

W-3894

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

RECORD OF WELL

| | | |
|--|----|--|
| | | |
| | | |
| | 27 | |
| | | |
| | | |

Location:

Town: Brandon (NE)
(SW): County Buchanan
NW SW sec. 27 T 87 N., R. 10 W. Twp.

Well name and number Brandon City Well No. 2 (1949)

Owner _____ Address _____

Tenant _____ Address _____

Contractor Thorpe Well Co. Address Des Moines

Drillers _____

Drilling dates 1949 to 165' Deepened Feb 22-Mar 4, 1955 to 405'

Well data:

Elevations: Drilling curb _____ feet; Land surface 838 feet

Determined by _____

Topographic position _____

Total depth: Reported 405 feet, Measured _____ feet

Drilling method _____

Hole and casing date 72'8" of 8" casing set at 70'8"

Original depth to water 17 ft. ^{above} 16 ft. ^{below} Date 1949
1955

Original elevation of water level _____ ft.; Source of data _____

Sources of water: Principal _____ ; Others _____

Production data:

Date 1949

Static depth to water 17

Measuring point _____

Pumping level 119

at 45 g.p.m.

SWL 167

PWL 33

Yield 80

1955

Specific capacity _____ g.p.m. per ft. drawdown; Temperature _____ °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 _____

WATER ANALYSES (in parts per million)

| | | | | |
|--|-------|-------|-------|-------|
| Date samples | _____ | _____ | _____ | _____ |
| Sampled by | _____ | _____ | _____ | _____ |
| Total solids | _____ | _____ | _____ | _____ |
| Insoluble matter | _____ | _____ | _____ | _____ |
| Alkalinity (Meo) | _____ | _____ | _____ | _____ |
| Alkalinity (Phn) | _____ | _____ | _____ | _____ |
| pH | _____ | _____ | _____ | _____ |
| Fe ₂ O ₃ -Mn ₂ O ₃ -Al ₂ O ₃ | _____ | _____ | _____ | _____ |
| Alkali as sodium | _____ | _____ | _____ | _____ |
| Calcium | _____ | _____ | _____ | _____ |
| Magnesium | _____ | _____ | _____ | _____ |
| Iron (unfiltered) | _____ | _____ | _____ | _____ |
| Manganese | _____ | _____ | _____ | _____ |
| Nitrate | _____ | _____ | _____ | _____ |
| Fluoride | _____ | _____ | _____ | _____ |
| Chloride | _____ | _____ | _____ | _____ |
| Sulfate | _____ | _____ | _____ | _____ |
| Bicarbonate | _____ | _____ | _____ | _____ |
| Hardness (ppm) | _____ | _____ | _____ | _____ |
| Hardness (gpg) | _____ | _____ | _____ | _____ |
| Remarks | _____ | _____ | _____ | _____ |

Laboratory data:

Sample storage location CF10-1

Sample range 15-165

165-400

No. spls. 23

47

70

No. dupls. & cond. 23

EH10-9

Foil 70

Spls. prepared by EMR-RR

Washed range 15-165-400

by W M M Campbell

Driller's log and cond. _____

Insoluble residues: Prepared by _____

Studied by _____

Strip log _____

Microscopic study _____

strip log _____

Gen. log _____

Correl. by _____

Northrop

Jan 10, 1950

3/12/56

And in W. (Dulleys log) 17' section #2

| | | |
|-----|--|-----|
| 3 | top soil | 3 |
| 12 | yellow clay | 15 |
| 5 | Broken lime yellow, | 20 |
| 3 | yellow lime | 23 |
| 10 | gray lime Rock | 33 |
| 3 | yellow lime Rock | 38 |
| 6 | gray lime Rock | 44 |
| 16' | " " " | 60 |
| 6' | blue gray shale | 66 |
| 46. | gray lime Rock | 112 |
| 13 | yellow lime mixed with white soft lime mud | 125 |
| 17 | gray lime mixed with white lime mud seams. | 142 |
| 13 | white and yellow lime mixed. | 155 |
| 10 | gray shale, 10 ft. bottom | 165 |

Sample Brandom City well #2

- 0-3 Top soil, no sample
- 3-15 Yellow clay PL
- 15-20 (1) Broken Lime
- 20-23 (2) yellow ls. 23 23F
- 23-33 (3) Gray ls.
- 33-38 (4) yellow ls.
- 38-44 (506) Gray Lime Rock
- 44-52 (7) Gray ls.
- 52-60 (8) Gray ls.
- 60-66 (9) Blue gr. sh.
- 66-70 (10) gray ls.
- 70-75 (11) " "
- 75-80 (12) " "
- 80-85 (13) " "
- 85-90 (14) " "
- 90-95 (15) " "
- 95-100 (16) " "
- 100-112 (17) " "
- 112-120 (18) yellow, mixed
- 120-125 (19)
- 125-133 (20)
- 133-142 21
- 142-148 (22)
- 148-155 (23)
- 155-165 (24) Shale

Approximate

~~155-165~~