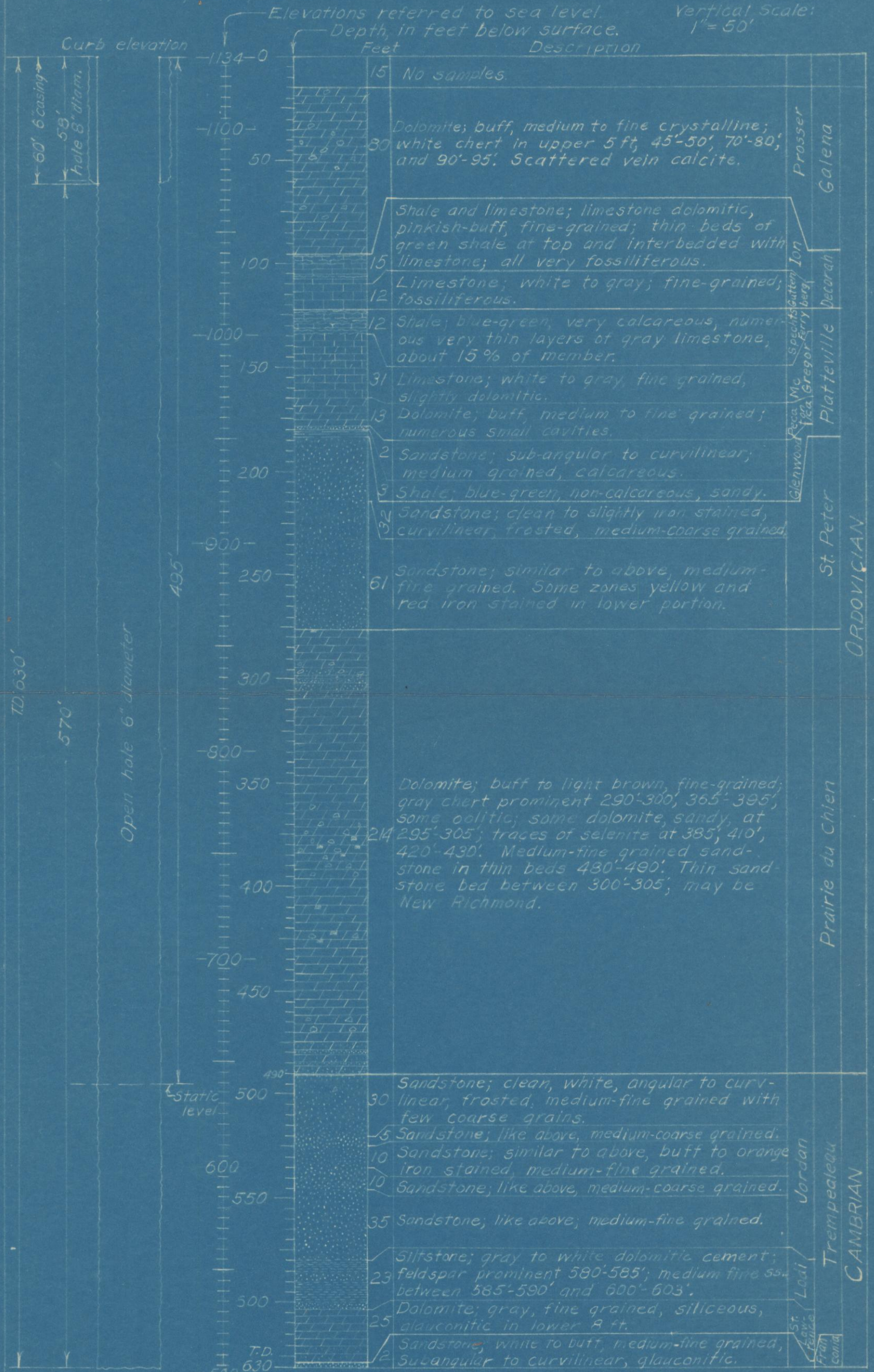
# PIKE'S PEAK STATE PARK WELL

## McGREGOR, IOWA

Location:  
Clayton County, south of McGregor  
SW 1/4, Sec. 35, T.95N., R.3E.

Drilled:  
August, 1936

Vertical Scale:  
1" = 50'

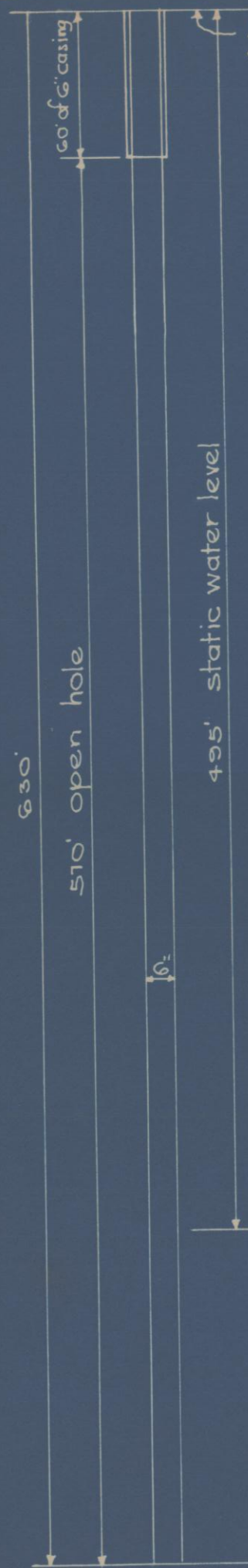


Capacity: 15 G.F.M. with 15 ft. drawdown. Static water level 495 ft. below surface.  
Contractor: C.W. VARNER  
DUBUQUE, IOWA

Samples interpreted & log prepared by:  
IOWA GEOLOGICAL SURVEY  
IOWA CITY

SURVEY No. W-0427





Sea level El. 1134.0'  
at curb.

# DIKE'S PEAK STATE PARK

VERTICAL SCALE: 1" = 60'

WELL NAME:

DRILLED BY: C.W. Varner, Dubuque, Iowa.

DATE DRILLED: Aug. 1936

LOCATION IN COUNTY: Clayton County, south of  
McGregor, S.W. 1/4, Sec. 35, T. 95N. R. 3E.

495' static water level

## TEST

Capacity: 15 G.P.M. with 15' drawdown.

Water reached about 525'. Sandstone  
about 525' very dry.

|                |                                                                                                                                                                                                                                                                                                         |               |                 |  |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|-----------------|--|
| 0'             | No samples.                                                                                                                                                                                                                                                                                             |               |                 |  |
| 15'            |                                                                                                                                                                                                                                                                                                         |               |                 |  |
| 95'            | Dolomite; buff, medium to fine crystalline; white chert in upper 5', 45'-50', 70'-80', and 90'-95. Scattered vein calcite.                                                                                                                                                                              | Prosser       | Galena          |  |
| 110'           | Shale and limestone; limestone dolomitic, pinkish buff, fine-grained; thin beds of green shale at top and interbedded with limestone; all very fossiliferous.                                                                                                                                           | Ion           | Decorah         |  |
| 122'           | Limestone; white to gray; fine-grained; fossiliferous.                                                                                                                                                                                                                                                  | Glen-berg     |                 |  |
| 135'           | Shale; blue-green, very calcareous, numerous very thin layers of gray limestone, about 15% of member.                                                                                                                                                                                                   | Speck's Ferry |                 |  |
| 165'           | Limestone; white to gray fine-grained, slightly dolomitic.                                                                                                                                                                                                                                              | McGregor      |                 |  |
| 183' 180' 178' | Dolomite; buff, medium to fine grained; numerous small cavities.                                                                                                                                                                                                                                        | Pecatonica    | Plattville      |  |
| 215'           | Sandstone; sub-angular to curvilinear; medium grained, calcareous.                                                                                                                                                                                                                                      | Glen-wood     |                 |  |
|                | Shale; blue green, non-calcareous, sandy.                                                                                                                                                                                                                                                               |               |                 |  |
|                | Sandstone; clean to slightly iron stained, curvilinear, frosted, medium-coarse grained.                                                                                                                                                                                                                 |               | St. Peter       |  |
| 276'           | Sandstone; similar to above, medium-fine grained. Some zones yellow and red iron stained in lower portion.                                                                                                                                                                                              |               |                 |  |
|                | Dolomite; buff to light brown, fine-grained; gray chert prominent 290'-300', 365'-395', some oolitic; some dolomite, sandy, at 295'-305', traces of selenite at 385', 410', 420'-430'. Medium-fine grained sandstone in thin beds 480'-490'. Thin sandstone bed between 300'-305', may be New Richmond. |               | Prarie du Chien |  |
|                | Sandstone; clean, white, angular to curvilinear, frosted, medium-fine grained with few coarse grains.                                                                                                                                                                                                   |               |                 |  |
|                | Sandstone like above, medium-coarse grained.                                                                                                                                                                                                                                                            |               |                 |  |
|                | Sandstone; similar to above, buff to orange iron stained, medium-fine grained.                                                                                                                                                                                                                          | Jordan        |                 |  |
| 490'           | Sandstone; like above, medium-coarse grained.                                                                                                                                                                                                                                                           |               |                 |  |
| 525' 520'      | Sandstone; like above, medium-fine grained.                                                                                                                                                                                                                                                             |               |                 |  |
| 535'           | Siltstone; gray to white, dolomitic cement; feldspar prominent 580'-585', medium fine siltstone between 585'-590' and 600'-603'.                                                                                                                                                                        | Lodi          | Trempealeau     |  |
| 545'           |                                                                                                                                                                                                                                                                                                         |               |                 |  |
| 580'           | Dolomite; gray, fine-grained, siliceous, glauconitic in lower 8'.                                                                                                                                                                                                                                       | St. Lawrence  |                 |  |
| 603'           | Sandstone; white to buff, medium-fine grained, subangular to curvilinear, glauconitic.                                                                                                                                                                                                                  |               | Franconia       |  |
| 630' 628'      |                                                                                                                                                                                                                                                                                                         |               |                 |  |

ORDOVICIAN

CAMBRIAN

Aug., 1937 G.E.B.