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

W-0037

RECORD OF WELL




Location:

Town: Elkader ( N E) ( S W); County Clayton

SE-SW-NW sec. 23 T. 93 N., R. 5 W. Boardman Twp.

Well name and number City Well #3

Owner City of Elkader Address

Tenant Address

Contractor Varner Address Dubuque

Drillers

Drilling dates 1927 & 1934

Well data:

Elevations: Drilling curb 732 feet; Land surface feet

Determined by

Topographic position River Valley

Total depth: Reported 1423 feet, Measured feet

Bridged at 515'

Drilling method

Hole and casing data 216' of 8" cast iron pipe 0-216'; 8" hole 659'-1426'
(Give amount, size, kind, and depth of all casing; type and
Well shot and resulted in bridging the hole. Cleaned out to a
position of seals and packers; cementing; how finished--perforated pipe, screen,
depth of 515'
gravel pack, open hole, etc.)

Original depth to water above ft. below Date

Original elevation of water level ft.; Source of data

Sources of water: Principal ; Others

Production data: Date Sept. 13, 1944

Static depth to water 8 Measuring point curb.

Pumping level ____ at 200 g.p.m.

Specific capacity ____ g.p.m. per ft. drawdown; Temperature 52 °F.

Pump data; Type pump Goulds Column Dia. ____ Length ____

Cylinder or bowls: Dia. ____ Length ____ Suction pipe ____

Power Electric Airline ____

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

Use of water ____

WATER ANALYSES (in parts per million)

| | | | | |
|---|---|---|---|---|
| Date sampled | Sept. 13, 1944 | | | |
| Sampled by | S.E.H. Jr. | | | |
| Total solids | 345 | | | |
| Insoluble matter | 2.5 | | | |
| Alkalinity (Meo) | 259.0 | | | |
| Alkalinity (Phn) | 0.0 | | | |
| pH | 7.3 | | | |
| $Fe_2O_3$+ $Mn_2O_3$+$Al_2O_3$ | 0.0 | | | |
| Alkali as sodium | 5.7 | | | |
| Calcium | 70.8 | | | |
| Magnesium | 35.5 | | | |
| Iron (unfiltered) | Tr. | | | |
| Manganese | 0.00 | | | |
| Nitrate | 1.30 | | | |
| Fluoride | 0.5 | | | |
| Chloride | 9.0 | | | |
| Sulfate | 61.7 | | | |
| Bicarbonate | 316.0 | | | |
| Hardness (ppm) | 323 | | | |
| Hardness (gpg) | 18.9 | | | |

Remarks ____

Laboratory data: Sample storage location ____

Sample range 5-610 No. spls. 29 No. dupls. & cond. 29 6,

Spls. prepared by ____ Washed range ____ by ____

Driller's log and cond. ____

Insoluble residues: Prepared by ____ Studied by ____ Strip log ____

Microscopic study Gulf 1939 strip log 1942. Cuvier

Gen. log ____ Correl. by Cuvier

WATER LEVEL DATA

Measuring point _____

| Date | Depth to water | Altitude | Remarks |
|---|---|---|---|
| | | | |
| | | | |
| | | | |
| | | | |

REMARKS

a total of 350 pounds of nitro-glycerin dynamite was used at different levels. The shots were placed at 345', 375', 440', 465', 490', 515', & 525'.